HALIFAX COMMUNITY COLLEGE
DENTAL HYGIENE DEPARTMENT FACULTY AND STAFF

Department Head
Verna V. High, RDH, BS, MDH

Full-Time Faculty
Cathy Sykes, RDH, BS, MDH
Second Year Clinic Coordinator

Full-Time Faculty
Lisa Santiago, RDH, BS, MDH
First Year Clinic Coordinator

Adjunct Faculty
Antoinette Bazemore, RDH, BS
Christina Hardee, RDH
Jim Clark, DDS
Laura Perry, RDH, BS

Dental Hygiene Clinic Manager
Angela Taylor
MISSION STATEMENT

HALIFAX COMMUNITY COLLEGE MISSION STATEMENT

Mission
HCC strives to meet the diverse needs of our community by providing high-quality, accessible and affordable education and services for a rapidly changing and globally competitive marketplace.

Vision
HCC will continue to be a catalyst for educational, cultural, and economic progress in the Roanoke Valley by anticipating and responding to the needs of an evolving global community.

Values
Integrity: We live by a code of ethics which includes truth, humility, respect, and fair-mindedness to all people.

Service: We actively support the growth and development of a culture of service in our community by word, example and collaboration.

Continuing Learning: We value and promote the process of reaching our individual and community-related potential through a life-long pursuit of education, both formal and informal.

Collaboration: We promote the combined efforts of all stakeholders in accomplishing common goals of government, education, industry, and the public.

Accessibility: We provide opportunity and support to all who seek personal enrichment or a higher quality of life.

Innovation: We embrace new and creative approaches to continually improve the quality of our education and services.

Diversity: We believe an appreciation of differences adds to the richness of the learning environment and the personal development of all.

Accountability: We take responsibility for continuous quality improvement, serving the needs of our community, utilizing our fiscal and educational resources wisely, and providing quality education and services with strategic outcomes.
HALIFAX COMMUNITY COLLEGE

DENTAL HYGIENE PROGRAM & CLINIC MISSION STATEMENTS

The mission of the Halifax Community College Dental Hygiene Program is to prepare each student to provide superb dental hygiene services in a legal, ethical, and knowledgeable manner, and to obtain dental hygiene licensure.

The Dental Hygiene Program facilitates the development of professional, ethical, and competent dental hygienists that exhibit the following:

• An awareness of their present and future roles and responsibilities within the profession and the community served.

• The knowledge and clinical skills necessary to provide comprehensive care to patients/clients.

• A commitment to lifelong learning and professional development.

The dental hygiene curriculum provides the dental hygiene student with the knowledge and skills to assess, plan, implement, and evaluate dental hygiene care for the individual and the community. The curriculum also trains the dental hygiene student to collaborate with the dentist, the patient, and other health professionals to provide comprehensive patient care. Graduates will receive an Associate of Applied Science Degree and will be eligible to take National and State/Regional Dental Hygiene Board Examinations.

The mission of Halifax Community College Dental Hygiene Program and Clinic is to educate the students in the dental hygiene curriculum, provide quality and professional clinical services, and obey the Dental Practice Acts of North Carolina.
The Halifax Community College Dental Hygiene Program has been granted accreditation by the Commission on Dental Accreditation of the American Dental Association. The accreditation status is “approval without reporting requirements”.

Halifax Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools.

This program manual is intended to help guide students accepted into this Dental Hygiene Program during their course of study. The information contained in this manual should be adhered to and referenced throughout the dental hygiene student’s course of study.
STUDENT STATEMENT
DENTAL HYGIENE PROGRAM MANUAL

As a student in the Halifax Community College Dental Hygiene Program, I understand it is my responsibility to read and familiarize myself with the policies, regulations, and procedures stated in this HCC Dental Hygiene Program Manual (2016 – 2018) and the Halifax Community College Academic Catalog.

I also understand it is my legal and ethical commitment to the Dental Hygiene Program, faculty, staff, fellow students, patients, and the North Carolina Dental Practice Acts to adhere to these policies, regulations, and procedures as long as I am enrolled as a student in the Halifax Community College Dental Hygiene Program.

I also understand my responsibilities as a student, and the responsibilities of the faculty as listed below.

Student Responsibilities:
☐ Attend all class, clinic and course activities on time and ready to engage in learning activities.
☐ Adhere to all school and clinical policies, including but not limited to dress code, academic honesty, attendance and professionalism.
☐ Assume the major responsibility for self-directed learning and continually strive for knowledge and personal growth.
☐ Maintain confidentiality and respect in interactions with patients, staff, faculty and peers.
☐ Act as professionals while representing the college. Misconduct reflects on all students, faculty, and the college.
☐ Be proactive and seek the assistance of faculty or administration if academic difficulties arise.

Faculty Responsibilities:
☐ Arrive to lectures/seminars/clinics on time and prepared to engage students.
☐ Abide by clinical policies.
☐ Exhibit ethical and professional behaviors in interactions with students, staff, patients and other faculty members.
☐ Provide students timely evaluation in a fair, objective, and consistent manner.
☐ Provide students equitable and unbiased treatment in an educational climate free from harassment and discrimination.
☐ Serve as an advocate for patients and students.
☐ Sustain ongoing personal development and continuing education that includes educational methodologies.
Section 1

THE PROFESSIONAL DENTAL HYGIENIST
Definition of a Dental Hygienist

“The dental hygienist is a licensed primary health-care professional, oral health educator, and clinician who provides preventive, educational, and therapeutic services supporting total health for the control of oral diseases and the promotion of oral health.”

--Esther M. Wilkins, BS, RDH, DMD

Clinical Practice of the Dental Hygienist

Dental Hygiene graduates from the Halifax Community College Dental Hygiene Program will be able to:

- Perform infection control procedures.
- Perform general and oral health assessments.
- Provide nutritional counseling and self-care programs to prevent disease.
- Examine head, neck, and oral regions for disease.
- Expose and process diagnostically acceptable radiographs and perform other diagnostic tests.
- Complete oral prophylaxis and other preventative services.
- Administer medications prescribed by a licensed dentist.
- Provide oral hygiene care instruction.
- Place and remove temporary fillings and periodontal dressings.
- Remove sutures.

In order to become prepared to perform these services, the dental hygienist requires an extensive educational background. As a student, your main objective is to learn the skills necessary to provide quality care for clients who trust your ability, your ethics, and your concern for their well being. For this reason, the HCC Dental Hygiene Program focuses on the skills of practice and the commitment to preserve the client's oral health.

Most people first meet the dental hygienist in a private dental office where the hygienist performs many critical services that detect, prevent, and treat diseases of the mouth. Career paths for the dental hygienist include positions in clinical dentistry, administration, education, research, consumer advocacy, hospital dentistry, and public health.
Dental Hygiene Oath

“In my practice as a Dental Hygienist,
I affirm my personal and professional commitment
to improve the oral health of the public,
to advance the art and science of dental hygiene,
and to promote high standards of quality care.

I pledge continually to improve my professional knowledge and skills,
to render a full measure of service to each client entrusted to my care,
and to uphold the highest standards of professional competence
and personal conduct in the interests of
the Dental Hygiene profession and the public it serves.”
# Halifax Community College
## Dental Hygiene
### Semester Course Sequence

#### First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Class</th>
<th>Lab</th>
<th>Clinical</th>
<th>Credit</th>
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<tr>
<td><strong>Fall Semester</strong></td>
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<tr>
<td>DEN 110 Orofacial Anatomy</td>
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<td>3</td>
</tr>
<tr>
<td>DEN 111 Infection/Hazard Control</td>
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<td>0</td>
<td>2</td>
</tr>
<tr>
<td>DEN 112 Dental Radiography</td>
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<td>BIO 168 Anatomy and Physiology I</td>
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<td><strong>Spring Semester</strong></td>
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</tr>
<tr>
<td>DEN 123 Nutrition/Dental Health</td>
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<td>DEN 125 Dental Office Emergencies</td>
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<td>DEN 130 Dental Hygiene Theory I</td>
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<td>DEN 222 General and Oral Pathology</td>
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<tr>
<td>BIO 169 Anatomy and Physiology II</td>
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<td>CHM 130</td>
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<td>DEN 140 Dental Hygiene Theory II</td>
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<td>DEN 141 Dental Hygiene Clinic II</td>
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<td>6</td>
<td>2</td>
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<tr>
<td>BIO 175 General Microbiology</td>
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<td>2</td>
<td>0</td>
<td>3</td>
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<tr>
<td>ENG 111 Expository Writing</td>
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<td><strong>Semester Total</strong></td>
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<tr>
<td><strong>Second Year</strong></td>
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<td><strong>Fall Semester</strong></td>
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<td></td>
<td></td>
</tr>
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<td>DEN 220 Dental Hygiene Theory III</td>
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<td>2</td>
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<tr>
<td>DEN 221 Dental Hygiene Clinic III</td>
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<td>0</td>
<td>12</td>
<td>4</td>
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<tr>
<td>DEN 124 Periodontology</td>
<td>2</td>
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<td>DEN 223 Dental Pharmacology</td>
<td>2</td>
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<td>2</td>
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<tr>
<td>DEN 224 Materials and Procedures</td>
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<td>2</td>
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<td>SOC 240 Social Psychology</td>
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<td><strong>Semester Total</strong></td>
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<td><strong>Spring Semester</strong></td>
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<td>DEN 230 Dental Hygiene Theory IV</td>
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<td>1</td>
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<tr>
<td>DEN 231 Dental Hygiene Clinic IV</td>
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<td>DEN 232 Community Dental Health</td>
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<td>3</td>
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<tr>
<td>DEN 233 Professional Development</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>ENG 114 Professional Research and Reporting</td>
<td>3</td>
<td>0</td>
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<td>Humanities/Fine Arts Elective</td>
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<td><strong>Semester Total</strong></td>
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<td><strong>Program Totals</strong></td>
<td>53</td>
<td>27</td>
<td>42</td>
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</table>
### Competencies for the HCC Dental Hygiene Program

<table>
<thead>
<tr>
<th>COMPETENCIES</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CORE (C) Ethics:</strong></td>
<td></td>
</tr>
<tr>
<td>The dental hygiene graduate will incorporate ethical behavior and professionalism into dental hygiene practice.</td>
<td></td>
</tr>
<tr>
<td>C.1 The graduate will be able to apply a professional code of ethics in all endeavors using the highest professional knowledge and ethical principles.</td>
<td>DEN 120/121&lt;br&gt;DEN 130/131&lt;br&gt;DEN 140/141&lt;br&gt;DEN 220/221&lt;br&gt;DEN 230/231&lt;br&gt;DEN 112</td>
</tr>
<tr>
<td>C.2 The graduate will practice as a member of a team in a professional manner.</td>
<td>DEN 112&lt;br&gt;DEN 120/121&lt;br&gt;DEN 125&lt;br&gt;DEN 130/131&lt;br&gt;DEN 140/141&lt;br&gt;DEN 220/221&lt;br&gt;DEN 230/231&lt;br&gt;DEN 232</td>
</tr>
<tr>
<td>C.3 The graduate will practice within the context of the appropriate state Dental Practice Act.</td>
<td>DEN 120/121&lt;br&gt;DEN 130/131&lt;br&gt;DEN 140/141&lt;br&gt;DEN 220/221&lt;br&gt;DEN 230/231&lt;br&gt;DEN 112</td>
</tr>
<tr>
<td><strong>Patient Care (PC):</strong></td>
<td></td>
</tr>
<tr>
<td>The dental hygiene graduate will apply the principles of dental hygiene care from the biomedical, clinical, and social sciences.</td>
<td></td>
</tr>
<tr>
<td>PC.1 The graduate will collect, analyze, and record data on the general, oral, and psycho-social health status of clients using methods consistent with medical, legal, and ethical principles.</td>
<td>DEN 110&lt;br&gt;DEN 112&lt;br&gt;DEN 123&lt;br&gt;DEN 120/121&lt;br&gt;DEN 130/131&lt;br&gt;DEN 140/141&lt;br&gt;DEN 220/221&lt;br&gt;DEN 230/231</td>
</tr>
<tr>
<td>PC.2 The graduate will use critical decision-making skills to determine the client’s needs related to his/her oral health and overall health based on all available data.</td>
<td>DEN 110&lt;br&gt;DEN 112&lt;br&gt;DEN 123&lt;br&gt;DEN 120/121&lt;br&gt;DEN 130/131&lt;br&gt;DEN 140/141&lt;br&gt;DEN 220/221&lt;br&gt;DEN 230/231&lt;br&gt;DEN 112</td>
</tr>
</tbody>
</table>
| PC.3 The graduate will consult and collaborate with clients and other health professionals to formulate a comprehensive dental hygiene care plan that identifies evidence-based dental hygiene interventions. | DEN 110  
DEN 112  
DEN 123  
DEN 120/121  
DEN 130/131  
DEN 140/141  
DEN 220/221  
DEN 230/231 |
|---|---|
| PC. 4The graduate will provide individualized care that includes educational, preventive, and therapeutic services designed to assist the client in achieving and maintaining optimal oral health. | DEN 121  
DEN 131  
DEN 141  
DEN 221  
DEN 231 |
| PC.5 The graduate will evaluate the effectiveness of educational, preventive, and therapeutic services and modify those services if necessary to assist the client in achieving and maintaining optimal health. | DEN 120/121  
DEN 130/131  
DEN 140/141  
DEN 220/221  
DEN 230/231 |
| **Community Involvement (CM):**  
**The dental hygiene graduate will develop and assume responsibility for health promotion and disease prevention to the public and community partners within and outside the profession.** | DEN 125  
DEN 130/131  
DEN 220/221  
DEN 232 |
| CM.1 The graduate will assess, plan, implement, and evaluate community-based oral health programs including health promotion and disease prevention activities. | DEN 232  
DEN 120  
DEN 130  
DEN 220  
DEN 230  
DEN 232 |
| CM.2 The graduate will provide dental hygiene services as a member of an interdisciplinary health care team to a diverse population in a variety of community-based settings. | DEN 232  
DEN 120  
DEN 130  
DEN 220  
DEN 230  
DEN 232 |
| CM.3 Facilitate patient access to oral health services by influencing individuals, organizations for the provision of oral care | DEN 232  
DEN 120  
DEN 130  
DEN 220  
DEN 230  
DEN 232 |
| CM.4 Advocate for effective oral health care for underserved populations | DEN 110 |
| DEN 112  |
| DEN 123  |
| DEN 120/121 |
| DEN 130/131 |
| DEN 140/141 |
| DEN 220/221 |
| DEN 230/231 |
| DEN 112  |
| DEN 232  |
PROFESSIONALISM GUIDELINES

The following guidelines are a set of performance areas relative to professional behaviors. These are to be considered basic guidelines and are designed to be cues for appropriate professional behavior and/or appearance for the student enrolled in the Dental Hygiene Program at Halifax Community College.

Performance Areas

A. Concern for Patient
   1. Shows concern for physical and psychological comfort of the patient.
   2. Observes and performs asepsis protocol throughout the clinical procedures.
   3. Manages patients in an effective manner.
   4. Displays enthusiasm when working with patients.
   5. Performs procedures with the needs of the patient as the ultimate determining factor.

B. Perseverance
   1. Follows tasks and procedures through to successful completion.
   2. Completes challenging management of cases effectively.
   3. Is able and willing to manage difficult situations. Does not avoid problems.

C. Ability to Follow Directions
   1. Listens attentively to directions.
   2. Follows given directions.
   3. Consults Clinic Manual for specific directions on protocol or operation of task to be performed.
   4. Asks for clarification if directions are not understood.

D. Honesty and Integrity
   1. Responds ethically in situations dealing with patients, classmates, and staff.
   2. Displays honesty in all educational environments including classroom and clinical settings.
   3. Is upright, truthful, and displays integrity in all aspects of dental hygiene education.

E. Energy and Industry
   1. Willing to assist other students as needed.
   2. Is self-directed in the tasks/procedures that need to be performed.
   3. Exhibits a healthy attitude toward self-management, i.e. adequate rest, healthy diet, etc.

F. Punctuality
   1. Arrives on time.
   2. Utilizes time efficiently.
   3. Finishes tasks by specified dates and deadlines.

G. Initiative
   1. Performs routine tasks without direct supervision.
   2. Initiates appropriate treatment for the particular needs of a patient.
Performance Areas

H. Personal Appearance
   1. Maintains personal cleanliness in all areas of hygiene.
   2. Follows written dress protocol as stated in the HCC Dental Hygiene Student Manual including those regarding nails, hair, clinical attire, and the overall professional appearance.

I. Attitude
   1. Assists others willingly.
   2. Responds positively to instructors, peers, and patients.
   3. Controls emotions and performs professionally under stressful conditions.
   4. Accepts added tasks willingly.
   5. Displays enthusiasm while working with patients.
   6. Adapts creative alternative methods in working with patients based on the situation.

J. Response Towards Clinical Evaluation
   1. Views evaluation as a positive force.
   2. Does not offer excuses or arguments.
   3. Makes the corrections and/or changes that are suggested.
   4. Is receptive to new ideas or methods suggested by others.
Code of Professionalism

The faculty and staff of the Halifax Community College Dental Hygiene Program recognize the importance of good work ethics, and the standards that govern the conduct of persons in the professional workplace. An employee’s values, abilities and behaviors including punctuality, honesty, motivation, reliability, cooperation, thoroughness, and creativity, are indicators of a work ethic that leads to success in the working environment.

HCC dental hygiene instructors strive to prepare dental hygiene students for the professional workplace. The dental hygiene student is expected to present the following standards at all times:

- Concern for Patient
- Perseverance
- Ability to Follow Directions
- Honesty and Integrity
- Energy and Industry
- Punctuality
- Initiative
- Personal Appearance
- Attitude
- Response Towards Clinical Evaluation
Section 2:

DEPARTMENTAL POLICIES
CONFIDENTIALITY POLICY

- Confidentiality is a matter of concern for all students who have access to client information. Confidential information is valuable and sensitive and is protected by law.

- All students in the HCC Dental Hygiene Program will sign a Confidentiality Statement (a copy is included in this manual) which will be filed in the Dental Hygiene Department Head’s office with the student’s records. This statement must be signed at the orientation prior to the start of classes for the first-year students and remains in effect throughout the student’s enrollment in the Dental Hygiene Program.

- Students will only access confidential information for which they have a “need to know”. “Need to know” is defined as the access of essential client information that is needed to deliver care. It requires that the access of any client information is for assigned clients only.

- Students will respect the privacy and institutional policies governing the use of any information accessible through the computer and client records.

- Students may not exhibit or divulge the contents of any record or report to others including faculty members, except to fulfill their assignment.

- Students may not remove any record or copy of a record from the healthcare agency.

- Students will not misuse confidential information or carelessly care for confidential information.

- Violation of this policy or any part of it may result in a clinical warning, failure, suspension, or immediate dismissal from the Dental Hygiene Program.
Halifax Community College
Dental Hygiene Program
Confidentiality Statement

As a student in the Dental Hygiene Program at Halifax Community College, I understand that I will be working with medical and dental records of clients in the HCC Dental Hygiene Clinic and at other health care facilities. I further understand that medical and dental records are confidential personal documents.

I agree to not discuss the contents of any client’s medical or dental record except with the client or instructor, and then only when such discussion is relative to client care or the learning experience. I understand these records are the property of Halifax Community College and I will not remove records from the Dental Hygiene Program. I understand a violation of the Confidentiality Policy established by the HCC Dental Hygiene Program may be grounds for suspension or dismissal from the program.

I have read and understood the HCC Dental Hygiene Clinic’s Notice of Privacy Practices and agree to comply with the policies adopted by the program in compliance with HIPAA regulations.

_____________________________________
Student’s Name       (Print)

_____________________________________            _____________________
Student ID # or Last Four Numbers of Social Security Number            Date

_______________________________________________  _____________________
Student’s Signature                                    Date

_______________________________________________
Signature of Faculty Member Witness                   Date
Halifax Community College Dental Hygiene Clinic’s Notice of Privacy Practices

This notice describes how medical/dental information about you may be used and disclosed and how you can get access to this information. Please review it carefully.

This Notice is provided to you as a requirement of the Health Insurance Portability and Accountability Act (HIPAA). HIPAA required that we protect the privacy of health information that identifies a patient. This Notice describes your rights as our patient and our obligations regarding the use and disclosure of medical and billing information.

Halifax Community College (HCC) Dental Hygiene Clinic’s Responsibility

HCC Dental Hygiene Clinic is required to:
- Maintain the privacy of your health information.
- Provide you with a notice as to our legal duties and privacy practices with respect to the information we collect and maintain about you.
- Abide by the terms of this notice.
- Accommodate reasonable requests you may have made to communicate health information by alternative means or at alternative locations.
- Notify you if we are unable to agree to a requested restriction or amendment to your record.

HCC Dental Hygiene Clinic reserves the right to change our practices and to make the new provisions effective for all protected health information we maintain, as well as any information we receive in the future. Should our privacy practices change, we will post a notice of change in designated areas and on the HCC website at www.halifaxcc.edu. The change to the policy will be available to you upon your request from the Privacy Officer or designee.

How We May Use or Disclose Your Medical/Dental Information

Following are examples of permitted uses and disclosures of medical/dental information about you. This list does not include every type of use or disclosure that may be within that category.

HCC Dental Hygiene Clinic will use your health information for treatment. We may use and disclose information about you to provide, coordinate, or manage your health care and related services. We may consult with other health care providers regarding your treatment and coordinate and manage your health care with others. We may also use or disclose information about you when referring you to another health care provider. In emergencies, we will use or disclose information to provide the treatment you require. We will only disclose information about you to people outside of HCC Dental Hygiene Clinic regarding your current treatment with your consent, or if such disclosures are required or permitted by law.

HCC Dental Hygiene Clinic will not use your health information for payment. We do not use or disclose information about you so that we can bill and collect payment for the treatment and services provided to you. Before providing treatment or services, we will share details with you regarding fees for services and collection/payment of those fees.

HCC Dental Hygiene Clinic will use your health information for regular healthcare operations. Members of the HCC Dental Hygiene Clinic staff and/or faculty or their designee may use information in your health record to assess care and outcomes in your case and others like it. This information will then be used in an effort to continually improve the quality and effectiveness of healthcare and services provided by the HCC Dental Hygiene Clinic. We will only disclose medical/dental information about you that identifies you to people outside of HCC Dental Hygiene Clinic who are involved in clinic operations with your consent or if such disclosures are required or permitted by law.
Communications from our Office/Marketing: HCC Dental Hygiene Clinic may send postcard reminders for scheduled appointments. We may also call you at home or at work to remind you of an appointment. Both the postcards and calls will contain the minimum information necessary, using our best judgment, to accomplish their intended purpose. Additionally, we may use or disclose information to notify or assist in notifying a family member, personal representative, or another person responsible for your care, your location, and general condition. We may also contact you with information about treatment alternatives or other health-related benefits and services of interest to you.

Communications with Family: Staff, students, and faculty, using their best judgement, may disclose to a family member or other relative, close personal friend, or any other person you identify, health information relevant to your care or payment related to your care, unless you object.

Required by HIPAA Privacy Rule: We are required to disclose medical/dental information to the Secretary of the United States Department of Health and Human Services when requested by the Secretary to review our compliance with the Privacy Rule.

Required by Law: HCC Dental Hygiene Clinic may use or disclose medical/dental information as required by federal, state, or local law.

Public Health: As required by law, HCC Dental Hygiene Clinic may disclose health information to public health or legal authorities to carry out certain activities related to public health such as:
- Prevent or control disease, injury, or disability.
- Report births and deaths.
- Report child abuse or neglect.
- Report reactions to medications or problems with products or devices regulated by the federal Food and Drug Administration or other activities related to quality, safety, or effectiveness of FDA-regulated products or activities.
- Notify a person who may have been exposed to a communicable disease or may be at risk for contracting or spreading a disease or condition.
- Report to your employer, under limited circumstances, information related primarily to workplace injuries or illness, or workplace medical/dental surveillance.

Abuse, Neglect, or Domestic Violence: HCC Dental Hygiene Clinic may disclose medical/dental information to a government authority such as the Department of Social Services, if we reasonable believe you may be a victim of abuse, neglect, or domestic violence.

Health Oversight Activities: HCC Dental Hygiene Clinic may disclose medical/dental information for oversight activities including audits, investigations, inspections, licensure, and disciplinary activities conducted to monitor the health care system, government benefit programs, and compliance with certain laws.

Legal Proceedings: HCC Dental Hygiene Clinic may disclose medical/dental information in response to subpoenas, discovery requests, or other lawful process.

Law Enforcement: HCC Dental Hygiene Clinic may disclose medical/dental information for law enforcement purposes, such as responses to legal proceedings and death suspected from criminal conduct. However, we will not release your information if you seek treatment for drug dependence for one of our practitioners without your authorization or a court order.

Coroners, Medical Examiners, and Funeral Directors: HCC Dental Hygiene Clinic may disclose health information to: coroners and medical examiners to identify a deceased person or determine the cause of death; funeral directors consistent with applicable law to carry out their duties.
Organ Procurement Organizations: Consistent with applicable law, HCC Dental Hygiene Clinic may disclose health information to organ procurement organizations or other entities engaged in the procurement, banking or transplantation of organs for the purpose of tissue donation and transplantation. If you are an organ or tissue donor, we are also required by law to provide medical/dental information about you after your death to the person or entity that receives the organ or tissue donation.

Research: HCC Dental Hygiene Clinic may disclose information to researchers when an institutional review board that has reviewed the research proposal and established protocols to ensure the privacy of your health information has approved the research. All research projects, where the researches know who you are, will require your written consent.

To Avert a Serious Threat to Health and Safety: HCC Dental Hygiene Clinic may disclose medical/dental information about you when necessary to prevent a threat to the health or safety of a person or to the public, and the disclosure is to a person or persons reasonable able to prevent or lessen the threat.

Specialized Government Functions: We may disclose medical/health information for military and veterans’ activities, national security, and intelligence activities. In addition, we may also disclose health information to a correctional institution in some circumstances.

Worker’s Compensation: HCC Dental Hygiene Clinic may disclose health information to the extent authorized by and to the extent necessary to comply with laws relating to worker’s compensation or other similar programs established by law.

Authorizations: Any uses or disclosures not covered by the HIPAA Privacy Rule will require a signed authorization by the patient.

Your Health Information Rights:
Although your health record is the physical property of HCC Dental Hygiene Clinic, you have the right to:
- Request, in writing a restriction on certain uses and disclosures of your information. Examples of restrictions may include use or disclosure to family members, relatives, close personal friends, and/or any others identified by the patient or for treatment, payment, and health care operations. Your request will be reviewed and will inform you in writing within 30 days of our final decision. However, we are not required to agree to any of your requests.
- Obtain a paper copy of the Notice of Privacy Practices upon request.
- Request, in writing, to inspect and/or copy your medical and billing information. Your request will be reviewed and we will inform you in writing within 30 days of our decision. HCC Dental Hygiene Clinic may deny access to the information for the following reasons: it is needed for legal proceedings; it contains psychotherapy notes; a licensed health care professional determines it will be injurious to your well-being. If your request is denied, you can request a review of the decision in certain instances. Our Compliance Officer will then review the denial and either agree with the denial or grant access. If you are granted access at any point in the process, there may be a fee for copying.
- Request, in writing, to amend your health record and provide a reason for your request. Your request will be reviewed and we will inform you in writing within 30 days of our decision. If we accept your request, we will make reasonable efforts to inform others of the amendment. However, we may deny your request for the following reasons: the information was not created by HCC Dental Hygiene Clinic; it is not a part of the designated record set; it is not accessible due to State or Federal law; it is complete and accurate; it is unavailable until clinical studies/trials are complete. If your request is denied, you can submit a statement of disagreement to our Compliance Officer, who will review the denial and either concur with the denial or agree to the amendment.
- Request, in writing, to obtain an accounting of disclosures of your health information except for treatment, payment, and health care operations; made to or requested by you; and communications from our office and with your family. The accounting will include disclosures that occurred during the six years prior to the date of request, but no earlier than the Privacy Rule compliance date of April 14, 2003. The first request in a 12-month period is free and any additional requests within the same 12-month period may result in a fee.
Request, in writing, communications of your health information by alternative means or at alternative locations. We must accommodate reasonable requests, but when appropriate, may require you to provide us with an alternative address or other method of contact.

Revoke, in writing, your authorization to use or disclose health information except to the extent that action has already been taken.

All forms to make the above requests can be obtained from the Clinic Manager at HCC Dental Hygiene Clinic Reception Desk.

**Privacy Rights of Minors:** State Law allows an unemancipated minor to provide consent, in lieu of a parent or guardian, for the prevention, diagnosis, and treatment of certain health care services including: sexually transmitted disease, pregnancy, substance abuse, and emotional disturbance.

**For More Information or to Report a Problem**
If you believe your privacy rights have been violated, you can file a complaint with the Privacy Officer at (252) 536-0000 or with the Secretary of Health and Human Services. If you have questions and would like additional information, you may contact the Privacy Officer or designee at (252) 536-0000. HCC Dental Hygiene Clinic will not retaliate for the filing of a complaint with the clinic or the Secretary of the Department of HHS.

Effective: 8/15/03
COMMUNICABLE DISEASE STATEMENT

Although there are no documented cases of occupational spread of HIV to dental workers, students enrolled in the Dental Hygiene Program are at a slight risk of exposure to blood and body fluids and the potential does exist for transmission of bloodborne and other infectious diseases during patient care activities. The risk of HIV disease transmission from dental patients to members of the dental team is extremely low. Nevertheless, there is some small potential for this to occur.

The Americans with Disabilities Act (ADA) forbids discrimination against patients with HIV, AIDS, Hepatitis, or other bloodborne diseases. Students in the Dental Hygiene Program are required to treat all patients assigned with regard to the safety of the patient, student, faculty, and staff. When there is a questionable health status of a patient, the student is advised to seek guidance from faculty.

No student will be allowed to deliver patient services in any setting until he/she has been instructed in infection control procedures as specified by the Occupational Safety and Health Administration (OSHA) and has mastered material on safety/universal precautions with satisfactory accuracy.

Students who enter the Dental Hygiene Program are required to read this statement and sign a Communicable Disease Agreement during the first two weeks of the first semester in the Dental Hygiene Program. This agreement becomes part of the student’s permanent record and will state that the student:
1. Has been informed of his/her risk for exposure to blood and body fluids.
2. Understands the potential for transmission of bloodborne disease during patient care activities.
3. Agrees to service patients that are assigned to him/her.

The student and a witness must sign the Communicable Disease Agreement. Students who are minors must have the agreement signed by a parent or legal guardian.
Halifax Community College
Dental Hygiene Program
Communicable Disease Agreement

As a student in the Dental Hygiene Program at Halifax Community College, I understand that I will be working with patients in the HCC Dental Clinic and at other health care facilities who may be afflicted with communicable diseases such as HIV, AIDS, hepatitis, and other illnesses. I further understand that the medical status of these patients is considered confidential information.

I acknowledge that I have been informed of my risk for exposure to blood and bodily fluids and understand the potential for transmission of bloodborne diseases during patient care activities.

I agree to provide care to patients assigned to me in regard to the safety and health status of patients in the clinical setting.

_______________________________________________
Student’s Name

_______________________________________________
Student’s Last Four Digits of Social Security Number or Student ID Number

__________________________________________   _______________
Student’s Signature         Date

__________________________________________   _______________
Faculty Member’s Signature        Date
Medical and Basic Life Support Requirements

Medical and Health Requirements:

❖ All students must complete the Student Medical Form prior to enrolling in the Dental Hygiene Program.

❖ The Hepatitis B Vaccine is required for all students in the HCC Dental Hygiene Program.

❖ A flu vaccine is optional but highly recommended for all students in the HCC Dental Hygiene Program.

❖ A TB (Tuberculin) Skin Test is required by all students in the Dental Hygiene Program and must be taken within 12 months of enrollment.

❖ All students who smoke are urged to quit. Dental Hygiene is a health field and the responsibilities of a licensed dental hygienist are to counsel individuals who smoke to quit and to discourage others from smoking. Dental hygienists are role models to others and must promote healthy habits as evident in their own lifestyle.

❖ A plaque-free, healthy mouth is always expected. Each student should receive regular dental care. Anyone who needs help finding a dentist or receiving dental care should contact the Dental Hygiene Department.

Basic Life Support Requirements:

❖ Each student must maintain current cardiopulmonary resuscitation (CPR) life support certification.

❖ A copy of the student’s certification card will be kept on file by the Dental Hygiene Department Head. This copy is due to the Department Head prior to the start of classes for all first year hygiene students. Copies of cards indicating re-certification are due by the expiration date of the current CPR card on file.

❖ Students are required to take a CPR course administered by the American Safety & Health Institute and Halifax Community College.

❖ Students will not be allowed to attend class, clinic, or lab sessions without CPR certification.

❖ Students will not be allowed to deliver patient care if certification expires until they become re-certified in CPR.
Standards of Care
Halifax Community College
Dental Hygiene Program

The HCC Dental Hygiene Program has adopted the following policies and procedures concerning the treatment services provided to all patients in the HCC Dental Hygiene Facility:

Assuring Comprehensive, Quality, Client-Centered Care

- During evaluation and grading of the dental hygiene care plan each faculty member will verify that the care plan:
  1. Includes all educational and clinical services necessary to meet the comprehensive/individual treatment needs of the client.
  2. Includes all referrals for medical or dental care/evaluation.
  3. Is client-centered.
  4. Is developed based on scientific evidence.

- At the end of each clinic session a faculty member will sign the treatment record with his/her last name to signify that the he/she has:
  1. Assisted the student in immediately modifying the care plan to correct any deficits found in the care plan.
  2. Verified that all treatment planned for that date is complete.
  3. Noted any deficits in client services and the measures to correct that deficit in the treatment record. The dental hygiene care plan must be amended to reflect the change.

- Before assigning a grade as an end-product evaluation, the faculty member will verify that only completed, quality treatment has been delivered.

- As a faculty member works with a student he/she will review the previous treatment record entries to make sure quality, client-centered, comprehensive treatment is delivered and all treatment completed.

Referring Clients for Medical/Dental Consultations

- Each client’s medical/dental history is reviewed by the student operator with a faculty member at the beginning of every appointment.

- If the student and faculty member have no medical or dental concerns, relating to that client, the faculty member allows the student to proceed with dental hygiene care after signing the Medical Review Form.
Any client with questionable medical/dental concerns will be referred for a medical consult and the client will be treated once they have a written release from their physician/dentist. The referral will be signed by the student, client, and clinical faculty.

Any client with a highly questionable medical/dental status will have his/her medical/dental history reviewed by the student, faculty, and dentist. The client will be expected to clarify, when possible, any questions concerning the history. These clients may be denied dental care in the HCC Dental Hygiene Clinic due to advanced medical/dental complications. The consulting dentist along with clinic faculty will make the final determination in accepting a client for care in the clinic.

Any client may be refused treatment in the HCC Dental Hygiene Clinic due to the presence of:
1. Progressive disease state that makes it unsafe to deliver routine dental hygiene care.
2. Serious communicable diseases that creates an unsafe environment for students, faculty, staff or clients.
3. Advanced dental disease that will not respond to non-surgical periodontal treatment.

A client will be referred for a dental consult when:
1. Periodontal disease does not respond to non-surgical periodontal therapy.
2. Treatment is needed for dental concerns beyond the scope of a dental hygiene educational clinic.

**Assuring Completed Care**

An attempt will be made to communicate by phone with clients who receive incomplete care. These clients will be informed of the incomplete treatment and offered a plan to correct the deficit. (For example, if x-rays are of less than diagnostic quality, the client will be asked to schedule an appointment to correct the deficits in radiographic series.)

Clients who receive incomplete care because they do not return to the clinic will be contacted by the clinic manager with two attempts by phone. The clinic manager will document the contact in the treatment record. After making the phone attempts with no success, the clinic manager will document the attempts to contact the client.
Guidelines About Appearance

Students should maintain a professional, well-groomed appearance. Faculty members reserve the right to dismiss a student from a clinic with a Professional Infraction if personal appearance and conduct are not in compliance with professional standards.

Hair:

- Hair must be clean, neat, and secured away from the face and off the shoulders so that it does not enter the field of operation.

- Hair coloration is limited to natural colors.

- Only small, plain barrettes or hairbands in neutral colors may be worn. These must be attached securely in the hair. They must not be allowed to fall off during patient care.

- Bows, beads, or other ornamentation in the hair are not allowed.

- Beards should be neatly groomed and trimmed in a professional manner.

Make-up:

- Make-up should be applied lightly.

- No visible tattoos are allowed in clinic. Visible tattoos must be covered during direct patient care or when visiting the clinic area.

Jewelry:

- Only small, stud-style earrings (pea-sized) will be allowed in clinic during direct patient care. Only one pair of stud earrings is allowed for professional attire. No dangling or large earrings will be allowed.

- No necklaces or chains may be worn during direct patient care.

- No visible body piercing ornaments or jewelry will be allowed in clinics or during direct patient care.

- A watch and watchband with no dangling catches may be worn during clinic and during direct patient care. The watch must fit securely and be covered by lab coat cuff.

- No hand jewelry is allowed. This includes wedding rings and wedding bands.

Odors:

- Effective personal hygiene must be practiced at all times. Deodorant must be used.

- No perfume is to be worn while in uniform or in clinic.

- Each student should be aware of his/her mouth odor and use a breath deodorant (mouthwash) brush and floss his/her teeth prior to direct patient care.
To remove odors (i.e., darkroom solutions, odors from papers, bookbags, books, money, etc.) retained on the hands during normal use, frequent handwashing is encouraged and hands must be washed prior to entering the clinical environment.

Students who smoke are urged to quit. Students who smoke must brush and use mouthwash before providing direct patient care. Uniforms, breath, and hands must be free of smoke odor. Students who do not comply will be asked to leave clinic and will forfeit clinic requirements for that clinic session.

**Nails:**

- Fingernails must be well manicured, short, and clean.
- Fingernails are to be flush with the end of the finger pad.
- No artificial nails are allowed as they harbor bacteria.
- No nail polish is to be worn during any clinical setting.
- Cuticles and skin around on the hands and around the nails must not be torn, chapped, or irritated. Hand lotion is available in the supply area.

**Other:**

- No chewing gum is allowed in classrooms, labs, or clinic.
Guidelines about Attire

Classroom Lecture Attire

- Attire should be neat and clean.

- Jeans are acceptable as long as they are in good taste. Faculty reserves the right to determine what is “in good taste” or “offensive” and to ask a student to refrain from wearing any item.

- Closed-toed shoes are recommended at all times.

- Bare midriffs and skimpy clothing are not allowed.

Lab Attire:

- Jeans or long pants are encouraged when working in the Radiography Lab.

- Scrubs are required when working in the Dental Lab (DEN 224).

- Hair must be secured away from the face.

- No dangling jewelry may be worn due to safety issues.

- Safety glasses must be worn at all times.

- Flat, comfortable full-coverage shoes and socks are required. No sandals, flip-flops are allowed.

Clinic:

- Students must comply with the uniform dress code by wearing the uniforms purchased as specified by the HCC Dental Hygiene Program.

- Uniforms must be clean and pressed at all times.

- Scrubs must be worn under lab coats at all times in the clinic environment. No jeans, shorts, leggings, sweat pants, or other street clothes are to be worn in the clinic environment.

- Only white shirts or shirts the color of the uniform can be worn under the uniform top.

- Lab coats are to be worn during direct patient care and during clinic rotations are not to be worn outside the clinic area. They must be left draped on the operator chair if the student leaves the clinic environment and plans to return. If the student does not plan to return to the clinic, the lab coat is put in a plastic bag and taken home to be laundered before it is worn again.
• Clean, white closed-toed shoes must be worn. These may be clinic shoes or leather tennis shoes with no holes on the top of the shoes. Canvas tennis shoes are not allowed. All shoes must be cleanable. No colors or obvious logos must be visible.

• Safety glasses, gloves, student gowns, and masks must be worn during direct patient care as specified by infection control policies established by the HCC Dental Hygiene Program.

• Radiographic monitoring badges must be worn in the clinic environment.

• Knee highs, white socks (at least crew-length), or white stockings must be worn. No ornamentation must appear on the knee highs, socks, or stockings. Ankles and legs must be covered during patient care.

• Waist high, plain, neutral-colored underwear must be worn in the clinic environment and should not be visible. No bikini, boxer, thong, French-cut, or string underwear should be visible.

• Student ID badges are to be worn beneath clinic gown during direct patient care.

• A minimum of two scrub uniforms consisting of pants and top.

• A minimum of two lab coats with HCC Dental Hygiene Department Logo
Attendance Requirements

Attendance:

 Registration in a dental course (DEN prefix) is required prior to attendance in a classroom, lab, or clinical session.

 If a lecture, lab, or clinical session is canceled due to the instructor’s absence, the session will be rescheduled.

 If a lecture, lab, or clinical session in progress is canceled due to unforeseen circumstances, it may be rescheduled.

 Children are not allowed in classroom, laboratory, or clinical areas. Students who bring children to class will not be allowed to stay in that class.

 If a student leaves the classroom, lab, or clinical area prior to the end of the session without permission from the instructor, the instructor will determine whether the student will be counted as absent or tardy.

 If a student comes to lecture, lab, or clinic unprepared, the instructor has the right to dismiss the student from that session, count it as an absence, and require the student to make up that session at the instructor’s discretion. The student is responsible for any missed assignments.

Absences:

 Punctual attendance is part of professional responsibility and is required at all classroom, laboratory, and clinic sessions. In the event a class must be missed, the student must notify the Dental Hygiene instructor for the specific class prior to class time and is responsible for all material covered during class absence.

 Students are to call the Clinic Manager at (252) 536-7219 to report absence or tardiness for any clinic session.

 For every class, lab, or clinical session missed in excess of two, the student may be dropped from the course.

 Students who have two absences will be given written warning notice of the absences.

 If the number of absences from any one course equals two, the student’s retention status in the dental hygiene program will be determined by a meeting of the Dental Hygiene Department Head and full-time Dental Hygiene faculty. This decision will be based on prior performance, the amount of time missed, and the circumstances that resulted in the absences.

 Three absences, excused or unexcused, may result in automatic dismissal from the program.

 A student is considered absent if he/she misses an entire class/clinic session.
Not all classes, labs, or clinic sessions can be made up. Scheduling to make up missed classroom, lab, or clinical activities is at the discretion of the instructor. It is the student’s responsibility to schedule that make-up session with the instructor within 24 hours of returning to class, lab, or clinic.

In any case of absence, the decision of the status of this absence shall be left to the discretion of the instructor.

**Tardiness:**

- A student is considered late (tardy) if s/he arrives after the class/lab/clinic start time.
- A student is considered tardy if he/she leaves before class is dismissed.
- Students who arrive to class tardy may be asked to wait until the break to enter the classroom or laboratory session.
- Every two times a student is tardy counts as one absence.
Equipment Regulations

Taping/Recording

- Recording and photographing any classroom instruction (individual and small group) is not permitted in any classroom, lab, or clinic session.

Cellular Telephones

- The use of cell phones is not permitted during classroom, lab, or clinical sessions.

- Each course syllabus will address the use of cell phones during class, lab, or clinic.

Telephone/Telephone Messages

- Phone messages taken by the clinic manager will be placed in your mailbox. The clinic manager will only contact you personally in the case of an emergency.

Clinic Computers

- The clinic computers are available for academic purposes only

Clinic Printer

- The printer located in the clinic is for clinic use only

- Students are not allowed to print items not pertaining to clinic use

Copier

- The copier is for departmental/clinical use only

- Students are not allowed to copy items unless permission is received from faculty
Assignments/Evaluations

All assignments and readings are required and should be completed prior to class. Students are responsible for assigned information for use in class discussions, quizzes, and examinations.

Evaluation Scale:
A = 93-100
B = 85-92
C = 77-84
D = 70-76
F = 69 and below

A final grade of 77 or higher is required for continued enrollment in the Dental Hygiene Program.

Incomplete Assignments:
All assignments in any dental hygiene course are due at the specified time.

Assignments can include, but are not limited to:
- Oral presentations
- Written assignments
- Homework
- All quizzes, including scheduled and unannounced quizzes
- Unit exams
- Mid term exams
- Final exams
- Proficences
- Clinical Evaluations
- All clinic assignments/requirements

The following penalty will be given for late completion:
- 1 point deduction per calendar day (including weekends) per late assignment.
- These points will be deducted from the final course grade.

Students Working Outside of Scheduled Class Time

Any student working in the clinic, lab, classroom, darkroom, etc. outside of regularly scheduled class times must follow these procedures:

1. Receive written approval from the Dental Hygiene Department Head and course instructors. A student is not allowed to work in the clinic or dental lab unless a dental hygiene faculty member is in the area. The clinic manager is not considered dental hygiene faculty.

2. Complete your assignment and clean up. Failure to clean up will result in a loss of professional responsibility points and the ability to work outside scheduled class time in the future.

3. Notify your instructor when you are leaving the area where you have been working. The instructor will inspect the area before you go to assure that it has been left clean and in its original arrangement.
EXAM POLICIES

- Exams are based on all the learning objectives and classroom, laboratory, and clinical activities assigned on all course syllabi, content covered in class, lab, or clinic, and all required learning resources.

- Exams must be taken at scheduled times and may only be taken once.

- No student will be allowed to enter an exam already in progress.

- Students who have concerns/questions with an exam question or results/grades are required to submit written documentation and make an appointment with faculty to discuss the assessment.

- Exams will be made-up at the discretion of the instructor.

- A student who fails an exam should make an appointment with a full-time faculty member for individual assessment of study and test-taking skills. Recommendations will be made to improve these skills. The student may be referred to Student Services for further help.

Procedure for Academic Dishonesty During an Exam

The faculty will:

- Take the student’s exam and answer sheet. In the event the test is computerized, the student will be asked to leave the room with the computer screen minimized.

- Ask the student to leave the room and wait to meet with the instructor/proctor at the conclusion of the testing time.

- Inform the student that a conference will be held with the department head at which time disciplinary procedures will be initiated as stated in the Halifax Community College Catalog.
Test & Quiz Policy

- On test days, purses, book bags, hats, cell phones and other items are to be placed on the floor in the back of the classroom or lab.

- On test days, seating arrangements for students will be at the instructor’s discretion.

- No communication, verbal or nonverbal, will be tolerated once the test has been distributed. Any talking will be viewed as cheating. The offender will be asked to leave the room and will receive a zero on the test.

- Once the student has completed the test, the paper should be turned in to the proctor/instructor and the student should leave the room and not stand outside the classroom door. If the test is computerized the student will log out of the test and shut the computer down and see the instructor before leaving the room. No one is allowed to re-enter until all students have completed the test.

- Students leaving the room following the completion of the test must not remain outside the classroom, but must leave the area and return by the time specified by the instructor.

- Instructors will not give answers to the test until everyone is finished.

- No test will be reviewed until everyone has taken it. Therefore, if a student is absent from the test, the test will not be reviewed until that student has taken it.

- Tests will be returned and discussed at the instructor’s discretion.

- Any cheating should be reported to the instructor as soon as it is discovered. If a student does not feel comfortable coming directly to an instructor, a note may be left in the instructor's mailbox. The note must inform the instructor about the following:
  1. Who was involved.
  2. When it happened.
  3. What happened.

- If a student is planning to be absent on a scheduled test day, it is his/her responsibility to contact the instructor prior to the test and take the test prior to the scheduled test date. The student taking the test early must sign the Academic Integrity Agreement (page 2-14A).

- If a student has an unexpected absence on a scheduled test day, it is his/her responsibility to contact the instructor to schedule a make-up date for testing. If the student fails to contact the instructor within a day after returning, the student will not be able to take the scheduled test.

- The faculty cannot guarantee that additional clinic sessions will be available for students to make-up missed clinical tests and requirements.

- Quizzes will be given throughout the semester, both announced and unannounced. Students will not be allowed to make up unannounced quizzes and the student will receive a grade of zero.
ACADEMIC INTEGRITY AGREEMENT

Student

Please print

I understand the instructor of this course has allowed me to take this test, midterm exam, final exam, or assignment earlier than the scheduled date.

I agree to not disclose the nature and/or type of questions that were included on this test to any classmate.

I will not describe the questions or discuss my answers to the test.

I will not tell anyone if the test contained listing, multiple choice, essays, or any other type of question methodology.

I will not share my opinions with any classmate if I considered the test hard, easy, fair, long, or short.

I understand that if I dishonor this agreement that academic sanctions will be imposed, and I may be dismissed from the Halifax Community College Dental Hygiene Program.

Course

Scheduled Evaluation Date

Evaluation Date

______________________________________________________________________________

Student Signature       Date

______________________________________________________________________________

Instructor Signature       Date
Exam Review Policy

- Following each exam, test, or quiz, the faculty will make a comprehensive analysis of exam results and make any necessary adjustments.

- A student's grades will only be discussed with the student and no one else.

- Following each exam, test, or quiz, the faculty will review the questions and answers on the exam. Each faculty member will review the exam, test, or quiz at his/her discretion whether it is in the classroom, or in a private setting for individual review. Students will be allowed to ask questions and have a right to understand the rationale behind each tested item.

- The purpose of the reviews are to:
  1. Improve the student's understanding of the course content.
  2. Improve the student's test-taking skills.
  3. Provide the student with an opportunity to verify his/her test score. If an error is suspected in the scoring of the exam, test, or quiz, the student must notify the instructor immediately for resolution.

- The students will not be allowed to keep a copy of the exam, test, or quiz or answer sheet but are allowed to look at his/her own answer sheet.

- All answer sheets must be returned to the instructor following the review.
Grievance Procedures

Grievance Procedures:

- All personal problems should be left outside the doors of Halifax Community College. Any personal problem may be discussed with a Halifax Community College counselor in the Student Support Services.

- Address your grievance to the source individual first, whether it is a classmate, faculty member, or the Department Head.

- Academic problems are discussed with the lead instructor of the course. If a student has a problem with a particular faculty member, they are to see that instructor during office hours. If a mutually agreeable solution cannot be found, the problem should be taken to the Department Head for joint consultation among all involved individuals.

- Although confronting someone with a problem may be difficult, the problem may be more easily resolved when discussed around the time of occurrence rather than after a significant period of time has elapsed.

- For HCC policy on Student Grievance Procedures and the Right to Appeal, see the HCC Semester Catalog.

Student Complaint Process
On campus and Distance Learning

In-State Students On campus and Distance Learning Complaint Process

Halifax Community College is committed to mutual respect among all constituents. The College is committed at all levels to a fair and reasonable resolution of issues through a formal grievance process guided by the information and documentation provided in the process. These procedures assure that all matters relating to present and prospective students will be handled fairly and equally without regard to race, color, sex, age, political affiliation, religion, disability, national origin, or other non-merit factors.

The grievance procedures described below apply to academic and non-academic student grievances. Student who desire to resolve a grievance should follow the College’s Student Grievance Procedure in the Student Handbook. These forms are also located in the offices of the Dean of Student Services and Dean of Curriculum Programs.

Out-of-State Students On campus and Distance Learning Complaint Process

Halifax Community College is committed to mutual respect among all constituents. We are at all levels committed to a fair and reasonable resolution of issues through a formal grievance process guided by the information and documentation provided in the student grievance process.

Students residing outside of the State of North Carolina while attending HCC who desire to resolve a grievance should follow the College’s Student Grievance Procedure in the Student Handbook. However, if an issue cannot be resolved internally, you may file a complaint with your State. The Student Complaint Information by State and Agency provides phone numbers, emails and/or links to state education agencies.

Halifax Community College is accredited by the Southern Association of Colleges and Schools Commission on Colleges.

Also see:
http://www.halifaxcc.edu/studntre/grievance/01062015.pdf
Academic Integrity

All students are required to exhibit academic honesty in all academic exercises and assignments. For a list of the types of misconduct which are subject to disciplinary action, refer to the HCC Semester Catalog.

Academic dishonesty occurs when any of the following acts are committed by a student:

- **Cheating**: Intentionally using or attempting to use unauthorized materials, information or study aids in any academic exercise. The term academic exercise includes all forms of work submitted for credit or hours.

- **Fabrication**: Intentional or unauthorized falsification or invention of any information or citation in an academic exercise.

- **Facilitating Academic Dishonesty**: Intentionally or knowingly helping or attempting to help another to violate any provision of the institutional policy on academic dishonesty.

- **Plagiarism**: The deliberate adoption or reproduction of ideas or works or statements of another person as one’s own, without acknowledgment.

**Dismissal from the Dental Hygiene Program include the following, but not limited to the following:**

1. Cheating.
2. Plagiarism.
3. Falsification of student or patient records.
4. Withholding patient records or radiographs from instructors.
5. Removing patient records or radiographs from the clinic area.
6. Unprofessional conduct or demeanor.
7. Failure to meet course requirements within the instructor’s specified time frame.
8. Failure to adhere to infection control procedures.

A student who believes the dismissal is unfair and elects to appeal the decision may not attend class, lab, or clinic sessions until a decision has been made in the appeals process (See HCC Semester Catalog [http://www.halifaxcc.edu/studntre/grievance/01052015.pdf]).
Test Question Challenge Form
(You must inform the instructor within 24 hours that you wish to challenge a question.)

Subject / test: _____________________

Test question number: _________

Test question / answer on test key:
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

Your answer:
__________________________________________________________________
__________________________________________________________________

1. Please provide information from a text book or reference book that supports your answer.
2. Please attach a copy of your reference.
3. Please make an appointment with the instructor to review this test question challenge.

Thank you!
Dismissal and Readmission Policy

- The dental hygiene faculty will meet at the conclusion of each semester to evaluate students’ grades and performance to determine which students will continue in the dental hygiene program.

- During the first week of each semester, each instructor will distribute course syllabi and outlines that describe grading criteria, evaluation, and course requirements.

- Students in the Dental Hygiene Program at HCC must attain a grade of “C” (77%) or better in each DEN course within the dental hygiene curriculum (See Dental Hygiene Semester Course Sequence) in order to continue on to the next semester of the program.

- In the event that a student receives a grade below a “C”, (D) in a DEN course s/he may be allowed to remain in the program on probation as long as the GPA does not drop below a 2.0. Should the student receive a second grade of “D” in a DEN course, s/he will be dismissed from the program.

- If a student receives an “F” in a DEN course s/he will be dismissed from the Dental Hygiene Program without an option of readmission.

- If an enrolled dental hygiene student receives a grade of “F” in a required general education course s/he may be allowed to continue in the program providing the cumulative GPA is a minimum of 2.0, the student will be on probation, and the student cannot make below a “C” in any other course (dental or non-dental) during enrollment in the dental hygiene program. The failed general education course must be repeated with a passing grade of “C” or better before the student is allowed to graduate.

- Students who meet the criteria for seeking readmission must reapply to the dental hygiene program through the college’s Admissions Office just as if s/he were a new applicant. Reapplication and readmission will be granted for a returning dental hygiene student in the same way as a new student applying to the program.

- The Dental Hygiene Department Head, in consultation with the dental hygiene faculty, will make a decision regarding the readmission of any student.

- If a student is readmitted, s/he will be required to retake the Clinic course s/he was enrolled in at the time of the dismissal. The student will be required to audit the other dental hygiene courses for the semester that the student is readmitted. Auditing previously completed dental hygiene courses may be required to ensure the student’s competence and ability to complete the sequential curriculum.

- Any student receiving a grade of “D” in any required general education course (non-DEN) will not be granted admission to the Dental Hygiene Program.

- A student who believes the dismissal is unfair and elects to appeal the decision may not attend class, lab, or clinic sessions until a decision has been made in the appeals process. (See HCC Student Handbook).
Academic Consultation Guidelines

- An academic consultation is required when a student is performing below accepted levels in a dental science course (DEN prefix). Faculty advisors must schedule a conference with the student to discuss his/her performance and the course instructor and complete the Academic Consultation Form.

- The following conditions warrant an academic consultation:
  1. A student’s grade average for any course below a “C” grade at the mid-semester grade conference.
  2. The student has displayed blatantly unsafe, illegal, or unethical behaviors in accordance to those polices described in the HCC Dental Hygiene Student Manual.
  3. The student has compromised his/her academic integrity in accordance with the polices in the HCC Dental Hygiene Program Manual and the HCC Semester Catalog.
  4. The student scores less than 77% on any test, quiz, or any other assignment must have a conference with the course instructor.

- The instructor will notify the Dental Hygiene Department Head about the student’s academic performance.

- The Academic Consultation Form is to be completed and signed by the instructor, the student, and the department head.

- The original Academic Consultation Form will be kept on file in the student’s dental hygiene academic file, and one copy given to the student.

- If a student receives an Academic Consultation Form and withdraws from the Dental Hygiene Program, s/he will be considered failing the course for purposes of readmission.

- If competency levels are not met within the designated time frame or by the end of the semester, a failure for the course will be issued and the student will be dismissed from the dental hygiene program.
Halifax Community College
Dental Hygiene Department
Academic Consultation Form

Date:   _____________________________________________________

Student Name: _____________________________________________________

Course:  _____________________________________________________

Student’s Status: _____________________________________________________

_____________________________________________________________________

_____________________________________________________________________

Recommendations for Improvement:

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

Faculty Signature

Student’s Comments:

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

Student Signature  Department Head Signature
Retaking Courses in HCC Dental Hygiene Curriculum

- Students who have previously completed dental science courses (DEN prefix) must follow specific requirements during their enrollment in the Halifax Community College Dental Hygiene Program regarding the transfer and credit of these courses into the program.

- Students must successfully complete admissions requirements for the Dental Hygiene Program, which includes submitting official transcripts to the registrar. The Dental Hygiene Department Head and the Registrar will consult on the course credits, and make recommendations on the course requirements needed to complete the HCC Dental Hygiene Program.

- If a student has transfer academic credit for a DEN course which is not a clinical course, the student will be required to audit the non-clinic DEN course. If a student audits a non-clinic DEN course s/he will have to complete a Request to Audit form. This form is signed by the student, department head, and the Dean of Curriculum and submitted to the registrar’s office.

- Students who have previously completed and passed clinical dental science courses (DEN prefix) with a “C” or better will still be required to complete the clinical DEN course for completion of the dental hygiene curriculum.
Malpractice/Liability Insurance

- All students are required to purchase malpractice/liability insurance through Halifax Community College prior to enrolling in the Dental Hygiene Program.
- The cost of the insurance is $16.00 per year, valid per calendar year.
- The insurance payment is due in August when the student pays for tuition and fees.
- Malpractice insurance is purchased at the Halifax Community College Cashier’s Office.
- Once the insurance is paid for, the student must provide proof of payment (receipt) to the department head.
- A copy of the School Policy for Healthcare Provider Students is on file in the department head’s office and in the office of Administrative Services.
Alcohol and Controlled Substances Use

The Dental Hygiene Program will follow the HCC policy. (See HCC Semester Catalog http://halifaxcc.edu/catalog/HCC%20catalog%202016_2018%20final%20for%20web_march%202016.compressed.pdf)

Any student found under the influence of alcohol or any narcotic drug or any other controlled substance while in any dental class, clinic or lab will be dismissed from the classroom or clinical site. If dismissed, the student will be suspended for a minimum of 2 days of class/lab/clinic. The following procedure will come into place if a student is dismissed:

1. Someone in the student’s family will be called to come and pick the student up from class/lab/clinic. If the student refuses to call a family member, then the campus police will be called to remove the student from class. If the police are called, the student will be placed under their custody and may be subject to arrest, drug or breathalyzer testing.

2. The student may be subject to legal issues especially if patient care is involved. If a patient is injured during the student’s care, then the student will be immediately dismissed from the program and will be subject to whatever legal issues the patient may decide to pursue.

3. The student will be suspended for 2 days from class/lab/clinic. The student is to write a one page paper explaining his/her situation and why he/she should be allowed back into class. This paper should be turned in within the 2 day period of suspension. The student will not be allowed back into class until this paper is turned into the Dept. Chair. This may cause the student to be suspended longer than 2 days.

4. Once the paper is turned in and is accepted by the School Chair, the student will sign a form indicating that he/she will be on probation until graduation. If another similar incident occurs after this time, the student will be dismissed from the program and will not have the opportunity to be re-admitted into the program in the future.

5. If a student is taking a controlled substance that is prescribed by a medical provider, it is not considered a violation; however it must be reported to the instructor of the class, clinic, activity, function or event. Students shall be held strictly accountable for their behavior while under the influence of prescribed drugs.

5. If a student is suspected of being under the influence of a controlled substance or alcohol, then he/she may be required to take a drug test or breathalyzer test. It may cause of his/her dismissal or suspension from class.
Withdrawal From the Dental Hygiene Program

- Any student who is failing academically or clinically and formally withdraws from a course in the Dental Hygiene Program will receive a “W” as a final grade for the course in compliance with the HCC Curriculum Schedule for that semester.

- Any student who is performing at academic levels less than a grade of “C” in dental sciences courses (DEN prefix) will schedule a conference with the Dental Hygiene Faculty who teaches that course. The student will receive an Academic Consultation Form, a written warning, and suggestions for improvement.

- Students who withdraw from another course within the Dental Hygiene Curriculum including those with the prefixes BIO, ACA, ENG, HUM, SOC, CIS, and CHM are required to repeat these courses and receive a grade of “C” or better to graduate from the Dental Hygiene Program. Students who do not graduate from the Dental Hygiene Program are not allowed to take National or State Dental Hygiene Examination Boards.

- A student who withdraws from the Dental Hygiene Program or other courses within the Dental Hygiene Curriculum is expected to notify the instructor of the course and the Dental Hygiene Department Head to complete the withdrawal procedure.
Section 3:
Infection Control and Hazardous Waste Policies
Infection Control and Hazardous Waste Policy  
Halifax Community College  
Dental Hygiene Program

The information compiled in this policy manual is to educate the health care providers on the hazards of the environment in which they work and about the means of prevention necessary to protect their health. Information and guidelines in this manual is based on recommendations provided by the US Public Health Service Centers for Disease Control and Prevention (CDC) as adopted by the American Dental Association (ADA) and accepted by the ADA Council on Scientific Affairs and The ADA Council on Dental Practice. Compliance with these policies and procedures is the ethical obligation of all participants in the delivery of care to patients in the Halifax Community College (HCC) Dental Hygiene Program.

Infection control is a priority consideration in the dental practice. With the increased publicity surrounding infectious diseases, dental professionals and consumers are becoming more aware that the dental environment is a potential source for one or more of these diseases. Accordingly, Infection control issues and procedures are undergoing dramatic change and will continue to evolve as new technology, research, and legal precedence emerge.

The prevention of cross-contamination and transmission of infection to all persons, whether patients, dentists, auxiliaries, laboratory technicians, or other non-clinical staff is the responsibility of all dental personnel. A fundamental principle of an effective infection control program is to provide careful precautions and effective control techniques that can keep infectious microbes within the manageable limits of the body’s normal resistance to disease. To achieve this goal and to provide a safe therapeutic environment for patients, students, and staff, the Dental Hygiene Program has adopted policies and procedures representing a comprehensive and practical infection control program.

As part of their education and preparation for clinical experience, students will be instructed in the use of standard precautions with all patients. These precautions will be reviewed with students as well as faculty and staff at the beginning of each semester. Infectious disease policies of off-site facilities will be reviewed with the student prior to a rotation experience at that facility. It is the responsibility of the students, faculty, and staff of the HCC Dental Hygiene Program to understand and follow the policies in this manual at all times when working in laboratory or clinic areas.
How Does Infection Occur?

Pathogens must enter the body for a person to become infected. The most common method of infection in the dental environment is from the patient to the staff member. Contaminated blood, saliva, or respiratory droplets from patients are passed to staff members by direct contact, transfer to clothing or possessions, and through residues of fluids found on surfaces or items in the dental environment. The infected material enters staff members’ bodies most commonly through cuts on fingers, direct transfer to the mouth, eyes, or nose, or by aspiration into the lungs.

Transmission of pathogens, or cross-contamination, is common in the dental environment. The usual pathway is from patient to staff, but the infection can move in many directions. One pathway of transmission is from direct splatter of blood, saliva, or a mixture of both into the eyes, nose, or mouth. Some airborne pathogens in aerosol droplets smaller than 5 microns can transmit diseases into the lungs. Sprays of infected blood and saliva from patients’ mouths can contaminate office surfaces, staff clothing, or equipment. Pathogens can then be transferred to the hands of dental personnel. Once pathogens are on the hands, they can pass into the body through body openings or breaks in the skin. Contaminated staff members can transfer pathogens to any surfaces they touch. These pathogens can then be picked up by other patients and staff members. Pathogens can be carried home by staff members and patients on clothing and objects.

Often unnoticed sites where pathogens live in the dental environment include equipment, x-ray units, bathrooms, dental units, telephones, and patient charts. On people, pathogens may hide under wedding bands and other jewelry, under fingernails, on uniforms, and in hair. Although unlikely, the waiting room is a place where patients and staff may become cross-contaminated by way of magazines, furniture, and clothing racks. Staff, patients, sales representatives, maintenance workers, technicians, and other visitors may come in contact with pathogens by touching contaminated items and/or surfaces in the clinic area. Dental professionals are at risk during dental procedures when infected saliva or blood sprays the face or enters a cut or sore, when they touch dental equipment, instruments, or chairs and other contaminated items or surfaces. Clerical personnel are at risk from handling the telephone, patient charts, and other surfaces contaminated from contact with the hands or belongings of staff members and patients. Janitorial staff may be at risk from touching contaminated items and by improper handling of hazardous wastes. Patients are at risk through contact with dental professionals, clerical staff, and other patients and by touching contaminated items. Family members and close friends of dental professionals working in a clinical environment are at a higher risk of infection than the general population. Laboratory technicians in independent labs are at risk from pathogens sent from office to lab on dentures, impressions, and other materials. Items sent from the dental office to the lab should include “Alert Labeling” when thought or known to be contaminated to help protect laboratory personnel.

The risk for contracting and spreading infectious disease can possibly affect job performance and job security as well as the health of colleagues and patients. The common, less serious infectious diseases easily contracted in the dental office include colds, influenza, and staphylococcal and streptococcal infections. Bouts of common diseases may keep dental personnel home for days, weeks, or more. Young patients and parents may transmit measles, chicken pox, and mumps. These diseases may cause severe symptoms in adults. AIDS is an incurable disease of the immune system that is almost always fatal. Herpes is a chronic disease that causes outbreaks of painful lesions, fever, malaise, and genital discharge. The herpes simplex type I virus has been found to live in saliva even when no lesions are present in the mouth.
Infections Transmissible in Dentistry

Herpes Simplex Type 1 (HSV-1)
Produces lesions in and around the mouth which usually heal within 7-10 days. The lesions shed the virus until healing is complete. Direct contact with the lesions is to be avoided. Lesions affecting the lip are the most common and are called herpes labialis or cold sores. In the mouth this virus causes acute herpetic gingivostomatitis. Common causes include trauma, sun exposure, fever, and upper respiratory infections. The virus can lie dormant and recur under favorable conditions, especially stress.

Herpes Simplex Type 2 (HSV-2)
Produces ulcerative lesions in the genital area and on the buttocks, fingers, thighs, lips, and mouth. Is a sexually transmitted venereal disease that is highly contagious during active stages. Many individuals do not know they carry the disease. Each outbreak or occurrence can last up to 3 weeks. The virus will lie dormant and recurs under favorable conditions, especially stress. At the present, there is no cure for this disease but anti-viral medications may relieve symptoms and occurrence of outbreaks.

Hepatitis
Is an inflammation of the liver and poses a great threat to dental personnel. There are several forms of hepatitis including A and E which are fecal borne and B, C, and D that are blood borne. The hepatitis B vaccine protects against B and D. Hepatitis A vaccine protects against hepatitis A. General signs and symptoms of viral hepatitis may include flu-like symptoms, malaise, anorexia, an enlarged liver, fatigue, diarrhea, nausea, abdominal pain, jaundice, fever, rashes, dark-colored urine, arthritis, muscle pain, and itching.

<table>
<thead>
<tr>
<th>Type</th>
<th>Transmission</th>
<th>Apparent Jaundice/ Other Symptoms</th>
<th>Possibility of Carriers</th>
<th>Mortality Rate</th>
<th>Vaccine Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Fecal</td>
<td>Yes</td>
<td>No</td>
<td>&lt;1%</td>
<td>Yes</td>
</tr>
<tr>
<td>B</td>
<td>Blood Saliva Sexual transmission</td>
<td>Yes 1 out of 5 have acute symptoms</td>
<td>Yes 1 out of 10 persons</td>
<td>2-3%</td>
<td>Yes</td>
</tr>
<tr>
<td>C</td>
<td>Blood Saliva Sexual transmission</td>
<td>No 10% have acute symptoms</td>
<td>Yes 50% of persons infected</td>
<td>1%</td>
<td>No</td>
</tr>
<tr>
<td>D</td>
<td>Blood Saliva Sexual transmission</td>
<td>Severe illness</td>
<td>1 out of 25 persons who carry type B</td>
<td>60%</td>
<td>Yes</td>
</tr>
<tr>
<td>E</td>
<td>Fecal</td>
<td>Yes</td>
<td>Unknown</td>
<td>None</td>
<td>No</td>
</tr>
<tr>
<td>Epstein-Barr Virus</td>
<td>Saliva</td>
<td>Fatigue Sometimes jaundice</td>
<td>Possible</td>
<td>None</td>
<td>No</td>
</tr>
<tr>
<td>Cytomegalovirus</td>
<td>Saliva Blood Sexual transmission</td>
<td>Sometimes</td>
<td>Possible</td>
<td>None</td>
<td>No</td>
</tr>
</tbody>
</table>
AIDS

Stands for Acquired Immune Deficiency Syndrome. First appeared in the US in 1981. Caused by a retro virus that lodges in the T-Lymphocytes and reproduces causing a decrease in the number of white blood cells. Transmitted through blood and blood-contact, semen and vaginal fluids, and breast milk. The virus has been found in tears, urine, cerebrospinal fluid, saliva, and amniotic fluid. There is no known cure or vaccine. Incubation can last from months to 10 years or possibly longer. After diagnosis death may occur within 3-5 years. Drugs have prolonged life for several years. The virus affects women more easily than men. It destroys the immune system leaving the person defenseless against diseases. AIDS can be transmitted from mother to fetus. It is not transmitted by casual contact, insects, air, water, toilets, or by shaking hands and touching an infected person. Symptoms include flu-like symptoms, fatigue, malaise, weight loss, fever, night sweats, diarrhea, white lesions or unusual marks on the tongue or mouth, swollen glands in the neck, armpits, or groin areas, a dry cough not caused by a cold or the flu, discolored blotches on the skin or inside the mouth, nose, eyelids, or rectum.

Opportunistic Diseases/Infections Associated with AIDS
- Pneumocytis Carinii Pneumonia (PCP)
- Candidiasis
- Cytomegalovirus (CMV)
- Herpes Simplex
- Herpes Zoster (Shingles)
- Papova Virus (Genital Warts)
- Kaposi’s Sarcoma
- Non-Hodgkins Disease
- Squamous Cell Carcinoma
- Primary Lymphoma of the brain
- Tuberculosis
- Hepatitis B

Oral Manifestations of AIDS
- Hairy Leukoplasia
- Candidiasis
- Gingivitis HIV-G
- Periodontitis HIV-P
- Angular Cheilitis
- Herpes
- Necrotizing Stomatitis
- Xerostomia
- Non-Hodgkins’ lesions/tumors
- Kaposi’s Sarcoma
Tuberculosis

Is an airborne disease known as TB and is considered to be a leading cause of death among the elderly. Highly contagious and can be transmitted through saliva and droplet infection. The inhalation of a small number of bacilli may lead to bacterial multiplication in the respiratory bronchioles, alveolar ducts, or alveoli. The bacilli are destroyed by boiling for five minutes, autoclaving, contact with phenols, and ultraviolet radiation. Only 5-15% of those infected ever become ill with tuberculosis. Masks and gloves are essential protection and handwashing is critical to prevent cross-contamination. Infectious patients tend to cough productively and may produce sputum that is yellow or bloody. These patients may have a dramatic weight loss. Dental personnel and staff must be suspect of TB when a patient is coughing continuously.
Student Health Regulations

Each student must submit a completed medical history prior to entering the program. Proof of a dental exam within the last 12 months prior to entry is also required. Any student with a positive history of Hepatitis B must provide documentation from his/her physician that states he/she is no longer infectious.

The 10A NCAC 41A .0207 “HIV and Hepatitis B Infected Health Care Workers” law requires health care workers to notify the state health director if they are infected with HIV and/or hepatitis B. The state health director will determine if the prospective student’s clinical activities will pose a risk to the public, and may impose practice limitations on the prospective student.

The student’s physician is obligated to judge whether clinical work poses a threat to the health of the student.

The evaluation of the applicant or currently enrolled student with a known infectious disease will include a physician’s statement of the individual’s health status as it relates to the individual’s ability to adequately and safely accomplish the essential outcomes of his/her course or curriculum.

The physician’s statement must also indicate the nature and extent of the individual's susceptibility to infectious diseases often encountered when accomplishing the outcomes of the individual's course or curriculum.

The ADA and the US Public Health Service strongly recommend that all dental personnel receive the Hepatitis B vaccine. The HCC Dental Hygiene Program requires that all students receive the Hepatitis B vaccine, have proof of immunity, or have a medical statement from a physician that he/she is medically advised not have the vaccination. The HCC Hepatitis B Vaccine Declination for Students form is available from the Dental Hygiene Department Head.

Other vaccines recommended for students in the HCC Dental Hygiene Program include those providing protection against influenza, measles, mumps, rubella, and tetanus.

Medical histories will be kept confidential unless a medical emergency occurs and it is vital that the medical history information be disclosed to other healthcare providers responding to the emergency. Medical histories will be kept by the Dental Hygiene Department Head.
Infection Control Terminology

**Acquired Immune Deficiency Syndrome (AIDS)**- syndrome of any of several opportunistic infections, malignancies, and constitutional symptoms that effect the depressed immune system of a person infected with the Human Immunodeficiency Virus (HIV).

**Active Disease**- infected person exhibits signs and symptoms of the disease.

**Airborne Pathogen**- a microorganism capable of causing disease in humans which is spread by droplets expelled into the air, typically through a cough or sneeze.

**Asepsis**- the absence of infection or infectious materials or agents.

**Asepsis Technique**- procedures carried out in the absence of pathogenic microorganisms; techniques that avoid contamination of patients; the careful use of sterilized instruments and materials to avoid contamination.

**Bacteria**- any number of living microorganisms occurring in a wide variety of forms, existing either as free-living organisms or as parasites, and having a range of biochemical, often pathogenic properties.

**Bloodborne Pathogens**- disease-producing microorganisms that are spread by contact with blood or other body fluids from an infected person.

**Blood**- human blood, human blood components, and products made from human blood.

**Infectious Body Fluids**- Blood, blood products, semen, and vaginal secretions; saliva, vomitus, tears, feces, nasal secretions, sputum, and sweat if visibly contaminated with blood.

**Carrier State**- there are no outward signs of a disease or virus, yet the person is still infected with a disease and is potentially infectious to others.

**Chain of Infection**- a sequence of events needed for infection to spread.

**Cidal**- a suffix meaning to kill.

**Cleaning**- the physical removal of dirt.

**Contaminate/Contaminated**- the presence or the reasonable anticipated presence of blood or other potentially infectious materials on an item or surface.

**Cross-Infections**- the process of acquiring pathogens from other sources either directly (operator to patient) or indirectly (environment to patient).

**Decontamination**- the use of physical or chemical means to remove, inactivate, or destroy blood-borne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.
**Disease**- an alteration of health, with a characteristic set of sign and symptoms which may affect specific organ systems or the entire body.

**Disinfection**- any process, chemical, or physical capability of destroying pathogenic organisms, but not spores.

**Etiologic Agent**- a living organism that may cause human disease.

**Exposure Incident**- means another person’s blood or other body fluids, tissues, or laboratory substance being introduced into the body of an individual by penetrating the skin, passing through a mucous membrane, inhalation, or a bite.

**Hepatitis**- inflammation of the liver.

**Hepatitis A (HAV)**- form of viral hepatitis spread through the fecal/oral route.

**Hepatitis B (HBV)**- form of viral hepatitis spread through bloodborne routes.

**Hepatitis C (HCV)**- form of viral hepatitis spread parenterally.

**Hepatitis D (HDV)**- form of viral hepatitis. HDV is an incomplete virus that requires an active HBV infection in order to replicate. So, the HBV immunization also protects the person from developing a HDV infection.

**Immunization**- the process by which a person is rendered protected from disease.

**Infection**- the entry of organisms into the body and their multiplication, resulting in disease.

**Pathogenic**- disease producing.

**Personal Protective Equipment (PPE)**- Specialized clothing or equipment worn by an employee/student for protection against a hazard.

**Sanitation**- processes that reduce the number of organisms on inanimate objects to a safe level.

**Sepsis**- a condition in which disease-producing microorganisms are present.

**Static**- (as in bacteriostatic) - Stopping the growth of bacteria, but not necessarily killing the bacteria.

**Standard Precautions**- the consideration of all patients as being infected with pathogens and therefore applying infection control procedures to the care of all patients.

**Sterilization**- the process by which all forms of life, including spores are destroyed.
Handling Patient Records/Charts

- Precautions will be taken to prevent cross-contamination of patient records, charts, and folders.

- **To prevent contamination:**

  1. Wash hands before touching records, charts, or folders.
  2. Remove the most current x-rays from the chart and place them on the viewbox.
  3. Review patient record information in the chart.
  4. Record up-dated information in the chart.
  5. After the chart has been reviewed and up-dated, place the chart in the operatory unit cabinet to prevent contamination during treatment procedures.
  6. Wash hands and put on personal barrier equipment.
  7. If information must be recorded during treatment procedures, overgloves will be worn to prevent contamination.
  8. After treatment has been completed, remove personal barrier equipment, and wash hands.
  9. Remove x-rays from viewbox and return to chart.
  10. Obtain all necessary signatures.
  11. Return file to the Clinic Manager.
  12. For digital records and digital radiographs, use protective barriers on the keyboard and mouse to prevent contamination of the computer equipment.

- **When in doubt, wash your hands before handling patient charts.**
Infection Control Policies for the Dental Clinic
Protective Attire and Barrier Techniques

Handwashing:

❖ Hands will be washed with antimicrobial soap and cool to lukewarm water.

❖ An alcohol-based hand rub may be used instead of hand washing if hands are not visibly soiled.

❖ Dental personnel working in the clinic must maintain well-manicured, short nails, and avoid wearing rings, fingernail polish, or acrylic/artificial nails. These items provide places for microorganisms to grow and are difficult to remove by handwashing.

❖ Dental personnel will wash their hands at the beginning and end of each day, before and after eating or drinking, after using the restroom, after contacting chemicals used to sterilize or disinfect items and equipment, and before and after treating each patient. Hand will be washed after the removal of gloves for any reason.

❖ Although instruments contaminated with blood, saliva, or respiratory secretions should not be touched barehanded, hands should be washed immediately should touching of inanimate objects likely to be contaminated occur.

❖ Dental personnel who have exudative lesions or weeping dermatitis, particularly on the hands, should refrain from all direct patient care and from handling dental patient-care equipment until the condition resolves.

❖ Hand lotion may be used to decrease the risk of dryness that can lead to cracked or torn skin on the hands or around the nails.

Gloves:

❖ For the protection of students, staff, and patients, medical gloves will always be worn by dental personnel when there is potential for contacting blood, blood-contaminated saliva, or mucous membranes. Nonsterile (exam) gloves are appropriate for examinations and other nonsurgical procedures. Sterile gloves will be worn during invasive procedures including surgical procedures. Utility gloves will be worn during all clean-up procedures.

❖ Before treatment of each patient, dental personnel (students and staff) will wash their hands and put on new gloves. After treatment of each patient or before leaving the dental operatory, dental personnel will remove and discard gloves, then wash their hands.

❖ Hands will be washed and re-gloved between patients. Worn gloves are appropriately discarded.

❖ When gloves are torn, cut, or punctured, they will be removed as soon as patient safety permits. Dental personnel will wash their hands thoroughly and re-glove to complete the dental procedure.

❖ Overgloves may be worn when cross-contamination must be avoided.

❖ Utility gloves will be discarded if they become cracked, peel, discolored, torn, or exhibit other signs of deterioration.
Eye and Face Protection:

- Eye protection is required when providing direct patient care and when splashing or spattering of blood or other body fluids is likely. Wear either a chin-length plastic face shield and surgical mask or safety glasses and a surgical mask. Prescription glasses may be used as protection provided solid side shields are attached to the frames or a face shield is used.

- Face masks should fit snugly around the face.

- Masks will be changed between patients or during a patient treatment if it becomes wet or moist. Face shields or protective eyewear will be washed with an appropriate cleaning agent and disinfected between patients and when visibly soiled. Face masks will have a minimum filtration of 95% of 0.3-mm particle size. Masks with glass fiber mat are considered the most effective.

- Protective eyewear and face masks will be provided at no cost to faculty and staff. Students will be responsible for purchasing their own protective eyewear.

- Protective eyewear and face mask will be worn when performing chairside procedures and lab work and during clean-up procedures.

- Protective eyewear will be worn by patients during clinical procedures that produce aerosols.

- All protective eyewear will be washed/dried and disinfected/decontaminated after each patient treatment has been completed. After the eyewear is disinfected for the proper amount of time (10 minutes), they will be rinsed to remove remaining residue and dried.

- Face masks are to be removed by handling the elastic or cloth strings only. Never touch the mask itself with bare hands because of the risk of contamination from the mask.

- Face masks will be disposed of in appropriate waste containers.

- Face masks and protective eyewear will not be worn outside the clinic area.
Protective Clothing:

- Lab coats will be worn over scrubs when providing direct patient care or when clothing is likely to be soiled with blood or other body fluids. White clinic shoes or white leather athletic shoes may be worn. Shoes will not have color or visible logos. White socks (at least crew length), knee highs, or hose will be worn with shoes.

- Protective clothing will be changed daily or as soon as it becomes visibly soiled. Lab coats, gloves, masks, and eye and face protection must be removed before students and staff exit clinic areas. If a student plans to return to the clinic, the lab coat may be draped over the operator chair until the student returns. It may be reused if it is not visibly soiled. Students must always have a spare lab coat to replace a soiled coat during patient care. Lockers are provided for students to store extra clothing and supplies.

- Scrubs, shoes, and socks may be worn outside the clinic area unless visibly soiled but should be removed as soon as possible. Shoes should not be worn to attend class, meetings, or run errands. Students should change shoes before they leave the Allied Health Building. It is recommended that students change into other clothes before leaving the Allied Health Building.

- Lab coats, scrubs, and socks should be washed, using a normal laundry cycle, according to the instructions of detergent and machine manufacturers. Clinic apparel should be washed separately from other household items and clothing. It is the student’s responsibility to launder lab coats, scrubs, socks, and other apparel worn during direct patient care. Soiled clothing is to be put in a plastic bag and transported home.

- Shoes should be kept cleaned and polished at all times.

- When delivering patient care that includes the use of prophy jets, cavitrons, and other equipment that increase the amount of splatter, spray, and aerosols in the operatory, a face shield should be worn with a mask.

- Students will be responsible for the cost of their own scrub uniforms and shoes.

- Students will be responsible for the cost of their own lab coat used in the clinic area. Lab coats will be provided at no cost to faculty and staff.

- Outer protective garments (lab coats) will be laundered at no cost for employees. Employees will not be allowed to take home outer garments for laundering.
Procedure for Eyewear, Mask, Lab Coat, and Glove Putting on and Removal

**Putting on**
1. Lab coat
2. Mask
3. Protective eyewear
4. Wash hands and put on gloves

**Removing**
1. Remove gloves and wash hands.
2. Remove protective eyewear.
3. Remove mask.
4. Remove lab coat, turning inside out by holding on to the cuffs of the coat.
5. Put lab coat into a plastic bag.

**Covering Equipment and Surfaces:**
- Impervious-backed paper, aluminum foil, or plastic covers will be used to protect items and surfaces that may become contaminated by blood or saliva during use and that are difficult or impossible to clean and disinfect. Between patients, the coverings will be removed, discarded, and replaced with clean materials.

**Splatter and Aerosol Spray Control:**
- Appropriate use of intra-oral evacuation, prophy jets, ultrasonic scalers, and sonic scalers should minimize the formation of droplets, spatter, and aerosols during patient treatment.

**Sharp Instruments and Needles:**
- Sharp items such as needles, instruments, and wires contaminated with patient blood and saliva are potentially infective and will be handled with care to prevent injuries.

- Used needles will not be recapped or otherwise manipulated utilizing both hands, or any other technique that involves directing the point of a needle toward any part of the body. Either a one-handed “scoop” technique or a mechanical device designed for holding the needle sheath will be employed. Used disposable syringes and needles and other sharp items will be placed in puncture-resistant containers located as close to the area as possible. Bending or breaking of needles before disposal requires unnecessary manipulation and is not allowed.

- Glass anesthetic cartridges are disposed of by placing in a sharps container.

**Pre-procedural Patient Mouth Rinse:**
- To reduce the numbers of microorganisms, all patients will be asked to rinse out his/her mouth with an antimicrobial mouthrinse prior to care.

- Before the initial examination of the mouth, dental personnel will supply patients with a cup filled with 10 ml of mouthrinse and a paper towel. Dental personnel will ask the patient to rinse for one minute and expectorate into the cup. The patient will be instructed to stuff the paper towel into the cup to absorb the liquid. The cup will be discarded into the appropriate waste container.
Unit Preparation Beginning of Day & End of Day
HCC Infection Control

Unit Prep Beginning of Day

1. Wash hands.
2. Stool and assistant’s arm are placed away from the chair.
3. Fill the water bottle.
4. The rheostat is placed on the floor.
5. Student puts on labcoat and glasses.
6. Student checks cups, paper towel containers, and soap containers. Refills any supplies necessary.

The following surfaces are disinfected with disinfectant wipe. Use a systematic order to avoid missing the following surfaces:
- Air/water syringe and all tubing.
- Valve end of HVE, saliva ejector, and all tubing.
- Handpiece hoses, connectors, and tubing.
- Dental unit
- Bracket tray and/or ultrasonic scaler platform.
- Counter tops.
- Drawer handles.
- Light handle & switch.
- Patient’s items including safety glasses, pens, pencils, client handmirror, disclosing bottle, etc.
- Sink
- Light Handle
- Chair
- Operator stool
- Counter faces
- Air/water syringes
- Bracket tray
- Assistant’s air/water syringe and oral evacuation arm
- Note: if a surface was initially disinfected, then covered with a protective barrier, further disinfection is not required unless contamination is suspected.

Barriers are placed on the following items:
- dental unit
- air/water syringe handle
- saliva ejector and all tubing
- Handpiece hoses, connectors, and tubing
- bracket tray and cavitron unit
- light handle and switch
- Assistant’s air/water syringe and oral evacuation arm
- operator stool handles
**Unit Preparation End Of Day**

1. Student is wearing clinic gown and protective eyewear
2. Hands are washed. Utility gloves are put on.
3. Handpiece is removed, cleaned, lubricated, and sterilized according to manufacturer’s recommendations.
4. Instruments are placed in cassette and cassette is placed in holding solution.
5. All contaminated waste is disposed of in regular trash receptacles.
6. Run all waterlines for 20-30 seconds into sink.
7. Turn off the master switch.

**The following surfaces are cleaned with disinfectant wipe if it was not protected with a barrier, or if the surface became contaminated.**

- Tubing & hoses.
- Water bottle.
- Countertops & faces.
- Foot Pedal.
- Drawer handles.
- Backs of chairs & stools.
- Client’s items including safety glasses, pens, pencils, plastic stand, client handmirror, disclosing bottle, etc.
- Dental chair.
- Operator’s and/or assistant’s stool.
- Light.
- Sink

- Remove gloves and wash hands.
- Remove safety glasses and disinfect
- Remove mask.

- Remove lab coat and placed in operator’s stool cover (removed inside-out) to be taken home for washing.

- Unit is prepared for the end-of-day: chair raised, bracket tray over chair, dental light over headrest, rheostat on paper towel on dental chair, and master switch turned off.
- Sink is cleaned with disinfectant wipe
- Trash bags are taken to the appropriate containers.
Clinical Protocol for Infection Control

- Remove all unnecessary items from the operatory. Keeping the operatory uncluttered reduces the number of items that can become contaminated and makes clean-up easier. Items kept at chairside must be stored in closed containers, drawers, or cabinets to prevent cross-contamination of these items.

- All drawers and cabinet doors will be kept closed during treatment.

- If an item must be retrieved from a drawer or cabinet once treatment has started, the item will be retrieved using a clean re-gloved hand, or overgloves. It is also advisable to ask another person (Clinic Assistant) for assistance in retrieving items as long as that person follows acceptable infection control procedures when assisting.

- Avoid touching unprotected switches, handles, and other equipment once gloves have become contaminated. Should this occur, these areas will be disinfected after treatment is completed.

- Preplan the materials needed during treatment to minimize interruptions for searches for additional items.

- Utilize disposable items whenever possible.

- Decisions to use barriers versus chemical disinfection will be based on individual circumstances and will be approved by an instructor if modifications from protocol are deemed necessary.

- When using paper charts and radiographic films, place radiographs on the view box and review patient records before initiating treatment and gloving to reduce contamination of patient records.

- Entries into paper charts will be made before gloves are put on prior to treatment or after gloves have been removed and hands washed after treatment.

- All pens and pencils used will be covered with disposable barriers and disinfected after each use.

- All water lines and equipment will be maintained according to manufacturers’ instructions and specifications.

- Avoid touching your hair, face, eyes, mouth, and nose during treatment procedures.

- Never leave the operatory without removing contaminated gloves and washing your hands.

- While wearing gloves, pick up any contaminated items that fall on the floor immediately following treatment. These include cotton rolls/pellets, gauze, cotton-tip applicators, floss, and instruments.
Before Start of Clinic Day

1. Wash hands with short scrub method. Put on lab coat, gloves, mask, and protective eyewear.

Before Seating Patient

1. Wash hands using short standard method and put on lab coat, gloves, mask, and protective eyewear.

2. Follow HCC Infection Control Guidelines for setting up the operatory at the beginning of the day.

Between Patients

1. Wash hands using short standard method and put on lab coat, utility gloves, mask and protective eyewear.

2. Dental devices that are connected to the dental water system and that entered the patient's mouth (e.g., handpieces, ultrasonic scalers, or air/water syringes) should be operated to discharge water and air for a minimum of 20–30 seconds after each patient.

3. Remove all barriers and dispose of properly.

4. Clean and disinfect any equipment that was contaminated during barrier removal.

5. Clean all surfaces that are likely to be touched that are not covered with a barrier including countertops, patient mirrors, pens, pencils, etc. with disinfectant (spray, wipe, spray, wipe). Leave disinfectant on these surfaces for 10 minutes.


After Dismissing Patient

1. Wash hands using short standard method and put on utility gloves, mask, eyewear, and lab coat.

2. Disinfect unit according to HCC Infection Control Policy.
Dental Instrument Sterilization and Disinfection Policies

Instrument Classifications:

Dental instruments are classified into three categories depending on their risk of transmitting infection and the need to sterilize them between uses. The HCC Dental Hygiene Program will classify instruments as follows:

1. Critical
   Surgical and other instruments used to penetrate soft tissue or bone. These devices include forceps, scalpels, bone chisels, scalers, and burs. These instruments will be sterilized after each use.

2. Semicritical
   Instruments such as mouth mirrors that do not penetrate soft tissue or bone, but contact oral tissues. These devices will be sterilized after each use.

   Instruments or medical devices such as external components of x-ray heads that have come into contact only with intact skin. Because noncritical surfaces have a relatively low risk of transmitting infection, they will be reprocessed between patients with intermediate-level or low-level disinfection, depending on the nature of the surface and the degree and nature of the contamination.

Instrument Sterilization Procedures:

- Before sterilization, instruments will be cleaned thoroughly to remove debris. Persons involved in cleaning and reprocessing instruments will wear heavy-duty gloves to lessen the risk of hand injuries.

- Instruments will be placed into a container of disinfectant/detergent as soon as possible after use to minimize drying of patient material and make cleaning easier and more efficient. Instruments will then be placed in an ultrasonic cleaner to increase efficiency of cleaning and to reduce handling of sharp instruments.

- All critical and semicritical dental instruments will be sterilized between uses by autoclaving following the instructions of the manufacturers of the instruments and sterilizers. All critical and semicritical instruments will be packaged before sterilization.

- All instruments will be sterilized and/or disinfected according to manufacturers’ instructions.
Monitoring of Sterilization Processes:

- Proper functioning of sterilization cycles will be verified weekly of biologic indicators (spore tests).
- Heat-sensitive chemical indicators will be used on the outside of each pack to identify packs that have been processed through the heating cycle.
- Integrated chemical indicators will be used inside each pack that change color gradually as sterilizing conditions are met and maintained for a sufficient length of time.

Storage of Sterilized Instruments:

- Sterilized instruments should be stored in closed areas away from the decontaminated areas and contaminated areas.
- Sterilized instruments should stay in their sealed packages until ready for use.
- Packaging materials may include FDA-approved plastic, plastic with paper backing, paper, muslin wrap, metal containers, or plastic cassettes.

Unwrapping of Sterile Instruments

1. Seat patient first.
2. Wash hands first with antimicrobial soap and put on gloves.
3. Use the cassette wrapper to cover the bracket table. This will provide a sterile field for the instruments.
4. Gloves will be worn used to remove instruments from the package. Do not touch sterile instruments with bare hands at any time.
5. Do not place paper towels, protective eye wear, or anything else on top of the sterile instruments.

Dental Units and Environmental Surfaces:

- After treatment of each patient and at the completion of daily work activities, countertops and dental unit surfaces that may have become contaminated with patient material will be cleaned with disposable toweling, using an appropriate disinfectant.
- Two disinfectant wipes are used to clean and disinfect a surface. The first wipe cleans the surface. The second wipe disinfects the surface.
Handling of Sharps

- All sharp items are to be disposed of in the sharp container. Sharps include needles, scalpel blades, anesthetic carpules, burs, wires/brackets/bands, files/reamers/broaches, suture needles, broken instruments, and matrix bands.

- Do not bend or break sharps.

- Do not recap needles after use.

Handpieces, Antiretraction Valves, and Other Intraoral Dental Devices Attached to Air and Water Lines of Dental Units:

- Handpieces will be lubricated, cleaned and sterilized in autoclaves after every use following manufacturers’ guidelines.

- Disposable prophy angles will discarded after each use.

- Procedures for the routine maintenance of antiretraction valves will be performed following the manufacturers’ guidelines.

- High-speed handpieces will run to discharge water and air for a minimum of 20-30 seconds after use on each patient. An enclosed container will be used to minimize the spread of spray, spatter, and aerosols generated during the discharge procedures.

- Reusable intraoral instruments such as ultrasonic scaler tips will be cleaned and sterilized after treatment of each patient.

- Items that do not enter the patient’s oral cavity, but are likely to become contaminated with oral fluids during treatment procedures including handles or dental unit attachments of saliva ejectors, high-speed air evacuators, and air/water syringes, will be covered with impervious barriers that are changed after each use or, if the surface permits, carefully cleaned and disinfected.

- All water lines will be flushed 20-30 seconds after the treatment of each patient.

Single-Use Disposable Instruments:

- Single-use disposable instruments such as prophy angles, prophy cups and brushes, and tips for high-speed air evacuators, saliva ejectors, and air/water syringes will be used for one patient only and discarded in the appropriate waste containers. They will not be cleaned, disinfected, or sterilized.
Regulated Waste

For more information about North Carolina laws of waste disposal, please see: http://portal.ncdenr.org/web/wm

- **Contaminated waste** – Items that have had contact with blood or other body secretions. For example, the plastic covers placed on the handles of the dental operatory light, a cotton roll damp with saliva, used masks, and used nitrile examination gloves are contaminated waste. Contaminated waste is disposed of in the regular trash. (So- contaminated waste is not regulated waste.)
  - The rational for this policy is: “The prevailing view is that no epidemiologic evidence suggests that most medical waste is any more infective than residential waste. Also, no epidemiologic evidence indicates that current medical/dental waste handling and disposal procedures have caused disease in the community.”

- **Regulated waste includes blood in a liquid or semi-liquid form**
  - Blood-soaked gauze is considered regulated waste.
  - Free-flowing/bulk blood is also regulated waste.
  - A 2 × 2 gauze pad with a few spots of blood on it would not be regulated waste.

- **Pathologic waste (teeth and other tissues) are regulated waste.**
  - However, CDC guidelines allows extracted teeth to be returned to the patient
  - Extracted teeth that are not returned to the patient are treated as regulated waste
  - Do not heat sterilize amalgams (will release mercury vapor), use glutaraldehyde instead for at least 30 minutes

- Sharps are always regulated waste and are to be placed in a sharps container. Glass cartridges used for local anesthetic are always disposed of as sharps, even if unbroken.

Labels and Signs

- Warning labels will be affixed to containers of regulated waste, refrigerators, and freezers containing blood or other potentially infectious material and/or other containers used to store, transport, or ship blood or other potentially infectious materials.

- These labels will be fluorescent orange or orange/red predominately displayed with lettering or symbols in a contrasting color.
Labels will be an integral part of the container or will be affixed as close as feasible to the container by string, wire, adhesive, or other method that prevents the loss or unintentional removal of the label.

Red bags or red containers may be substituted for labels.

Regulated waste that has been decontaminated need not be labeled or color-coded.

**Sharps**

- All sharps are to be disposed of in the sharps container. Sharps containers will be closeable, puncture resistant, leak-proof on sides and bottom, and labeled or color-coded in accordance with OSHA standards.

- Sharps containers will be easily accessible to personnel and located as close as feasible to the immediate area where the sharps will be used or can be reasonably anticipated to be found. The container will remain upright throughout use and will not be allowed to overfill.

- When moving sharps containers from the area of use, the container will be closed immediately prior to removal to prevent spillage or protrusion of contents. If leakage is possible, the container will be placed in a secondary container before removal. This secondary container will be close-able, leak-proof, puncture resistant, and labeled or color-coded in accordance with OSHA standards.

- Sharps include but are not limited to:
  - Needles
  - Anesthetic caruples
  - Wires/brackets/bands
  - Suture needles
  - Matrix bands
  - Scalpel blades
  - Burs
  - Files/reamers/broaches
  - Broken instruments

- Do not break or bend sharps.

**Spills**

- Spills of any nature (blood, saliva, body fluids, and chemicals) are to be cleaned up immediately. Protective barriers will be worn in the area contaminated by the spill. After the spill is cleaned up, an intermediate-level disinfectant is used to disinfect the surfaces involved in the spill of body fluids.

**Regulatory Waste Containers**

- Must be closeable.
Construct to contain all contents and prevent leakage of fluids during handling, storage, transport, or shipping.

Labeled or color-coded in accordance with OSHA standards.

If outside contamination of the container occurs, the contaminated container will be placed in a secondary container which adheres to the same OSHA standards for containers.

Disposal of all regulated waste will be in accordance with all applicable federal, state, and local regulations as specified in the HCC Exposure Control for Bloodborne Pathogens manual.

Location of Regulated Waste Containers

The lead instructor will place the containers for regulated waste in appropriate and accessible areas in the laboratory and clinic.

Cleaning

All housekeeping personnel involved in the cleaning or waste disposal from the HCC Dental Hygiene Facility are required to read and follow procedures found in the HCC Infectious Disease Control Program, the Exposure Control for Bloodborne Pathogens, and the Chemical Hygiene Plan.

Housekeeping will be responsible for all areas within the HCC Dental Hygiene Facility that are considered a part of the building or general office furniture.

Housekeepers are not and will not be required to clean any area considered laboratory equipment. Cleaning and maintenance of this equipment is the responsibility of HCC Dental Hygiene staff.

Housekeepers will not work in the Dental Hygiene Facility with open or exposed sores or injuries. The supervisor will be notified at the beginning of a shift if a housekeeper has open or exposed sores. Should a housekeeper injure him/herself while working in the Dental Hygiene Facility, the supervisor will be notified immediately. Should chemicals or hazardous waste be splashed in the eyes, the eye wash station will be used immediately and the supervisor will take necessary action to obtain medical assistance.

Housekeepers performing general cleaning tasks within the Dental Hygiene Facility are to treat all areas as potentially infectious. These areas include floors, cabinets, ledges, etc.

Housekeepers will perform duties in the Dental Hygiene Facility on an as-need basis during the hours of 7:00 a.m. to 4:00 p.m. and perform general housekeeping tasks after 4:00 p.m. daily.

Housekeepers will be responsible for removing full contaminated waste containers and replacing with new containers when they are full.
Dental staff will notify housekeeping when sharps containers need disposal. Sharps containers will be placed inside of empty biological waste containers with red liners. Do not place in same container as non-sharps waste.

Full waste containers will be stored in an area designated by HCC Maintenance until pick-up time is feasible. Empty containers will be provided by HCC Maintenance.

Safety Data Sheets (SDSs) for all chemicals will be read by each employee, faculty, student, and staff and will be readily available in the clinic areas.
Body Fluids Exposure Evaluation & Treatment Guidelines

Dental Hygiene students must report immediately to faculty any time s/he has had a significant exposure to infectious body fluids. This occurs when:

- A contaminated object penetrates the skin producing cuts, scratches, or punctures. Contaminated objects include, but are not limited to needles, instruments, broken glass, broken capillary tubes, and exposed ends of dental wires.
- Mucous membranes are contaminated with infectious body fluids.
- Chapped or abraded skin is exposed to body fluids, especially when the skin is afflicted with dermatitis or the contact is prolonged or involving an extensive area.

Procedures to follow after exposure occurs:

- Report incident to the clinical faculty.
- Use soap and water to wash exposed area or flush mucous membranes with water.
- Do not apply caustic agents (such as bleach or counter top disinfectants) to the affected area.
- Inform source patient and review medical history.
- Complete incident report and counseling.
- Identify source patient to Dental Hygiene Department Head.
- The student will report to the Halifax Works clinic for blood testing.

After documentation of exposure incident, the Dental Hygiene Department Head will discuss with the exposed student or faculty the follow-up recommended by the Center for Disease Control and Prevention (CDC) as follows:

1. Identify the source individual (the patient whose body fluid is involved in exposure incident). Program director will contact patient to explain incident and request consent for testing. If consent is received, patient will be tested for HBV and HIV status by the Halifax Medical Center’s Emergency Room. Results remain confidential at all times.
2. Exposed individual goes to his/her the Halifax Works clinic for evaluation. This evaluation may include a blood test for HBV and HIV status.
3. Health care professional evaluates source and exposed individual’s status and discusses results with exposed individual. The health care professional will determine any treatment and/or the need for a follow-up evaluation.
4. HCC will file report in exposed individual’s confidential file.

Charges for testing and treatment when indicated will be responsibility of Halifax Community College for Faculty/staff. For student, the accident health insurance will be responsible. Charges not covered by the student’s accident health insurance will be the responsibility of Halifax Community College.

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Blood or Body Fluid Exposure Sheet
DENTAL HYGIENE PROGRAM

Name: ______________________________________________       Title: ________________

Date___________ Time___________ Location of Incident: ___________________________________

Description of Exposure Incident:

_____ Needle Stick/Sharp
How deep?___________ Site____________________
What type of needle/sharp? __________________________
Was bleeding evident?    Yes_____ No______
Was personal protective equipment worn?   Yes_____ No______
If yes, what item(s)?_____________________________________________

_____ Non-Intact Skin
Was personal protective equipment worn?    Yes_____ No_______
If yes, what item(s)? __________________________________________

_____ Exposure to Mucous Membranes (Eyes, nose, or mouth)
Was personal protective equipment worn?    Yes______ No_______
If yes, what item(s)? __________________________________________

_____ Human Bite that Breaks the Skin
Was personal protective equipment worn?    Yes______ No________
If yes, what item(s) ___________________________________________

Body Fluids Exposure:  Yes _____No _______Blood Exposure:  Yes _____No _______

Source (Patient’s Name) ______________________________________________________

History HIV?    Yes _____ No _____ Unknown _______
History Hepatitis    Yes _____ No _____ Unknown _______

Chronological Description of Incident:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Student/Faculty History:

Pregnancy
Yes ______ No ______ Unsure ______

Hepatitis B Vaccine Series Completed
Yes ______ No ______ Unsure ______

Major Medical Problem
Yes ______ No ______
If yes, describe:

Evaluation/Treatment Indicated:

Was a medical assessment and evaluation of the incident completed?
Yes ______ No ______ Refused ______
If yes, date and time: ______________________________
If no, reason:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Anti Retro Viral Therapy
Yes ______ No ______ Refused ______

Gamma Globulin Therapy
Yes ______ No ______ Refused ______
If no, reason:

______________________________________  __________________
Student Signature       Date

______________________________________  __________________
Faculty Signature       Date
Incident Reporting

Students and faculty must complete an incident report within 24 hours for any of the following:
1. Physical injury incurred to their own person.
2. Physical injury incurred to the patient.
3. Accidents
4. Theft and/or suspected thefts.
5. Damage to property.

Incident Report Instructions:

1. The report shall be completed immediately with as much detailed information as possible and submitted to the designated department within twenty-four hours of the occurrence.
2. The supervisor or department head in whose area of responsibility the incident took place must sign the report and be responsible for the completion and distribution of it.
3. The report form should have attached to it any document or support information available that will add to the total picture of the incident.
4. The report is not to be given to anyone other than the appropriate college administrative staff.
5. No statements or information concerning any accident/incident should be given to an outside person without prior discussion with the program director.
6. Detailed instructions for completing the incident report are explained below.
HCC DENTAL HYGIENE
POST-EXPOSURE INCIDENT REPORT

Name of Exposed Person: __________________________________________________

Date and Time of Exposure: ________________________________________________

Location of Incident: ______________________________________________________

Description of the Incident: _________________________________________________
________________________________________________________________________

What barriers were used by exposed person (student/instructor) during the incident?

________________________________________________________________________

Was source (patient) sent for medical evaluation?      ______ Yes  _____ No

Patient’s name:  __________________________________

Comments: ______________________________________________________________
_______________________________________________________________________

Was exposed person (student/instructor) sent for medical evaluation?  ______ Yes ______ No

Comments:  _____________________________________________________________

Was the exposed person (student/instructor) informed by the evaluating physician of the
results of the medical evaluation?  _______Yes  _______ No

Signature of exposed person (student/instructor)    Date

Signature of HCC Dental Hygiene Department Head    Date
Post-exposure Checklist for HCC Dental Hygiene Student

1. _____Informs the instructor of the incident/exposure.
2. _____Completes a post-exposure form.
3. _____Reports to the Halifax Works clinic for blood testing and evaluation.
4. _____Gives or withholds consent for testing.
5. _____Receives own and source individual’s test results from health care professionals. (Patient reports to the Halifax Medical Center’s Emergency Room for evaluation.)
6. _____Is told by health care professional (physician) of any conditions resulting from exposure that require further evaluation or treatment.

Post-exposure Checklist for HCC Department Head

1. _____Phone the Halifax Works clinic (see phone number below).
2. _____Send student to the Halifax Works clinic, and patient report to the Halifax Medical Center’s Emergency Room.
3. _____Phone the Halifax Center’s Emergency Room (see phone number below).
4. _____Send patient to the Halifax Medical Center’s Emergency Room.
5. _____Gives the following to the health care professional:
   Copy of the incident report.
   Copy of the student’s hepatitis B vaccination status and any past exposure incidents.
4. _____Informs appropriate HCC administration officials concerning the incident.
5. _____Assures that test results of source individual (patient) are given to the Halifax Works clinic physician.
6. _____Receives written opinion from the Halifax Works physician.
7. _____Maintains written opinion in confidential student medical records file.
The Halifax Works Clinic
We are located at 210 Smith Church Road, Building 1, on the Halifax Regional campus.

(252) 535-8463
210 Smith Church Rd
Roanoke Rapids, NC 27870

Hours of operation:
Monday through Friday, 8:00 a.m. to 4:30 p.m.

The Halifax Medical Center’s Emergency Room
250 Smith Church Rd
Roanoke Rapids, NC 27870

(252) 535-8425
CONTROL MEASURES FOR COMMUNICABLE DISEASES

(see website: http://reports.oah.state.nc.us/ncac.asp?folderName=\Title\2010A\20-%20Health\20and\20Human\20Services\Chapter\2041\20-%20Epidemiology\20Health )

CHAPTER 41 – HEALTH: EPIDEMIOLOGY

SUBCHAPTER 41A – COMMUNICABLE DISEASE CONTROL

SECTION .0200 - CONTROL MEASURES FOR COMMUNICABLE DISEASES

10A NCAC 41A .0201 CONTROL MEASURES - GENERAL

(a) Except as provided in Rules of this Section, the recommendations and guidelines for testing, diagnosis, treatment, follow-up, and prevention of transmission for each disease and condition specified by the American Public Health Association in its publication, Control of Communicable Diseases Manual shall be the required control measures. Control of Communicable Diseases Manual is hereby incorporated by reference including subsequent amendments and editions. Guidelines and recommended actions published by the Centers for Disease Control and Prevention shall supercede those contained in the Control of Communicable Disease Manual and are likewise incorporated by reference, including subsequent amendments and editions. Copies of the Control of Communicable Diseases Manual may be purchased from the American Public Health Association, Publication Sales Department, Post Office Box 753, Waldora, MD 20604 for a cost of twenty-two dollars ($22.00) each plus five dollars ($5.00) shipping and handling. Copies of Centers for Disease Control and Prevention guidelines contained in the Morbidity and Mortality Weekly Report may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 for a total cost of three dollars and fifty cents ($3.50) each. Copies of both publications are available for inspection in the Division of Public Health, 1915 Mail Service Center, Raleigh, North Carolina 27699-1915.

(b) In interpreting and implementing the specific control measures adopted in Paragraph (a) of this Rule, and in devising control measures for outbreaks designated by the State Health Director and for communicable diseases and conditions for which a specific control measure is not provided by this Rule, the following principles shall be used:

1. control measures shall be those which can reasonably be expected to decrease the risk of transmission and which are consistent with recent scientific and public health information;
2. for diseases or conditions transmitted by the airborne route, the control measures shall require physical isolation for the duration of infectivity;
3. for diseases or conditions transmitted by the fecal-oral route, the control measures shall require exclusions from situations in which transmission can be reasonably expected to occur, such as work as a paid or voluntary food handler or attendance or work in a day care center for the duration of infectivity;
4. for diseases or conditions transmitted by sexual or the blood-borne route, control measures shall require prohibition of donation of blood, tissue, organs, or semen, needle-sharing, and sexual contact in a manner likely to result in transmission for the duration of infectivity.

(c) Persons with congenital rubella syndrome, tuberculosis, and carriers of Salmonella typhi and hepatitis B who change residence to a different local health department jurisdiction shall notify the local health director in both jurisdictions.

(d) Isolation and quarantine orders for communicable diseases and communicable conditions for which control measures have been established shall require compliance with applicable control measures and shall state penalties for failure to comply. These isolation and quarantine orders may be no more restrictive than the applicable control measures.

(e) An individual enrolled in an epidemiologic or clinical study shall not be required to meet the provisions of 10A NCAC 41A .0201 - .0209 which conflict with the study protocol if:

1. the protocol is approved for this purpose by the State Health Director because of the scientific and public health value of the study, and
2. the individual fully participates in and completes the study.

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(f) A determination of significant risk of transmission under this Subchapter shall be made only after consideration of the following factors, if known:

1. The type of body fluid or tissue;
2. The volume of body fluid or tissue;
3. The concentration of pathogen;
4. The virulence of the pathogen; and
5. The type of exposure, ranging from intact skin to non-intact skin, or mucous membrane.

(g) The term "household contacts" as used in this Subchapter means any person residing in the same domicile as the infected person.

History Note: Authority G.S. 130A-135; 130A-144; Temporary Rule Eff. February 1, 1988, for a period of 180 days to expire on July 29, 1988; Eff. March 1, 1988; Amended Eff. February 1, 1990; November 1, 1989; August 1, 1988; Recodified Paragraphs (d), (e) to Rule .0202; Paragraph (i) to Rule .0203 Eff. June 11, 1991; Amended Eff. April 1, 2003; October 1, 1992; December 1, 1991; August 1, 1998; Emergency Amendment Eff. January 24, 2005; Emergency Amendment Expired on April 16, 2005.

10A NCAC 41A .0202 CONTROL MEASURES – HIV
The following are the control measures for the Acquired Immune Deficiency Syndrome (AIDS) and Human Immunodeficiency Virus (HIV) infection:

1. Infected persons shall:
   (a) refrain from sexual intercourse unless condoms are used; exercise caution when using condoms due to possible condom failure;
   (b) not share needles or syringes, or any other drug-related equipment, paraphernalia, or works that may be contaminated with blood through previous use;
   (c) not donate or sell blood, plasma, platelets, other blood products, semen, ova, tissues, organs, or breast milk;
   (d) have a skin test for tuberculosis;
   (e) notify future sexual intercourse partners of the infection;
   (f) if the time of initial infection is known, notify persons who have been sexual intercourse and needle partners since the date of infection; and,
   (g) if the date of initial infection is unknown, notify persons who have been sexual intercourse and needle partners for the previous year.

2. The attending physician shall:
   (a) give the control measures in Item (1) of this Rule to infected patients, in accordance with 10A NCAC 41A .0210;
   (b) If the attending physician knows the identity of the spouse of an HIV-infected patient and has not, with the consent of the infected patient, notified and counseled the spouse, the physician shall list the spouse on a form provided by the Division of Public Health and shall mail the form to the Division. The Division shall undertake to counsel the spouse. The attending physician's responsibility to notify exposed and potentially exposed persons is satisfied by fulfilling the requirements of Sub-Items (2)(a) and (b) of this Rule;
   (c) advise infected persons concerning clean-up of blood and other body fluids;
   (d) advise infected persons concerning the risk of perinatal transmission and transmission by breastfeeding.

3. The attending physician of a child who is infected with HIV and who may pose a significant risk of transmission in the school or day care setting because of open, oozing wounds or because of behavioral abnormalities such as biting shall notify the local health director. The local health director shall consult with the attending physician and investigate the following circumstances:
   (a) If the child is in school or scheduled for admission and the local health director determines that there may be a significant risk of transmission, the local health director shall consult with an interdisciplinary committee, which shall include school personnel, a medical expert, and the child's parent or guardian to assist in the investigation and
determination of risk. The local health director shall notify the superintendent or private school director of the need to appoint such an interdisciplinary committee.

(i) If the superintendent or private school director establishes such a committee within three days of notification, the local health director shall consult with this committee.

(ii) If the superintendent or private school director does not establish such a committee within three days of notification, the local health director shall establish such a committee.

(b) If the child is in school or scheduled for admission and the local health director determines, after consultation with the committee, that a significant risk of transmission exists, the local health director shall:

(i) notify the parents;

(ii) notify the committee;

(iii) assist the committee in determining whether an adjustment can be made to the student’s school program to eliminate significant risks of transmission;

(iv) determine if an alternative educational setting is necessary to protect the public health;

(v) instruct the superintendent or private school director concerning protective measures to be implemented in the alternative educational setting developed by school personnel; and

(vi) consult with the superintendent or private school director to determine which school personnel directly involved with the child need to be notified of the HIV infection in order to prevent transmission and ensure that these persons are instructed regarding the necessity for protecting confidentiality.

(c) If the child is in day care and the local health director determines that there is a significant risk of transmission, the local health director shall notify the parents that the child must be placed in an alternate child care setting that eliminates the significant risk of transmission.

(4) When health care workers or other persons have a needlestick or nonsexual non-intact skin or mucous membrane exposure to blood or body fluids that, if the source were infected with HIV, would pose a significant risk of HIV transmission, the following shall apply:

(a) When the source person is known:

(i) The attending physician or occupational health care provider responsible for the exposed person, if other than the attending physician of the person whose blood or body fluids is the source of the exposure, shall notify the attending physician of the source that an exposure has occurred. The attending physician of the source person shall discuss the exposure with the source and, unless the source is already known to be infected, shall test the source for HIV infection without consent unless it reasonably appears that the test cannot be performed without endangering the safety of the source person or the person administering the test. If the source person cannot be tested, an existing specimen, if one exists, shall be tested. The attending physician of the exposed person shall be notified of the infection status of the source.

(ii) The attending physician of the exposed person shall inform the exposed person about the infection status of the source, offer testing for HIV infection as soon as possible after exposure and at reasonable intervals up to one year to determine whether transmission occurred, and, if the source person was HIV infected, give the exposed person the control measures listed in Sub-Items (1)(a) through (c) of this Rule. The attending physician of the exposed person shall instruct the exposed person regarding the necessity for protecting confidentiality.

(b) When the source person is unknown, the attending physician of the exposed persons shall inform the exposed person of the risk of transmission and offer testing for HIV infection as soon as possible after exposure and at reasonable intervals up to one year to determine whether transmission occurred.

(c) A health care facility may release the name of the attending physician of a source person upon request of the attending physician of an exposed person.

(5) The attending physician shall notify the local health director when the physician, in good faith, has reasonable cause to suspect a patient infected with HIV is not following or cannot follow control measures and is thereby causing a significant risk of transmission. Any other person may notify the local health director when the person, in good faith, has reasonable cause to suspect a person
infected with HIV is not following control measures and is thereby causing a significant risk of transmission.

(6) When the local health director is notified pursuant to Item (5) of this Rule, of a person who is mentally ill or mentally retarded, the local health director shall confer with the attending mental health physician or mental health authority and the physician, if any, who notified the local health director to develop a plan to prevent transmission.

(7) The Division of Public Health shall notify the Director of Health Services of the North Carolina Department of Correction and the prison facility administrator when any person confined in a state prison is determined to be infected with HIV. If the prison facility administrator, in consultation with the Director of Health Services, determines that a confined HIV infected person is not following or cannot follow prescribed control measures, thereby presenting a significant risk of HIV transmission, the administrator and the Director shall develop and implement jointly a plan to prevent transmission, including making recommendations to the unit housing classification committee.

(8) The local health director shall ensure that the health plan for local jails include education of jail staff and prisoners about HIV, how it is transmitted, and how to avoid acquiring or transmitting this infection.

(9) Local health departments shall provide counseling and testing for HIV infection at no charge to the patient. Third party payors may be billed for HIV counseling and testing when such services are provided and the patient provides written consent.

(10) HIV pre-test counseling is not required. Post-test counseling for persons infected with HIV is required, must be individualized, and shall include referrals for medical and psychosocial services and control measures.

(11) A local health department or the Department may release information regarding an infected person pursuant to G.S. 130A-143(3) only when the local health department or the Department has provided direct medical care to the infected person and refers the person to or consults with the health care provider to whom the information is released.

(12) Notwithstanding Rule .0201(d) of this Section, a local or state health director may require, as a part of an isolation order issued in accordance with G.S. 130A-145, compliance with a plan to assist the individual to comply with control measures. The plan shall be designed to meet the specific needs of the individual and may include one or more of the following available and appropriate services:
   (a) substance abuse counseling and treatment;
   (b) mental health counseling and treatment; and
   (c) education and counseling sessions about HIV, HIV transmission, and behavior change required to prevent transmission.

(13) The Division of Public Health shall conduct a partner notification program to assist in the notification and counseling of partners of HIV infected persons.

(14) Every pregnant woman shall be offered HIV testing by her attending physician at her first prenatal visit and in the third trimester. The attending physician shall test the pregnant woman for HIV infection, unless the pregnant woman refuses to provide informed consent pursuant to G.S. 130A-148(h). If there is no record at labor and delivery of an HIV test result during the current pregnancy for the pregnant woman, the attending physician shall inform the pregnant woman that an HIV test will be performed, explain the reasons for testing, and the woman shall be tested for HIV without consent using a rapid HIV test unless it reasonably appears that the test cannot be performed without endangering the safety of the pregnant woman or the person administering the test. If the pregnant woman cannot be tested, an existing specimen, if one exists that was collected within the last 24 hours, shall be tested using a rapid HIV test. However, providers who do not currently have the capacity to perform rapid HIV testing are not required to use a rapid HIV test until January 1, 2009.

(15) If an infant is delivered by a woman with no record of the result of an HIV test conducted during the pregnancy and if the woman was not tested for HIV during labor and delivery, the fact that the mother has not been tested creates a reasonable suspicion pursuant to G.S. 130A-148(b) that the newborn has HIV infection and the infant shall be tested for HIV. An infant born in the previous 12 hours shall be tested using a rapid HIV test. However, providers who do not currently have the capacity to perform rapid HIV testing shall not be required to use a rapid HIV test until January 1, 2009.

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Testing for HIV may be offered as part of routine laboratory testing panels using a general consent which is obtained from the patient for treatment and routine laboratory testing, so long as the patient is notified that they are being tested for HIV and given the opportunity to refuse.

History Note: Authority G.S. 130A-135; 130A-144; 130A-145; 130A-148(h); Temporary Rule Eff. February 1, 1988, for a period of 180 days to expire on July 29, 1988; Eff. March 1, 1988; Amended Eff. February 1, 1990; November 1, 1989; June 1, 1989; Temporary Amendment Eff. January 7, 1991 for a period of 180 days to expire on July 6, 1991; Amended Eff. May 1, 1991; Recodified from 15A NCAC 19A .0201 (d) and (e) Eff. June 11, 1991; Amended Eff. August 1, 1995; October 1, 1994; January 4, 1994; October 1, 1992; Temporary Amendment Eff. February 18, 2002; June 1, 2001; Amended Eff. November 1, 2007; April 1, 2005; April 1, 2003.

10A NCAC 41A .0203 CONTROL MEASURES - HEPATITIS B
(a) The following are the control measures for hepatitis B infection. The infected persons shall:

   (1) refrain from sexual intercourse unless condoms are used except when the partner is known to be infected with or immune to hepatitis B;
   (2) not share needles or syringes;
   (3) not donate or sell blood, plasma, platelets, other blood products, semen, ova, tissues, organs, or breast milk;
   (4) if the time of initial infection is known, identify to the local health director all sexual intercourse and needle partners since the date of infection; and, if the date of initial infection is unknown, identify persons who have been sexual intercourse or needle partners during the previous six months;
   (5) for the duration of the infection, notify future sexual intercourse partners of the infection and refer them to their attending physician or the local health director for control measures; and for the duration of the infection, notify the local health director of all new sexual intercourse partners;
   (6) identify to the local health director all current household contacts;
   (7) be tested six months after diagnosis to determine if they are chronic carriers, and when necessary to determine appropriate control measures for persons exposed pursuant to Paragraph (b) of this Rule;
   (8) comply with all control measures for hepatitis B infection specified in Paragraph (a) of 10A NCAC 41A .0201, in those instances where such control measures do not conflict with other requirements of this Rule.

(b) The following are the control measures for persons reasonably suspected of being exposed:

   (1) when a person has had a sexual intercourse exposure to hepatitis B infection, the person shall be tested;
   (2) after testing, when a susceptible person has had sexual intercourse exposure to hepatitis B infection, the person shall be given a dose appropriate for body weight of hepatitis B immune globulin and hepatitis B vaccination as soon as possible; hepatitis B immune globulin shall be given no later than two weeks after the last exposure;
   (3) when a person is a household contact, sexual intercourse or needle sharing contact of a person who has remained infected with hepatitis B for six months or longer, the partner or household contact, if susceptible and at risk of continued exposure, shall be vaccinated against hepatitis B;
   (4) when a health care worker or other person has a needlestick, non-intact skin, or mucous membrane exposure to blood or body fluids that, if the source were infected with the hepatitis B virus, would pose a significant risk of hepatitis B transmission, the following shall apply:
      (A) when the source is known, the source person shall be tested for hepatitis B infection, unless already known to be infected;
      (B) when the source is infected with hepatitis B and the exposed person is:
         (i) vaccinated, the exposed person shall be tested for anti-HBs and, if anti-HBs is unknown or less than 10 milli-International Units per ml, receive hepatitis B vaccination and hepatitis B immune globulin as soon as possible; hepatitis B immune globulin shall be given no later than seven days after exposure;
(ii) not vaccinated, the exposed person shall be given a dose appropriate for body weight of hepatitis B immune globulin immediately and begin vaccination with hepatitis B vaccine within seven days;

(C) when the source is unknown, the determination of whether hepatitis B immunization is required shall be made in accordance with current published Control of Communicable Diseases Manual and Centers for Disease Control and Prevention guidelines. Copies of the Control of Communicable Diseases Manual may be purchased from the American Public Health Association, Publication Sales Department, Post Office Box 753, Waldora, MD 20604 for a cost of twenty-two dollars ($22.00) each plus five dollars ($5.00) shipping and handling. Copies of Center for Disease Control and Prevention guidelines contained in the Morbidity and Mortality Weekly Report may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 for a cost of three dollars fifty cents ($3.50) each. Copies of both publications are available for inspection in the General Communicable Disease Control Branch, Cooper Memorial Health Building, 225 N. McDowell Street, Raleigh, North Carolina 27603-1382.

(5) infants born to HBsAg-positive mothers shall be given hepatitis B vaccination and hepatitis B immune globulin within 12 hours of birth or as soon as possible after the infant is stabilized. Additional doses of hepatitis B vaccine shall be given in accordance with current published Control of Communicable Diseases Manual and Centers for Disease Control and Prevention guidelines. The infant shall be tested for the presence of HBsAg and anti-HBs within three to nine months after the last dose of the regular series of vaccine; if required because of failure to develop immunity after the regular series, additional doses shall be given in accordance with current published Control of Communicable Diseases Manual and Centers for Disease Control and Prevention guidelines. Copies of the Control of Communicable Diseases Manual may be purchased from the American Public Health Association, Publication Sales Department, Post Office Box 753, Waldora, MD 20604 for a cost of twenty-two dollars ($22.00) each plus five dollars ($5.00) shipping and handling. Copies of Center for Disease Control and Prevention guidelines contained in the Morbidity and Mortality Weekly Report may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 for a cost of three dollars fifty cents ($3.50) each. Copies of both publications are available for inspection in the General Communicable Disease Control Branch, Cooper Memorial Health Building, 225 N. McDowell Street, Raleigh, North Carolina 27603-1382;

(6) infants born to mothers whose HBsAg status is unknown shall be given hepatitis B vaccine within 12 hours of birth and the mother tested. If the tested mother is found to be HBsAg-positive, the infant shall be given hepatitis B immune globulin as soon as possible and no later than seven days after birth;

(7) when an acutely infected person is a primary caregiver of a susceptible infant less than 12 months of age, the infant shall receive an appropriate dose of hepatitis B immune globulin and hepatitis vaccinations in accordance with current published Control of Communicable Diseases Manual and Centers for Disease Control and Prevention guidelines. Copies of the Control of Communicable Diseases Manual may be purchased from the American Public Health Association, Publication Sales Department, Post Office Box 753, Waldora, MD 20604 for a cost of twenty-two dollars ($22.00) each plus five dollars ($5.00) shipping and handling. Copies of Center for Disease Control and Prevention guidelines contained in the Morbidity and Mortality Weekly Report may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 for a cost of three dollars fifty cents ($3.50) each. Copies of both publications are available for inspection in the General Communicable Disease Control Branch, Cooper Memorial Health Building, 225 N. McDowell Street, Raleigh, North Carolina 27603-1382.

(c) The attending physician shall advise all patients known to be at high risk, including injection drug users, men who have sex with men, hemodialysis patients, and patients who receive multiple transfusions of blood products, that they should be vaccinated against hepatitis B if susceptible. The attending physician shall also recommend that hepatitis B chronic carriers receive hepatitis A vaccine (if susceptible).

(d) The following persons shall be tested for and reported in accordance with 10A NCAC 41A .0101 if positive for hepatitis B infection:

(1) pregnant women unless known to be infected; and

(2) donors of blood, plasma, platelets, other blood products, semen, ova, tissues, or organs.
(e) The attending physician of a child who is infected with hepatitis B virus and who may pose a significant risk of transmission in the school or day care setting because of open, oozing wounds or because of behavioral abnormalities such as biting shall notify the local health director. The local health director shall consult with the attending physician and investigate the circumstances.

(f) If the child referred to in Paragraph (e) of this Rule is in school or scheduled for admission and the local health director determines that there may be a significant risk of transmission, the local health director shall consult with an interdisciplinary committee, which shall include school personnel, a medical expert, and the child’s parent or guardian to assist in the investigation and determination of risk. The local health director shall notify the superintendent or private school director of the need to appoint such an interdisciplinary committee. If the superintendent or private school director establishes such a committee within three days of notification, the local health director shall consult with this committee. If the superintendent or private school director does not establish such a committee within three days of notification, the local health director shall establish such a committee.

(g) If the child referred to in Paragraph (e) of this Rule is in school or scheduled for admission and the local health director determines, after consultation with the committee, that a significant risk of transmission exists, the local health director shall:

1. notify the parents;
2. notify the committee;
3. assist the committee in determining whether an adjustment can be made to the student’s school program to eliminate significant risks of transmission;
4. determine if an alternative educational setting is necessary to protect the public health;
5. instruct the superintendent or private school director concerning protective measures to be implemented in the alternative educational setting developed by school personnel; and
6. consult with the superintendent or private school director to determine which school personnel directly involved with the child need to be notified of the hepatitis B virus infection in order to prevent transmission and ensure that these persons are instructed regarding the necessity for protecting confidentiality.

(h) If the child referred to in Paragraph (e) of this Rule is in day care and the local health director determines that there is a significant risk of transmission, the local health director shall notify the parents that the child must be placed in an alternate child care setting that eliminates the significant risk of transmission.

History Note: Authority G.S. 130A-135; 130A-144

10A NCAC 41A .0205 CONTROL MEASURES – TUBERCULOSIS
(a) The local health director shall investigate all cases of tuberculosis disease and their contacts in accordance with recommendations and guidelines published by the Centers for Disease Control and Prevention which are hereby incorporated by reference including subsequent amendments and editions. The recommendations and guidelines are the required control measures for tuberculosis, except as otherwise provided in this Rule. A copy of the recommendations and guidelines is available by contacting the Division of Public Health, 1931 Mail Service Center, Raleigh, North Carolina 27699-1931 or by accessing the Centers for Disease Control and Prevention website at http://www.cdc.gov/tb.

(b) The following persons shall have a tuberculin skin test (TST) or Interferon Gamma Release Assay (IGRA) administered in accordance with recommendations and guidelines published by the Centers for Disease Control and Prevention:

1. Household and other high priority contacts of active cases of pulmonary and laryngeal tuberculosis. For purposes of this Rule, a high priority contact is defined in accordance with Centers for Disease Control and Prevention guidelines. If the contact’s initial skin or IGRA test is negative, and the case is confirmed by culture, a repeat skin or IGRA test shall be performed 8 to 10 weeks after the exposure has ended;
2. Persons reasonably suspected of having tuberculosis disease;
(3) Inmates in the custody of the Department of Public Safety, Division of Adult Correction upon incarceration, and annually thereafter;
(4) Persons with HIV infection or AIDS.

(c) The following persons shall be tested using a two-step skin test method or a single IGRA test, administered in accordance with recommendations and guidelines published by the Centers for Disease Control and Prevention:

(1) Staff with direct inmate contact in the Department of Public Safety, Division of Adult Correction upon employment;
(2) Staff of licensed nursing homes or adult care homes upon employment;
(3) Residents upon admission to licensed nursing homes or adult care homes. If the individual is being admitted directly from another hospital, licensed nursing home or adult care home in North Carolina and there is documentation of a two-step skin test or a single IGRA test, the individual does not need to be retested;
(4) Staff in adult day care centers providing care for persons with HIV infection or AIDS upon employment.

(d) Except as provided in the last sentence of Subparagraph (c)(3) of this Rule, persons listed in Paragraph (c) of this rule shall be required only to have a single TST or IGRA in the following situations:

(1) If the person has ever had a two-step skin test; or
(2) If the person has had a single skin test within the last twelve months.

(e) Persons with a positive tuberculin skin test or IGRA shall be evaluated by an interview to screen for symptoms and a chest x-ray if they do not have a documented chest x-ray that was performed on the date of the positive test or later.

(f) Treatment and follow-up for tuberculosis infection or disease shall be in accordance with the recommendations and guidelines from the Centers for Disease Control and Prevention.

(g) Persons with active tuberculosis disease shall complete a standard multi-drug regimen, and shall be managed using Directly Observed Therapy (DOT), which is the actual observation of medication ingestion by a health care worker (HCW).

(h) Persons with suspected or known active pulmonary or laryngeal tuberculosis who have sputum smears positive for acid fast bacilli shall be considered infectious and shall be managed using airborne precautions including respiratory isolation or isolation in their home with no new persons exposed. These individuals are considered noninfectious and use of airborne precautions, precautions including respiratory isolation or isolation in their home may be discontinued when:

(1) Sputum specimen results meet Centers for Disease Control and Prevention criteria for discontinuation of respiratory isolation;
(2) They have two consecutive sputum smears collected at least eight hours apart which are negative;
(3) It has been at least seven days since the last positive sputum smear; and
(4) They have been compliant on tuberculosis medications to which the organism is susceptible and there is evidence of clinical response to tuberculosis treatment.

(i) Persons with suspected or known active pulmonary or laryngeal tuberculosis who are initially sputum smear negative require respiratory isolation until they have been started on tuberculosis treatment to which the organism is susceptible and there is evidence of clinical response to treatment.

History Note: Authority G.S. 130A-135; 130A-144;
Eff. March 1, 1992;
Amended Eff. April 1, 2006; April 1, 2003; August 1, 1998; October 1, 1994; Temporary Amendment Eff. August 1, 2011; Amended Eff. July 1, 2012.
emergency room; Emergency Medical Service (EMS) agency; pharmacies where a health practitioner offers clinical services; or any other organization that provides clinical care.

(2) "Invasive procedure" means entry into tissues, cavities, or organs or repair of traumatic injuries. The term includes the use of needles to puncture skin, vaginal and cesarean deliveries, surgery, and dental procedures during which bleeding occurs or the potential for bleeding exists.

(3) "Non-contiguous" means not physically connected.

(b) In order to prevent transmission of HIV, hepatitis B, hepatitis C and other bloodborne pathogens each health care organization that performs invasive procedures shall implement a written infection control policy. The health care organization shall ensure that health care workers in its employ or who have staff privileges are trained in the principles of infection control and the practices required by the policy; require and monitor compliance with the policy; and update the policy as needed to prevent transmission of HIV, hepatitis B, hepatitis C and other bloodborne pathogens. The health care organization shall designate one on-site staff member for each noncontiguous facility to direct these activities. The designated staff member in each health care facility shall complete a course in infection control approved by the Department. The Department shall approve a course that addresses:

(1) Epidemiologic principles of infectious disease;
(2) Principles and practice of asepsis;
(3) Sterilization, disinfection, and sanitation;
(4) Universal blood and body fluid precautions;
(5) Safe injection practices;
(6) Engineering controls to reduce the risk of sharp injuries;
(7) Disposal of sharps; and
(8) Techniques that reduce the risk of sharp injuries to health care workers.

(c) The infection control policy required by this Rule shall address the following components that are necessary to prevent transmission of HIV, hepatitis B, hepatitis C and other bloodborne pathogens:

(1) Sterilization and disinfection, including a schedule for maintenance and microbiologic monitoring of equipment; the policy shall require documentation of maintenance and monitoring;
(2) Sanitation of rooms and equipment, including cleaning procedures, agents, and schedules;
(3) Accessibility of infection control devices and supplies; and
(4) Procedures to be followed in implementing § 10A NCAC 41A .0202(4) and .0203(b)(4) when a health care provider or a patient has an exposure to blood or other body fluids of another person in a manner that poses a significant risk of transmission of HIV or hepatitis B.

(d) Health care workers and emergency responders shall, with all patients, follow Centers for Disease Control and Prevention Guidelines on blood and body fluid precautions incorporated by reference in § 10A NCAC 41A .0201.

(e) Health care workers who have exudative lesions or weeping dermatitis shall refrain from handling patient care equipment and devices used in performing invasive procedures and from all direct patient care that involves the potential for contact of the patient, equipment, or devices with the lesion or dermatitis until the condition resolves.

(f) All equipment used to puncture skin, mucous membranes, or other tissues in medical, dental, or other settings must be disposed of in accordance with § 15A NCAC 13B .1200 after use or sterilized prior to reuse.

History Note: Authority G.S. 130A-144; 130A-145; 130A-147; Eff. October 1, 1992; Amended Eff. January 1, 2010; December 1, 2003; July 1, 1994; January 4, 1994.

10A NCAC 41A .0207 HIV AND HEPATITIS B INFECTED HEALTH CARE WORKERS

(a) The following definitions shall apply throughout this Rule:

(1) "Surgical or obstetrical procedures" means vaginal deliveries or surgical entry into tissues, cavities, or organs. The term does not include phlebotomy; administration of intramuscular, intradermal, or subcutaneous injections; needle biopsies; needle aspirations; lumbar punctures; angiographic procedures; endoscopic and bronchoscopic procedures; or placing or maintaining peripheral or central intravascular lines.

(2) "Dental procedure" means any dental procedure involving manipulation, cutting, or removal of oral or perioral tissues, including tooth structure during which bleeding occurs or the potential for bleeding exists. The term does not include the brushing of teeth.

JEC reviewed 21July2016
(b) All health care workers who perform surgical or obstetrical procedures or dental procedures and who know themselves to be infected with HIV or hepatitis B shall notify the State Health Director. Health care workers who assist in these procedures in a manner that may result in exposure of patients to their blood and who know themselves to be infected with HIV or hepatitis B shall also notify the State Health Director. The notification shall be made in writing to the Chief, Communicable Disease Control Branch, 1902 Mail Service Center, Raleigh, NC 27699-1902.

(c) The State Health Director shall investigate the practice of any infected health care worker and the risk of transmission to patients. The investigation may include review of medical and work records and consultation with health care professionals who may have information necessary to evaluate the clinical condition or practice of the infected health care worker. The attending physician of the infected health care worker shall be consulted. The State Health Director shall protect the confidentiality of the infected health care worker and may disclose the worker’s infection status only when essential to the conduct of the investigation or periodic reviews pursuant to Paragraph (h) of this Rule. When the health care worker’s infection status is disclosed, the State Health Director shall give instructions regarding the requirement for protecting confidentiality.

(d) If the State Health Director determines that there may be a significant risk of transmission of HIV or hepatitis B to patients, the State Health Director shall appoint an expert panel to evaluate the risk of transmission to patients, and review the practice, skills, and clinical condition of the infected health care worker, as well as the nature of the surgical or obstetrical procedures or dental procedures performed and operative and infection control techniques used. Each expert panel shall include an infectious disease specialist, an infection control expert, a person who practices the same occupational specialty as the infected health care worker and, if the health care worker is a licensed professional, a representative of the appropriate licensure board. The panel may include other experts. The State Health Director shall consider for appointment recommendations from health care organizations and local societies of health care professionals.

(e) The expert panel shall review information collected by the State Health Director and may request that the State Health Director obtain additional information as needed. The State Health Director shall not reveal to the panel the identity of the infected health care worker. The infected health care worker and the health care worker’s attending physician shall be given an opportunity to present information to the panel. The panel shall make recommendations to the State Health Director that address the following:

1. Restrictions that are necessary to prevent transmission from the infected health care worker to patients;
2. Identification of patients that have been exposed to a significant risk of transmission of HIV or hepatitis B; and

(f) If, prior to receipt of the recommendations of the expert panel, the State Health Director determines that immediate practice restrictions are necessary to prevent an imminent threat to the public health, the State Health Director shall issue an isolation order pursuant to G.S. 130A-145. The isolation order shall require cessation or modification of some or all surgical or obstetrical procedures or dental procedures to the extent necessary to prevent an imminent threat to the public health. This isolation order shall remain in effect until an isolation order is issued pursuant to Paragraph (g) of this Rule or until the State Health Director determines the imminent threat to the public health no longer exists.

(g) After consideration of the recommendations of the expert panel, the State Health Director shall issue an isolation order pursuant to G.S. 130A-145. The isolation order shall require any health care worker who is allowed to continue performing surgical or obstetrical procedures or dental procedures to, within a time period specified by the State Health Director, successfully complete a course in infection control procedures approved by the Department of Health and Human Services, General Communicable Disease Control Branch, in accordance with 10A NCAC 41A .0206(e). The isolation order shall require practice restrictions, such as cessation or modification of some or all surgical or obstetrical procedures or dental procedures, to the extent necessary to prevent a significant risk of transmission of HIV or hepatitis B to patients. The isolation order shall prohibit the performance of procedures that cannot be modified to avoid a significant risk of transmission. If the State Health Director determines that there has been a significant risk of transmission of HIV or hepatitis B to a patient, the State Health Director shall notify the patient or assist the health care worker to notify the patient.

(h) The State Health Director shall request the assistance of one or more health care professionals to obtain information needed to periodically review the clinical condition and practice of the infected health care worker who performs or assists in surgical or obstetrical procedures or dental procedures.

(i) An infected health care worker who has been evaluated by the State Health Director shall notify the State Health Director prior to a change in practice involving surgical or obstetrical procedures or dental procedures.
infected health care worker shall not make the proposed change without approval from the State Health Director. If the State Health Director makes a determination in accordance with Paragraph (c) of this Rule that there is a significant risk of transmission of HIV or hepatitis B to patients, the State Health Director shall appoint an expert panel in accordance with Paragraph (d) of this Rule. Otherwise, the State Health Director shall notify the health care worker that he or she may make the proposed change in practice.

(j) If practice restrictions are imposed on a licensed health care worker, a copy of the isolation order shall be provided to the appropriate licensure board. The State Health Director shall report violations of the isolation order to the appropriate licensure board. The licensure board shall report to the State Health Director any information about the infected health care worker that may be relevant to the risk of transmission of HIV or hepatitis B to patients.

History Note: Authority G.S. 130A-144; 130A-145;  
Eff. October 1, 1992;  
Methods of Handwashing

Hand Hygiene

**GOAL**: To reduce the microbial burden on the hands so that fewer microbes will be transferred to surfaces touched and to remove chemicals from the hands that may cause irritation

**Materials Needed**

- Non-antimicrobial liquid soap and alcohol-based hand rub
- Antimicrobial handwashing agent
- Hands-free soap dispenser
- Soft brush to clean nails
- Soft sponge for surgical scrub
- Disposable towels
- Sterile towels after surgical scrub

**At Beginning of the Day**

1. Remove jewelry; gently clean fingernails.

2. Scrub hands, nails, and forearms using a liquid antimicrobial handwashing agent and soft brush or sponge for 15 seconds.

3. Rinse with cool to lukewarm water while rubbing hands together for 10 seconds.

4. Dry hands and then forearms with clean paper towels and use towels to turn off hand-controlled sink faucets.

**Rationale**: This more thorough hand hygiene helps ready the hands for patient treatment for the day.
ROUTINE HAND HYGIENE DURING THE DAY

Choice 1

1. Vigorously lather hands with a liquid non-antimicrobial soap for 15 seconds.
2. Rinse with cool to lukewarm water while rubbing hands together for 10 seconds.
3. Dry hands and then forearms with clean paper towels and use towels to turn off hand-controlled sink faucets.

*Rationale:* To remove soil and transient microbes

Choice 2

1. Vigorously lather hands with a liquid antimicrobial soap for 15 seconds.
2. Rinse with cool to lukewarm water while rubbing hands together for 10 seconds.
3. Dry hands and then forearms with clean paper towels and use towels to turn off hand-controlled sink faucets.

*Rationale:* To remove soil and transient microbes and to reduce resident skin flora

Choice 3

1. Place appropriate amount of alcohol-based hand rub agent in palm of hand.
2. Vigorously rub hands together until hands are dry.

*Rationale:* To kill microbes when no visible soil is present on skin
BEFORE SURGERY

Choice 1

1. Remove jewelry and gently clean fingernails.
2. Scrub nails, hands, and forearms with an antimicrobial surgical scrub product and a soft sterile brush or sponge for 2 to 6 minutes using multiple scrub and rinse cycles.
3. Rinse hands and forearms with cool to lukewarm water starting with the fingers and keeping the hands above the level of the elbows. Let the water drip from the elbows, not the hands.
4. Dry with sterile towels.
5. Put on sterile gloves by inserting hands into the gloves held around the wrists by an assistant wearing sterile gloves.
6. Check the gloves for defects and do not touch contaminated items or surfaces before patient care.

Rationale: To remove soil and transient microbes and to kill some resident microbes

Choice 2

1. Remove jewelry and gently clean fingernails.
2. Scrub nails, hands, and forearms with a non-antimicrobial agent and a soft sterile brush or sponge for 2 to 6 minutes using multiple scrub and rinse cycles.
3. Rinse hands and forearms with cool to lukewarm water starting with the fingers and keeping the hands above the level of the elbows. Let the water drip from the elbows, not the hands.
4. Dry with sterile towels.
5. Place appropriate amount of alcohol-based hand rub agent in palm of hand.
6. Vigorously rub hands together until hands are dry.
7. Put on sterile gloves by inserting hands into the gloves held around the wrists by an assistant wearing sterile gloves.
8. Check the gloves for defects and do not touch contaminated items or surfaces before patient care.

Rationale: To remove soil and to kill transient and some resident microbes

Section 4:
RADIOLOGY POLICIES
AND
PROCEDURES
These instructions are provided to you so that the Halifax Community College Dental Hygiene Program can comply with the state rules for radiation control. The North Carolina Division of Radiation Protection enforces the radiation rules in North Carolina. These rules require that our radiation machines meet specific requirements. The rules also require that certain procedures be followed and that certain records be kept. A copy of these rules is always available for you to read and review. It is entitled the North Carolina Regulations for Protection Against Radiation (NCRFPAR) and is stored in the Dental Hygiene Department Head’s office.

The intent of this manual is to establish procedures to minimize radiation exposure of x-ray personnel and patients without sacrificing diagnostic quality. You are required to know the procedures and requirements in this manual and be able to demonstrate that you can use them. After reading this manual and demonstrating that you can use the machines safely and correctly, you must sign and date the “Record for Instruction of Individuals in Operating and Safety Procedure” provided in this manual (See Appendix A). {Rule .0603 (a)(1)(D)}

The rules also require that each x-ray facility be registered with the state. This notification will be posted in the Dental Hygiene Clinic area. All operators of x-ray machines are responsible for following the radiation safety procedures. RDH 1 is the Radiation Safety Office (RSO) and has the responsibility and authority for overseeing matters relating to radiation protection. The RSO also confirms all training and serves as the contact person with the state. Employees should submit all radiation questions or concerns about radiation to the RSO. The Radiation Safety Officer for HCC is Verna High, RDH,BS, MDH.

All x-ray examinations will be conducted by instructors and “retakes” will be ordered by the dentist assigned clinic responsibilities. No one is allowed to operate x-ray equipment in the HCC Dental Hygiene Facility unless authorized by the RSO.

**Operation of X-Ray Equipment:**

- Do not allow anyone in the room with the patient during an x-ray examination. {Rule .0603 (E)}

- Use the procedures specified in the HCC Dental Hygiene Student Manual to set up for each routine examination.

- The radiography equipment is preset for mAs, time, and kVp. In addition, posted on the wall next to the exposure button are charts that give the mAs, time and kVp you must use for (select those that apply): bitewings, anterior periapicals, posterior periapicals, panoramic, and cephalometric examinations. {Rule .0603 (C)}

- During each exposure, stand behind the protective barrier and look through the window to view the control during the x-ray examination. {Rule .0607 (e)}

- Do not allow anyone to walk by or into the x-ray operatory during the exposure time.
Use film holders for all examinations to eliminate patients from holding films with their hands.

Do not hold patients or films during exposures. If exceptions are made to this rule, the decision to hold a patient or the film will always be made by the dentist assigned clinic responsibilities. If you are ever instructed to hold a patient or film, wear a lead apron, use forceps or film holder for holding film and stand well away from the useful beam. {Rule .0603 (H)}

Never hold the housing or support housing during any exposure. The tube housing must not drift or move during any exposure. If a problem with stability of the suspension arm develops, notify the RSO so the unit can be serviced.

Dental fluoroscopy without image intensification shall not be used. {Rule .0607 (I)}

**Personnel:**

We are required to have personnel monitoring devices to monitor radiation workers using dental machines if staff, faculty, or students are likely to receive a dose in excess of 10% of the limits in Rule .1604 (a).

The dose to an embryo/fetus during the entire pregnancy, due to occupational exposure of a declared pregnant woman, shall not exceed 500 millirem. {Rule .1610 (a)}

If you suspect there has been an excessive exposure or a radiation incident, immediately notify the RSO immediately. The RSO will then notify the Division of Radiation Protection. The address is: Division of Radiation Protection, 3825 Barrett Drive, Raleigh, North Carolina 27609-7221. The telephone number during working hours is (919) 571-4141.

General requirements for radiation safety and your rights and obligations as faculty, students, or staff are found in the NCRFPAR, Section .1600. The specific sections of NCRFPAR that most impact our facility are Rules .0603, .0604, and .0607. You need to read these sections. (See Appendix B in this manual)

X-ray machines are equipped with devices to limit the radiation exposure to patients and employees. These devices include filters that reduce unnecessary low-energy radiation from the primary beam and collimators that restrict the size of the x-ray beam. {Rule .0604 and .0607} Do not alter, remove, tamper with, or defeat these devices, or in any way cause needless radiation exposure.

Our protective lead aprons all contain 0.25 millimeter or more lead equivalence. Use the protective apron on adults of childbearing age and all children. The apron is stored in each of the seven radiography operatories, hanging on the wall. Check the aprons by looking for holes, cracks, or tears. If a defect is found, notify the RSO. {Rule .0603 (a)(1)(C)(iii)}

Use a thyroid shield on all patients unless it interferes with the examination. While this is not a regulatory requirement, it is considered good practice to keep exposure to a minimum.
External Imaging:

- Position the patient and center the beam for all radiography machines (See “Panoramic Radiograph Procedures” and “Operation of Radiographic Operatories” included in this manual).

- If the film appears misaligned, report it to the RSO and do not use the panoramic machine.

- During each exposure, stand behind the protective barrier and use the window to watch the patient during the x-ray examination. (Rule .0604(b)(1)(C))

Film Processing and Quality Assurance:

Basic Procedure

- Unexposed film is stored in the locked cabinet in the darkroom storage area (See “Dental Radiology Policies” for procedures for obtaining film).

- Process films according to the specifications supplied by the manufacturer.

- Always check expiration dates on the film and the chemicals used in the processor. Do not use films or chemicals after the use date has expired.

- Chemicals will be replaced by a student during the radiography assistant/screener rotation according to the manufacturer’s recommended interval or when test limits are exceeded.

- The automatic processors will be monitored and maintained according to instructions in the manufacturer’s operating manual located in the HCC Dental Hygiene Clinic Darkroom.
Appendix A

Student Instruction in Radiographic Operating and Safety Procedures for the Halifax Community College Dental Hygiene Program.

In accordance with North Carolina Regulations for Protection Against Radiation (NCRFPAR), these procedures have been made available to each individual who operates the x-ray equipment. I certify that the individuals listed have demonstrated to me, on the date indicated, that he/she is competent in these operating and safety procedures and can operate our x-ray equipment in a safe manner. This was demonstrated by my direct observation of the skills and procedures of the individual listed below and will be documented in the Radiographic Operating and Safety Procedures Manual that is kept on file in the Radiation Safety Officer’s office.

Operator Statement:
I have read these procedures, which are in the Halifax Community College Dental Hygiene Program Clinic Manual, Section IV, and agree to abide by them.

______________________________________          ___________________
Operator’s Signature               Date

________________________________________   ______________________
Radiation Safety Officer                 Date
Certifying Statement

These procedures have been developed to ensure safe radiological working conditions. All staff, faculty, and students working in the Halifax Community College Dental Hygiene Facility must adhere to these procedures. Prior approval must be obtained from the RSO and the Dental Hygiene Department Head for any deviation from these procedures.

In accordance with Rule .1603(c) the RSO and Dental Hygiene Department Head will annually review the radiation protection program content and implementation.

Verna V. High, RDH,BS, MDH
Radiation Safety Officer

8-1-2016
Date
Dental Radiology Policies

Dress Code for Laboratory Exercises

- Clean, neatly pressed clothes.
- Clean white clinic shoes, white leather athletic shoes, or full coverage dress shoes.
- Hair neat and pulled away from the face.
- No jewelry, except for a watch.
- Dress slacks, dress, or skirt. No shorts.
- Lab coat (when working with live patient).

Dress Code During Patient Treatment

- Same as clinical requirements
  - Clinic scrubs
  - Clinic shoes
  - Personal protective equipment (gloves, mask, protective eyewear)

Lead Apron

- Students will use a lead apron when exposing all radiographs whether on DXXTR manikin or on humans.

Pediatric Patient Requirements

- A patient is considered a pediatric patient if the following conditions are met:
  1. Have at least 1 primary tooth and is under the age of 13
  2. The patient must be accompanied by a parent or guardian.

Obtaining Films for Manikin Use (DXXTR)

- The lab instructor will distribute films or digital sensors as needed during lab hours.
- The film used will be “F” speed, single film packages.
- The student must sign out each film or digital sensor used (original and retake) in the Radiation Film Log located in darkroom storage area.
- Failure to sign out films results in 10 points being deducted from the radiographic exposure grade.

Obtaining Films for Patient Use (PA, FMX, BWX, Panorex)

- The clinic instructor or Radiography Assistant/Screener will distribute films and digital sensors as needed during lab/clinic hours.
- The film to be used will be “F” speed, double film packages.
- The student must sign out each film or digital sensor used (original and retake) in the Radiation Film Log located in the darkroom storage area.
Failure to sign out film results in 10 points being deducted from your BWX, FMX, PA, or Pano grade.

**Obtaining Panorex Film**

- Panorex films come in a single speed, packaged in a box and require special handling.
- You will load panorex film into a cassette prior to exposure. Load two panorex films into the cassette. One film is the clinic copy and the additional film is a copy for the patient’s dentist.
- The kVp must be increased by 3 increments to compensate for the two films.

**Radiographic Interpretation**

- An interpretation of pathology, landmarks and anomalies seen on a radiographic exposure should be done on each patient radiographic survey.
- Instructions for completing the radiographic interpretation form will be given in DEN 112. This form must be completed during lab and clinic when seeing patients.

**Procedure for Mailing Patient Radiographs**

- Following grading, one copy of the patient's radiographs will be mailed to the dentist of record if requested.
- Only those radiographs that a dental instructor determines to be of diagnostic value will be sent to the patient’s dentist.
- Radiographs cannot be given to a patient without permission of an instructor, and this must be documented in the patient’s record.
- The student will complete the HCC Services Rendered Form that will be sent to the dentist with the radiographs and a Dental Referral Form (if needed). A copy of the forms will also be placed in the patient’s chart.

**Radiographic Requirements**

- Each student is required to meet a radiology requirement every semester and these requirements are listed in each course syllabus.
- Deadlines for submitting the radiology requirements will be listed in the course schedule.
- Failure to turn in x-rays is considered unethical and cheating. This may result in dismissal from the Dental Hygiene Program.
Panoramic Radiograph Procedures

1. Switch unit on. The unit will flash a few messages as it completes its self-test. The time will then appear on the main display and the unit is now ready for use. The machine uses military time.

2. Load the cassette with film in the darkroom under safelight conditions:

3. Press the “Return Key” to move the cassette carriage to the loading position.

4. Slide the cassette into the cassette carriage. Insert the carriage in the direction of the arrow, supporting the carriage as you insert.

5. The panorex machine should be prepared with the appropriate chin rest, the bite plane and control panel should be covered with barriers.

6. Have unit in Pan mode. The panorex machine defaults to the “Pan” mode when the machine is turned on.

7. Select child or adult mode.

8. Select the correct exposure values for the patient according to the values posted on the machine. Note the quick select modes on the unit.

9. Press the “Return Key” to move the rotating assembly to the ready position.

10. Press the “Temple” support key to open the supports.

11. Escort the patient into the operatory.

12. Prepare the patient by removing glasses, hearing aids, dentures, earrings, necklaces, hairpins, barrettes, tongue rings, and facial jewelry.

13. Place the appropriate lead apron (no thyroid collar) on the patient.

14. Explain the procedure to the patient.

15. Position the patient:
   1) Press the height adjusting keys to bring up the height of the vertical carriage until the chin rest is slightly higher than the patient’s chin.
   2) Guide the patient so that they are facing the chin rest, holding the client’s arm for support.
   3) Direct the patient to hold the handles.
   4) Ask patient to place the chin on the chin rest, and bite on the bite piece so that the incisal edges of the maxillary and mandibular teeth are in the groove.
   5) Ask the patient to stretch up to reach the chin rest.
   6) Stand behind the patient to verify the client’s shoulders are level.
   7) Check to ensure the midsagittal plane is vertical, that the mouth is centered on the bite piece and head is not tilted or turned.
   8) Verify the chin is parallel to the floor and back is straight.

16. Press the Focal trough keys to activate positioning light that automatically turns off after 25 seconds.

17. Position apices of lateral incisor/canine in focal trough by using plus (+) or minus (-) keys.

18. Close temporal support.
19. Make a dummy run if patient is nervous. CTL + kV key or CTL = mA key will turn off the radiation. Repeat this procedure to return to the radiation mode.

20. Press “Ready” key to drive the unit to ready position. Indicator light will come on.

21. Direct patient to close his/her eyes, close lips on the bite piece, swallow and place the tongue flat against the roof of the mouth, breath normally, and stand still.

22. Close door.

23. Watch patient through window.

24. Press and hold exposure button for the duration of the exposure (18 seconds).

25. Press “Return” key to return unit to the ready position.


27. Remove lead apron and return patient’s personal items.

28. Record exposure settings on Radiographic Technique Analysis form (kV, mA, mm in comment section).

29. Escort patient to reception area and ask him/her to wait until x-ray is processed.


31. Have instructor evaluate panorex to determine need for retake.

32. Label film with the patient’s name, date and student’s name.

33. With instructor approval, dismiss patient.

34. Disinfect unit. Dispose of barriers. Leave operatory clean and neat.
Operation of Intraoral Radiographic Machines

- The control panel is mounted on the wall outside the x-ray rooms. Pressing the on/off switch located on the unit mounted inside the rooms turns on the unit.

- All radiography equipment is preset by the manufacturer. The preset exposure settings are for analogue film, phosphor plates and electronic digital sensors. When necessary, consult the exposure chart located beside the control panel to determine exposure variables.

- The exposure button is located outside the door. The exposure button must be held down throughout the exposure. An audible beep will sound when x-rays are being produced.

- The door must be closed when exposing any image receptor.

- The student operator is not allowed to hold the image receptor in the patient’s mouth.

- Only the patient is allowed to remain in the radiography room during an exposure.

- To turn off the unit, press the on/off switch located under the x-ray machine.
Infection Control Radiography Procedures

1. Place barriers over the tube head, chair, unit, assistant’s arm, door handles, and light handles & switch.

2. Exposure control panel is protected with a plastic covering. When pressing the control button, touch only the front of the unit using a one-finger approach to avoid contaminating unbarriered areas on the control panel.

3. Disinfect all countertops, sinks, faucets, lead apron and/or thyroid shields, swivel arms, x-ray cones, chairs, and any surface touched with contaminated hands.

4. Place unexposed films in a paper cup prior to exposure and keep in the cup holder outside of the radiography operatory.

5. Place at least 2 paper towels on the bracket tray. One to hold stabs and XCP equipment and one to dry wet films as they come out of the mouth after exposure.

Follow these procedures for exposing radiographs using analog films:

1. Select exposure settings prior to picking up unexposed film.
2. Student will bring in an unexposed film taken from the unexposed-film cup.
3. Place the film in the patient’s mouth prior to exposure.
4. Go out to control panel, closing door gently as you leave the room.
5. Expose the film.
6. Retrieve exposed film and wipe off excess saliva.
7. Return exposed film to “exposed” cup outside of operatory.
8. Repeat above process until all films are exposed.
9. Remove gloves and wash hands.
10. Take exposed films in the “exposed” cup to darkroom for processing.

Follow these procedures for processing analog films:

1. Place 2 paper towels on the counter surface.
2. Turn on safety light, turn off overhead light.
3. Wearing gloves, peel open each exposed radiograph film packet.
4. Place the film without touching on one paper towel.
5. Place empty film packet on the second paper towel.
6. Open all radiographs using the procedure above.
7. Take off gloves.
8. Place radiographs in the processor.
9. Turn on light.
10. Discard trash.

Follow these procedures for exposing radiographs using digital sensors:

1. Cover the sensor with the appropriate size barrier
2. Select exposure settings prior to placing the covered sensor in the patient’s mouth.
3. Click the desired exposure on the exposure template
4. Place the covered sensor in the patient’s mouth prior to exposure.
5. Go out to control panel, closing door gently as you leave the room.
6. Expose the sensor
7. Move the sensor to another desired exposure site and repeat items 1 – 6

Follow these procedures for **exposing** radiographs using **phosphor plates**:  
1. Cover the phosphor plate with the appropriate size barrier  
2. Select exposure settings prior to placing the covered phosphor plate in the patient's mouth.  
3. Click the desired exposure on the computer exposure template  
4. Place the covered phosphor plate in the patient's mouth prior to exposure  
5. Go out to control panel, closing door gently as you leave the room  
6. Expose the phosphor plate  
7. Remove the exposed phosphor plate from the patient's mouth  
8. Remove the barrier from the exposed phosphor plate before placing the exposed phosphor plate in the transfer box

**After** exposures are completed using either the analogue films, digital sensors, or the phosphor plates:  
- Remove contaminated barriers from the sensors, x-ray machine, control panel, computer keyboard, and computer mouse  
- Disinfect any surfaces that may have been contaminated during the exposure procedure

Gloves, masks, lab coats, and safety glasses are worn during x-ray procedures and should be removed following proper removal techniques.

Reusable sensor holders will be sterilized following proper sterilization techniques.
Appendix B

North Carolina Regulations for Protection Against Radiation
N.C. Department of Environment and Natural Resources
Division of Environmental Health
Radiation Protection Section
Raleigh, North Carolina

http://www.ncradiation.net/all_rules/sec0600index.htm
Page Last Modified: 31 May 2013

This document will be maintained in the Department Head’s office and in the Radiation Safety Officer’s office in a notebook labeled: NC Regulations for Protection Against Radiation. In relationship to the HCC Dental Hygiene Program, the specific sections of these Regulations are:

**.0603 GENERAL REQUIREMENTS**

(1) (B) Individuals who will be operating the x-ray equipment shall be instructed in the safe operating procedures and use of the equipment and demonstrate an understanding thereof to the registrant.

(1) (D) Written safety procedures and rules shall be established and made available to each individual operating x-ray equipment under his control. The operator shall be familiar with these rules.

**.0604 GENERAL REQUIREMENTS FOR ALL DIAGNOSTIC SYSTEMS**

15A NCAC 11 .0607 INTRAORAL DENTAL RADIOGRAPHIC SYSTEMS

(a) In addition to the provisions of Rules .0603 and .0605 of this Section, the requirements of this Rule apply to x-ray equipment and associated facilities used for dental radiography. Criteria for extraoral dental radiographic systems are covered in Rule .0606 of this Section.

(b) X-ray systems designed for use with an intraoral image receptor shall be provided with means to limit source-skin distance to not less than:

1. 18 centimeters, if operated above 50 kilovolts peak; or
2. ten centimeters, if operated at or below 50 kilovolts peak.

(c) The size of the direct radiation beam shall be limited in accordance with the following rules:

1. Radiographic systems designed for use with an intraoral image receptor shall be provided with means to limit the x-ray beam such that:
   (A) If the source-skin distance (SSD) is 18 centimeters or more, the x-ray field at the SSD shall be containable in a circle having a diameter of no more than seven centimeters; and
   (B) If the SSD is less than 18 centimeters, the x-ray field at the SSD shall be containable in a circle having a diameter of no more than six centimeters.

2. Effective February 1, 1981, equipment manufactured prior to August 1974 shall be equipped with a lead line open position indicating device with at least 0.79 mm lead.

(d) The timing device shall comply with the following requirements:

1. Termination of the exposure after a preset interval;
2. Termination of exposure shall cause automatic resetting of the timer to its initial setting or to zero;
It shall not be possible to make an exposure when the timer is set to a zero or "off" position if either position is provided; and

When four timer tests are performed at identical timer settings equal to five seconds or less, the average time period (T) shall be greater than five times the difference between the maximum period (T_{max}) and the minimum period (T_{min}) in accordance with the formula:

\[ T > 5(T_{max} - T_{min}) \]

Effective February 1, 1983, intraoral dental radiographic systems shall be equipped with an electronic timer.

Timer accuracy

For indicated values of 0.10 seconds and above, the measured value shall be within plus or minus 15 percent of the indicated values for equipment manufactured before August 1, 1974.

For equipment manufactured after August 1, 1974, the deviation of measured values from indicated values shall not exceed the limits specified for that system by its manufacturer.

The exposure switch shall comply with the following requirements:

1. A control shall be incorporated into each x-ray system such that an exposure can be terminated at any time, except for exposures of one-half second or less.

2. Each x-ray control shall be located in such a way as to meet the following criteria:
   - For stationary x-ray systems installed after the effective date of this Rule, the exposure switch shall be permanently mounted in a protected area (e.g., corridor outside the room) so that the operator is required to remain in that protected area during the entire exposure.
   - For stationary x-ray systems without a protected area and installed before the effective date of this Rule, the exposure switch shall be such that the operator shall stand at least six feet away from the tube and out of the direct beam.
   - For mobile and portable x-ray systems the switch shall meet the requirements of Part (e)(2)(B) of this Rule.

3. For equipment manufactured after August 1, 1974, the x-ray control shall provide visual indication observable at or from the operator's protected position whenever x-rays are produced. In addition, a signal audible to the operator shall indicate that the exposure has terminated.

The exposure produced shall be reproducible to within the following criteria:

When all technique factors are held constant, the coefficient of variation shall not exceed 0.10. This shall be deemed to be met if, when four exposures at identical technique factors are made, the value of the average exposure (E) is greater than five times the difference between the maximum exposure (E_{max}) and the minimum exposure (E_{min}) in accordance with the formula:

\[ E > 5(E_{max} - E_{min}) \]

Patient and film holding devices shall be used when the techniques permit.

Neither the tube housing nor the position indicating device shall be hand-held during an exposure.

Dental fluoroscopy without image intensification shall not be used.

Structural shielding

1. All wall, floor and ceiling areas shall have protective barriers sufficient to meet the requirements of Rules .1604 and .1611 of this Chapter.

2. When intraoral x-ray systems are installed in adjacent rooms or areas, protective barriers as specified in Subparagraph (j)(1) of this Rule shall be provided between the rooms or areas.

History Note: Authority G.S. 104E-7; Eff. February 1, 1980; Amended Eff. January 1, 1994; October 1, 1980.
Scheduling Patients for Radiographs

- The HCC Dental Hygiene Program will follow the U.S. Dept. of Health and Human Services: *The Selection of Patients for Dental Radiographic Examinations. Revised 2004 by the American Dental Association: Council on Dental Benefit Program, Council on Dental Practice, Council on Scientific Affairs "Guidelines for Prescribing Dental Radiographs"*.

- Dental hygiene instructors may dismiss patients whose appointments have not been properly recorded in the appointment book through the Clinic Manager. All appointments must be confirmed with the Clinic Manager in advance.

- Students should have a personal appointment book, which must correspond with the Clinic Manager’s clinic appointment schedule.

- Students may not schedule more than two patients in one clinic session.

- Appointments will be scheduled according to the following guidelines:
  - FMX – 45 minutes
  - BWX – 20 minutes
  - Retakes – 5 minutes

- Included in the appointment entry are:
  - Patient’s name
  - Student’s name
  - Length of appointment time required
  - Service to be rendered

- Appointments will be confirmed in advance with the patient.

- Patients will be scheduled no later than 60 minutes of the end of a clinic session.

- Processing the exposed radiographs must be completed within 30 minutes prior to the end of the clinic session.

- Students should have the patient’s radiographs evaluated by an instructor at least 30 minutes prior to the end of each clinic session.
EXPOSING RADIOGRAPHS

Paperwork Required Prior to Exposure

Health Questionnaire
1. Each patient must have a complete and dated medical and dental health history signed by patient/parent, student, and instructor.

2. If the patient is under age 18, a parent or guardian must sign. Parents and guardians are required to remain in the clinic facility (waiting room or at operatory) while minor is receiving treatment.

3. The medical/dental history must be reviewed and updated and signed by the patient, student and instructor.

4. Blood pressure readings must be recorded.

Consent Form/Treatment Plan
1. Each patient, regardless of age, must have a completed and signed a HCC Dental Hygiene Program Consent Form. This must be signed prior to the instructor's review.

2. The treatment plan must state the date, type of radiographic survey, and number of exposures.

Record of Treatment
1. The record of treatment must be completed stating the student has reviewed the medical and dental history.

2. It must state the type of radiographs being taken.

Exposing Films on a Patient
- All radiographs must be taken with “F” speed double packet film or covered digital sensor or covered phosphor plate. One copy of the radiographs will be sent to the dentist of record after grading and one will remain with the patient’s chart.

- Follow sequence guidelines for exposing radiographs distributed in DEN 112.

- Every patient, regardless of age, will be protected against ionizing radiation by the use of a lead apron and proper exposure procedures.

- Failure to use a lead apron will result in a grade of “0” for the radiographic clinic requirement.

- No one is allowed to remain in the radiology operatory during the exposure of radiographs except the shielded patient. This includes parents, friends, students, children, and instructors. Failure to abide by this rule will result in a grade of “0” for the survey.

- Aseptic technique will be utilized when exposing radiographs on patients. Failure to maintain the chain of asepsis will result in a grade of “0” for the survey.
PANORAMIC RADIOGRAPH PROCEDURES

Panorex Machine Preparation
1. Prepare the unit by wiping with disinfectant wipe
2. Insert a new biteblock
3. Cover the control panel, the head support bars, the door handle, and the exposure button with barriers
4. Place a covered bite piece into the hole in the top of the chin rest
5. Turn unit on-the on/off switch is located on the underside of the carriage
(The unit will flash a few messages as it completes its self-test)

THE PANOREX MACHINE DEFAULTS TO THE PAN MODE WHEN IT IS TURNED ON
1. Press the “Return Key” to move the cassette carriage to the loading position
2. Select the “child” or “adult” mode for the patient

Film Cassette Preparation
1. Load the cassette with film in the darkroom with safelight conditions
2. Transport the loaded cassette to the panorex machine
3. Slide the cassette into the cassette carriage.
4. Insert the carriage in the direction of the arrow with one hand, and use the other hand to support the carriage

Patient Preparation
1. Ask the patient to remove:
   - eyeglasses
   - hearing aids
   - dentures
   - jewelry (earrings, necklaces, hairpins, tongue ornaments, facial piercing jewelry)
2. Place the lead apron on the patient (fasten lead apron in front or the side of patient)

Panorex Exposure
1. Select the correct exposure values for the patient
   Child: Auto + A   Adult Female: Auto + B   Adult Male: Auto + C
   Please adjust the exposure values according to the size of the patient and according to the number of films in the film cassette

<table>
<thead>
<tr>
<th>Patient</th>
<th>One Film in Cassette</th>
<th>Two Films in Cassette</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>kVp</td>
<td>mA</td>
</tr>
<tr>
<td>Child</td>
<td>62</td>
<td>5</td>
</tr>
<tr>
<td>Adult Female</td>
<td>64</td>
<td>6</td>
</tr>
<tr>
<td>Adult Male</td>
<td>68</td>
<td>7</td>
</tr>
</tbody>
</table>

2. Guide the patient to the unit so they are facing the chin rest (chin rest should be higher than the patient’s chin)
3. Ask the patient to step forward and grasp the patient handles
4. Slide the bite piece up or down until the patient is able to bite it (incisors in the grooves)
5. Press the temple support key
6. Position the patient so the midsagittal plan is vertical and the Frankfort plane is horizontal
7. Press the “mm” key for the focal trough light to come on
8. Once the focal trough light is on, position the patient’s head so the light is between the central incisors and the on the maxillary canine (“-” moves the patient forward, and “+” moves the patient backwards)
9. Press the ready key
10. Instruct the patient to:
    - close their lips
    - swallow
    - place their tongue flat against the roof of the mouth
    - breathe normally
    - stand still
11. Press and hold down the exposure button for the duration of the exposure (18 seconds)
12. Press the return key and remove the cassette
Performance Criteria for Intraoral Periapical Radiographs

General Criteria
1. The radiograph is an acceptable representation of the area exposed.
2. The density of the radiograph is neither too dark nor too light.
3. The images are neither foreshortened nor elongated.
4. The proximal contacts are distinct, with no overlapping.
5. A minimum of 1/8 inch of alveolar bone is visible beyond the apices and crowns of the teeth.
6. The apex of each tooth is visible at least once, preferable twice on a full mouth series.
7. A margin of at least 1/8 inch exists from the tooth crowns to the receptor edge.
8. The radiograph is free of technical errors.
9. The occlusal plane is straight or slightly curved upward toward the distal.
10. The radiograph is properly identified and mounted correctly.

Criteria for MAXILLARY Right and Left MOLAR Periapicals
1. Placed horizontally.
2. Size 2 receptor.
3. Demonstrate the first, second, and third molar.
4. No more than the distal portion of the second premolars should show, though it is not necessary to demonstrate any of the second premolar or the mesial of the first molar.
5. Interproximal spaces are open with emphasis between the first and second molar.
6. The maxillary tuberosity must be present.

Criteria for MAXILLARY Right and Left PREMOLAR Periapicals
1. Placed horizontally.
2. Size 2 receptor.
3. Demonstrate no less than the distal portion of the maxillary canine, the entire first and second premolars, the first molar, and the mesial portion of the second molar.
4. Interproximal spaces are open with emphasis on the first and second premolar.

Criteria for MAXILLARY Right and Left LATERAL/CANINE Periapicals
1. Placed vertically.
2. Size 1 receptor.
3. Demonstrate the entire lateral incisor, entrie canine, and distal portion of the central incisor and mesial portion of the premolar.
4. The lateral/canine interproximal is centered on the film.
5. Interproximal spaces are open with emphasis between the lateral incisor and canine.

Criteria for the MAXILLARY CENTRAL Periapical
1. Placed vertically.
2. Size 2 receptor.
3. The maxillary central interproximal space is centered on the film.
4. Demonstrate the central incisors, lateral incisors, and proximal of canines.
5. Interproximal spaces are open with emphasis between the central incisors.
Criteria for the MANIDBULAR Left and Right MOLAR Periapicals
1. Placed horizontally.
2. Size 2 receptor.
3. Demonstrate the first, second, and third molars. No more than the distal portion of the second premolars should show, though it is not necessary to demonstrate any of the second premolar or the mesial of the first molar.
4. Interproximal spaces are open with emphasis between the first and second molar.
5. The retromolar area is open.

Criteria for MANDIBULAR Left and Right PREMOLAR Periapicals
1. Placed horizontally.
2. Size 2 receptor.
3. Demonstrate no less than the distal portion of the mandibular canine, the entire first and second premolar, the first molar, and the mesial portion of the second molar.
4. Interproximal spaces are open with emphasis on the first and second premolar.

Criteria for MANDIBULAR Left and Right CANINE Periapicals
1. Placed vertically.
2. Size 1 receptor.
3. The lateral/canine interproximal space is centered on the receptor.
4. Demonstrate the entire lateral incisor and canine, the distal portion of the central incisor and the mesial portion of the premolar.
5. Interproximal spaces are open with emphasis between the lateral incisor and canine.

Criteria for MANDIBULAR CENTRAL Periapical
1. Placed vertically.
2. Size 1 receptor.
3. All mandibular incisors are present.
4. The interproximal space between mandibular central incisors is centered on the receptor.
5. The mesial aspect of the mandibular right and left canines are present.
6. Interproximal spaces are open with emphasis between the central and lateral incisors.
Performance Criteria for Bitewing (BWX) Radiographs

General Criteria
1. The radiograph is an acceptable representation of the area exposed.
2. The density of the receptor is neither too dark nor too light.
3. The images are neither foreshortened nor elongated.
4. The crowns of the teeth are not enlarged or distorted.
5. The proximal contacts are distinct, with no overlapping.
6. The radiograph is free of technical errors.
7. The radiograph is properly identified and mounted.
8. There is equal distribution of both maxillary and mandibular teeth on radiographs.
9. The embossed film dot is at the occlusal or incisal edge of the analogue film.
10. The interproximal alveolar crest and bone level distal to the most posterior erupted tooth is demonstrated.
11. The occlusal plane is straight or slightly curved from mesial to distal.

Criteria for Right and Left Molar Interproximal Bitewings
1. Placed horizontally.
2. Size 2 receptor (receptor size should be appropriate for dentition)
3. Demonstrate no more than the distal portion of the second premolar.
4. The entire first, second, and third molar crowns must be present.
5. Bone level distal to the last erupted tooth is visible.
6. Interproximal spaces are open with emphasis between maxillary first molar and second molar.
7. There is equal distribution of maxillary and mandibular crowns.

Criteria for Right and Left Premolar Interproximal Bitewings
1. Place horizontally
2. Size 2 receptor (receptor size should be appropriate for dentition)
3. Demonstrate no less than the distal portion of the canine crowns.
4. All of the first and second premolar and the first molar crowns and mesial of second molar crowns are visible.
5. Interproximal spaces are open with emphasis on the maxillary first and second premolar.
6. There is equal distribution of maxillary and mandibular crowns.

Criteria for Right and Left Molar Vertical Bitewings
1. Placed vertically.
2. Size 2 receptor.
3. Demonstrate 1/8 inch of bone distal to the last erupted tooth and as much of the maxillary and mandibular third, second, and first molars as possible.
4. Interproximal spaces are open with emphasis on the maxillary first and second molars.
5. There is equal distribution of crowns.

Criteria for Right and Left Premolar Vertical Bitewings
1. Placed vertically.
2. Size 2 receptor.
3. Demonstrate no less than the distal portion of the maxillary and mandibular canine crowns.
4. All of the first and second premolar crowns and some of the first molar crowns are visible.
5. Interproximal spaces are open with emphasis on the maxillary first and second premolar.
6. There is equal distribution of crowns.
DXXTR (Manikin) Radiographs

DXXTR (Dental X-ray Trainer) Radiograph Procedure

1. Expose radiographic series on DXXTR.
3. Mount and label radiographs.
4. Critique radiographs and complete a Radiographic Analysis Form.
5. Attach the mounted radiographs and the Radiographic Analysis Form and place in the appropriate area/container for grading.

After DXXTR Radiographs are Graded

1. The instructor will return the mounted radiographs and Radiographic Analysis Form to the student.
2. The student will examine the grade sheet and compare the instructor's grade with the mounted radiographs.
3. If the student disagrees with the grade, s/he should see the instructor who graded the radiographs.
4. Once the grade is finalized, the student should return the radiographs and the signed Radiographic Analysis Form to the instructor, and the grade is recorded.

DXXTR Retakes

If the instructor deems that an exposed radiograph is non-diagnostic, the student should:

1. Place the non-diagnostic radiograph in a coin envelope and label the envelope with DXXTR's name, date exposed, student's name, and the word “RETAKE”, and paperclip to the mount along with the Radiographic Analysis Form.
2. Retake the specific exposure and mount it in the appropriate place.
3. Re-submit the radiographic series with the new film and the “Retake” envelope for grading.
Retaking Patient Radiographs

- The attending clinic dentist will decide which patient radiograph retakes are necessary and put his/her initials in the appropriate column on the Radiographic Technique and Analysis Form.

- The student will request the instructor review the radiograph and must have the unacceptable/non-diagnostic radiograph available for the instructor to determine the error made.

- The instructor must initial for approval for retakes. It is the student’s responsibility to secure the instructor’s initials. Failure to obtain the initials before exposing films results in the loss of 2 points per film.

- An instructor must be present in the room with the student when retaking a radiograph. Failure to receive instructor assistance for retakes will result in a grade of “0” for the set of radiographs.

- After processing the retake, the error radiograph will be taken out of the mount, placed in a coin envelope, and replaced in the film mount with the retake film. The student will critique the retake.

- The undiagnostic film will be placed in a coin envelope. The student should complete the necessary information on the envelope including the patient’s name, date of the radiographic exposure, type of exposure, and the student’s name.

- When exposing radiographs on a patient, the student is allowed a maximum of:

  1 retake on an interproximal bitewing series (BWX)
  3 retakes on an intraoral full mouth series (FMX)

- Retakes are indicated only when the determined cause for the error can be corrected.

- Retakes are taken to improve the diagnostic quality of an x-ray, not to improve the student’s grade.
Radiographic Series Grading Policies

- After exposing and processing, and mounting radiographs, all radiographs must be evaluated for diagnostic quality by clinical faculty before the patient is dismissed. The clinic dentist must initial at top of Radiographic Analysis and Technique Form that approval has been given to dismiss the patient. Failure to obtain this approval will result in a 0 grade for the series.

- Students have one week from retake approval to process, mount, critique, and submit radiographs for grading unless written permission is granted by the instructor. All radiographs will be turned in whether diagnostically acceptable or not.

- Students are encouraged to critique his/her own radiographs without the assistance of others.

- Withholding radiographs from faculty evaluation is unethical and unacceptable behavior. This behavior is grounds for dismissal from the program.

- Five points will be deducted from the radiology grade for each day film surveys are late beyond the one-week period. The instructor grading the radiographs has the right to approve exceptions. The five points per day does not include weekends.

Radiographic Grading Per Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirement</th>
<th>Minimum Grade %</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEN 112</td>
<td>BWX</td>
<td>80</td>
</tr>
<tr>
<td>DEN 112</td>
<td>FMX</td>
<td>77</td>
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<tr>
<td>DEN 131</td>
<td>BWX</td>
<td>85</td>
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<tr>
<td>DEN 131</td>
<td>FMX</td>
<td>77</td>
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<tr>
<td>DEN 141</td>
<td>BWX</td>
<td>88</td>
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<tr>
<td>DEN 141</td>
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<td>DEN 231</td>
<td>BWX</td>
<td>93</td>
</tr>
<tr>
<td>DEN 231</td>
<td>FMX</td>
<td>85</td>
</tr>
</tbody>
</table>

Full Mouth Series (FMX) for Course Requirements:
Minimum of 20 teeth
Minimum of 12 films

Bitewing (BWX) Course Requirements:
If there is only one premolar, the contact area to open in the premolar exposure is between the first molar and the existing premolar.

If there is mixed dentition, the contact area to open in the molar exposure is between the first and second primary molar.

Remediation with DXTTR is required with an instructor after failing two (2) radiographic surveys.
GRADING CRITERIA
for
COURSE RADIOGRAPHIC REQUIREMENTS

BITEWING ONLY SERIES

Horizontal Angulation (open contacts)

Molar Bitewings:
- -5 points if no open contact between first and second molar on molar exposure and premolar exposure
- -2 points if the first and second molar contact is open in the premolar exposure, but closed in the molar exposure

Premolar Bitewings:
- -5 points if no open contact between first and second premolar on premolar exposure and molar exposure
- -2 points if the first and second premolar contact is open in the molar exposure, but closed in the premolar exposure

Molar Bitewings in FMX
- -5 points if no open contact between first and second molar on molar exposure and the molar contacts are closed on any other exposure
- -2 points if the first and second molar contact is open in any other exposure in the FMX

Premolar Bitewings in FMX
- -5 points if no open contact between first and second premolar on premolar exposure and the premolar contacts are closed on any other exposure
- -2 points if the first and second premolar contact is open in any other exposure in the FMX

Bitewing Packet Placement
- -1 point if distal portion of canine not present on any premolar exposure
- -2 points if mesial portion of first premolar not present on premolar exposure
- -1 point if maxillary tuberosity not present on any molar exposure
- -1 point if distal portion of maxillary second molar not present on the molar exposure
- -1 point for unequal distribution on bitewings
PERIAPICALS & FULL-MOUTH SERIES

Radiographer Technique Error on Any Radiographic Series

- Cone Cut = -1 to -3 points (depending on the severity)
- Movement = -1 point (if student does not identify the reason on the analysis form)
- Foreshortening = -1 point
- Elongation = -1 point
- Processing error = -1 point if student does not identify the processing error
- Processing error = 0 points if student does identify the error
- Retake = -2.5 points
  Clinic dentist orders retakes on patients
  Lab instructor orders retakes on manikin
- Mounting error = -5 points
- Film exposed backward = -5 points
- Missing apex = -2 points on the specific exposure area and if the apex is seen in another exposure
  Retake the exposure if the apex is not visible in any other exposure
- Missing crown = -1 point
- Other = -1 to -5 points

Incomplete film mount label = -5 points
Incomplete analysis form = -5 points
Failure to interpret any abnormalities on the analysis form = -5 points
No patient name on film mount label = FAIL
No date on film mount label = FAIL
No dentist initials on human patient analysis form = UNACCEPTABLE
Submitting Patient Radiographs for Grading

Procedure for Submitting Radiographs for a Grade

1. After exposing, processing, and mounting the radiographs, evaluate them using the Radiographic Analysis and Technique Form.

2. The radiographs should be labeled with the patient’s name, date, and the student’s name.

3. There should be two sets of radiographs, one should be kept in the patient’s chart at all times, and the other set submitted for grading.

4. Place all retake films in a coin envelope with the patient’s name, date, and the student’s name, and labeled “Retakes”.

5. The student should submit a set of the mounted radiographs, the completed Radiographic Analysis Form and the “Retake” coin envelope for grading.

After Radiographs are Graded

1. The instructor will return the graded radiographs and the Radiographic Analysis Form to the student.

2. The student will initial the Radiographic Analysis Form.

3. If the student disagrees with the grade, s/he should see the instructor who graded the survey to discuss any discrepancies.

4. The Analysis Form is given to the course instructor and the graded radiographs are filed in the patient’s chart.

5. All radiographic grade sheets are retained by the course instructor.
Halifax Community College
Dental Hygiene Program
Panorex Radiographic Analysis Form

Student: ______________________________ Date Exposed: ________________

Patient: ______________________________ Patient’s DOB: ________________

Exposure Information: _______ _______ Dentist’s Initials: ________________

KVp mA

Panorex films are graded as Pass/Fail and count toward graduation requirements only if the student receives a passing grade.

Pass = no more than two errors, and the film is diagnostically acceptable.

Fail = three or more errors or the film is diagnostically unacceptable.

Critique the panorex. Check errors that apply below:

___ Patient head too far forward, anterior teeth out of focus
___ Patient head too far back, wide blurred anterior teeth
___ Patient head tilted down and chin positioned back, apices of lower incisors out of focus, chin has pointed appearance, “Jack-O-Lantern” smile
___ Patient head tilted up and chin too far forward, upper incisors out of focus, chin has flat appearance
___ Patient head tilted, one condyle is larger than the other, image tilted
___ Patient head twisted, teeth on one side of the midline appear wide and have sever overlapping of contacts
___ Dark shadow in maxilla below palate and maxillary apices obscured, patient’s tongue was not fully placed against the roof of the mouth
___ Blurred image, patient moved
___ Pyramid-shaped opacity in middle of panorex, patient was slumped and spinal column causes ghost image
___ Ghost images, earrings, facial jewelry, appliances not removed
___ Random white artifacts on film, intensifying screen scratched, film scratched

Processing errors
___ dark area on edge of film, light leak ___ dark streaks, roller marks
___ film too light ___ film too dark
___ tree-like image, static electricity ___ double exposed

Other errors __________________________________________________________________________________

Document any pathology, abnormalities, anomalies, or conditions present on the film or diagnosed by the dentist.
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________

Grade: Pass Fail Instructor: _________________________ Date: ________________

Student: _________________________ Date: ________________

Please be sure to place one copy of the panorex in the patient’s chart.
Anatomical Landmarks Identification

(Check all of the anatomical landmarks you see on the panorex film)

Maxilla And Surrounding Tissues
___Mastoid Process
___Styloid Process
___External Auditory Meatus
___Glenoid Fossa
___Articular Tubercle
___Lateral Pterygoid Plate
___Maxillary Tuberosity
___Infraorbital Foramen
___Orbit of the Eye
___Incisive Canal
___Incisive Foramen
___Anterior Nasal Spine
___Nasal Cavity
___Nasal Septum
___Hard Palate
___Maxillary Sinus
___Zygomatic Process of the Maxilla
___Zygoma
___Hamulus

Mandible and Surrounding Tissues
___Mandibular Condyle
___Sigmoid Notch
___Coronoid Process
___Mandibular Foramen
___Lingula
___Mandibular Canal
___Mental Ridge
___Mental Fossa
___Lingual Foramen
___Genial Tubercles
___Inferior Border of the Mandible
___Mylohyoid Ridge
___Oblique Ridge
___Angle of the Mandible
___Cervical Spine
___Mental Foramen

Soft Tissue Images
___Tongue
___Soft Palate
___Lipline
___Ear

Air Space Images
___Palatoglossal Air Space
___Nasopharyngeal Air Space
___Glossopharyngeal Air Space

Once the panoramic analysis form has been evaluated by the instructor the student should:
- Initial the analysis form
- Place the analysis form in the appropriate tray in the clinic
- Place the panorex film in the appropriate tray in the clinic
Halifax Community College
Dental Hygiene Radiographic Technique and Analysis Form

Student ____________________________    Date Submitted __________________    Dr.’s initials

Patient _____________________________   DOB _____________   Date Exposed ___________

Dental Hygiene Course________________   Instructor’s Initials ________     Grade___________

Radiographic Series:
Periapical(s)  2-BWX Pedo  4-BWX Pedo  Digital
FMX        2-BWX Adult  4-BWX Adult  Film

<table>
<thead>
<tr>
<th>Radiographic Area</th>
<th>Error and Reason</th>
<th>Error Point(s) (For Instructor)</th>
<th>Retake (Dr.’s initials)</th>
<th>Radiographic Interpretation</th>
<th>Anatomical Abnormalities</th>
<th>Instructor Assistance Initials</th>
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</thead>
<tbody>
<tr>
<td>1. Max rt molar</td>
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<td>7. Max left molars</td>
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<td>8. Mand. left molars</td>
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<td>9. Mand left premolars</td>
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<td>10. Mand left lat/canine</td>
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<td>11. Mand centrals</td>
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<td>12. Mand rt lat/canine</td>
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<td>13. Mand rt premolars</td>
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<td>14. Mand rt molars</td>
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<td>15. Right molar bitewing</td>
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<td>16. Right premolar bitewing</td>
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<td>17. Left premolar bitewing</td>
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<td>18. Left molar bitewing</td>
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</tbody>
</table>

Total Points  ********

Total Pts

Total Pts

Final Grade

student ’s initials
Radiographic Analysis Guidelines and Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>B</td>
<td>Film exposed backward</td>
</tr>
<tr>
<td>C</td>
<td>Cone cut</td>
</tr>
<tr>
<td>D</td>
<td>Density</td>
</tr>
<tr>
<td>E</td>
<td>Elongation</td>
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<tr>
<td>F</td>
<td>Foreshortening</td>
</tr>
<tr>
<td>H</td>
<td>Horizontal (closed contact)</td>
</tr>
<tr>
<td>MV</td>
<td>Movement (film or patient)</td>
</tr>
<tr>
<td>MT</td>
<td>Mounted incorrectly</td>
</tr>
<tr>
<td>MA</td>
<td>Missing apex</td>
</tr>
<tr>
<td>MC</td>
<td>Missing crown</td>
</tr>
<tr>
<td>O</td>
<td>Other (specify)</td>
</tr>
<tr>
<td>P</td>
<td>Packet placement</td>
</tr>
<tr>
<td>PR</td>
<td>Processing error</td>
</tr>
<tr>
<td>U</td>
<td>Unequal distribution</td>
</tr>
</tbody>
</table>

Please make notations on analysis forms when there is an anatomical reason for an error, e.g. crowded or mal-positioned teeth, or if there are other reasons for technical errors.

Once the analysis form has been graded by the instructor:
1. Please initial the grade
2. Return the analysis form to the appropriate tray in the clinic
3. Place the patient radiographs in the appropriate tray in the clinic
4. Give the DXXTR radiographs to the instructor along with the analysis form

Retakes

2.5 points will be deducted for each retake film /
1 maximum retake for BWX series  3 maximum retakes for FMX series
Retake films should be placed in coin envelopes with the patient’s name, student’s name, date of exposure, and the word “Retake”
The coin envelope should be attached to the analysis form

Bitewing Grading

Each exposure in an adult four-bitewing film series and a mixed/pedo two-film series will be graded as follows:
- film position 1 - 5 points
- cone position 1 - 5 points
- vertical angle 1 - 5 points
- horizontal angle 1 - 5 points

Total possible points for an adult four-film bitewing series is 80
Total possible points for a mixed/pedo or adult two-film bitewing series is 40
Divide total number of points received by 80 or 40 to get grade percentage
Points will be deducted for incomplete film mount label

FMX Grading

Each film in the series will be evaluated as follows:
- film position 1 - 5 points
- cone position 1 - 5 points
- vertical angle 1 - 5 points
- horizontal angle 1 - 5 points
- correct mounting in the FMX series is worth 5 points
- correct film mount label completion in the FMX is worth 5 points

Total possible points is 100
Total number of penalty points subtracted from 100 equals grade

*SEE EACH INDIVIDUAL COURSE SYLLABUS FOR GRADING CRITERIA*

**THE GRADE IS RECORDED AFTER THE STUDENT INITIALS THE ANALYSIS FORM AND RETURNS IT TO THE INSTRUCTOR**
Completing the Radiographic Evaluation/Interpretation

Students should use the following abbreviations when critiquing their radiographs

<table>
<thead>
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Radiographic Interpretation

Students should identify and record the following when interpreting their radiographs:
- Missing teeth
- Restorations
- Unerupted teeth
- Tori
- Calculus
- Bone level
- Caries and recurrent caries (per consulting dentist)
- Overhangs
- Impacted teeth
- Foreign bodies
- Retained root tips
- Fractures
- Periapical pathology
- Dilaceration
- Widened PDL space
- Pulp stone
- Furcation involvement
- Root resorption
- Condensing Osteitis
- Other pathosis
- Bone level - demonstrating the loss of crestal lamina dura
Care of Darkroom & Automatic Processors

First Clinic or Radiography Lab Session of the Day:

- Turn on overhead light and safelight.
- Check solution levels in tank and underneath in cabinet. Add developer or fixer if indicated to the tanks. Change bottles of fixer and developer underneath cabinet if they are within 1 inch of the bottom of the jug.
- Remove prop and turn processor on.
- Run cleaning film through the AT-2000 after processors reach appropriate temperature.
- Turn off overhead light.
- Check quality assurance log for additional duties.
- Check maintenance calendar for additional duties.

Last Clinic or Radiograph Lab Session of the Day:

- Turn off processor and place prop under lid.
- Disinfect counters, pick up trash, and clean exterior of processor with soap and water.
- Turn off safelights and overhead light.
- Leave outer door open.
- Check supply closet for stabe holders, mounts, coin envelopes, labels, processor solutions, and bitewing tabs. Fill out a form if the Clinic Manager needs to order supplies.
- Verify the presence of the following equipment in each radiography operatory:
  Adult lead apron (1-7)
  Child lead apron (5 & 6)
  View box

Make sure all equipment in radiography rooms is left in the correct end-of-day positions.

Care of A/T 2000 Automatic Processor Operating Instructions

Instructions for the daily, weekly, monthly, and quarterly maintenance of the automatic processors are posted inside the cabinet in the darkroom, and the instruction manual is located in the top labeled drawer in the darkroom. The Radiation Safety Officer is responsible for the maintenance of the automatic processors.
Radiation & Pregnancy Procedures

Any person who is pregnant or becomes pregnant should notify the Radiation Safety Officer and submit a written declaration of pregnancy. A “declared pregnant woman” means a woman who has voluntarily informed the HCC Dental Hygiene Program, in writing, of her pregnancy and estimated date of conception. The declaration remains in effect until the declared pregnant woman withdraws the declaration in writing. HCC Dental Hygiene Program will provide a fetal monitor for the operator.

15a ncac 11.1610  DOSE EQUIVALENT TO AN EMBRYO/FETUS

(a) The licensee or registrant shall ensure that the dose equivalent to an embryo/fetus during the entire pregnancy, due to occupational exposure of a declared pregnant woman, does not exceed 0.5 rem (5 mSv). Recordkeeping requirements for doses to an embryo/fetus are provided in Rule .1640 of this Section.

(b) The licensee or registrant shall make efforts to avoid variation above a uniform monthly exposure rate to a declared pregnant woman so as to satisfy the limit in Paragraph (a) of this Rule.

(c) The dose equivalent to an embryo/fetus shall be taken as the sum of:
   (1) the deep-dose equivalent to the declared pregnant woman; and
   (2) the dose equivalent to the embryo/fetus from radionuclides in the embryo/fetus and radionuclides in the declared pregnant woman.

(d) If the dose equivalent to the embryo/fetus is found to have exceeded 0.45 rem (4.5 mSv) by the time the woman declares the pregnancy to the licensee or registrant, the licensee or registrant shall be deemed to be in compliance with Paragraph (a) of this Rule if the additional dose to the embryo/fetus does not exceed 0.05 rem (0.5 mSv) during the remainder of the pregnancy.
Film Badge Policy

- A film badge, to monitor exposure to ionizing radiation, will be supplied by the school and will be worn during each session when radiographs are exposed.

- The badge is to be placed in the appropriate container in the darkroom lobby, when not being worn. The badge will be stored in the clinic at all times.

- The badge will be worn between the neck and waist with the window side facing away from the body and will never be covered by clothing.

- Failure to wear the badge in the proper manner will result in a professional infraction.

- Students, faculty, and staff must wear a film badge at all times while in the clinic area.

- The Radiation Safety Officer is responsible for ordering, distributing and having the film badges evaluated.

- No badge will be worn home, left in an automobile, washed in a washing machine, or damaged in any way. Damaged badges must be brought to the immediate attention of the Radiation Safety Officer.

- Replacement badges cost $20.00.

- Radiation levels are monitored quarterly. These reports are maintained by the Radiation Safety Office and filed in the Darkroom Storage area.
Certifying Statement

These procedures have been developed to ensure safe radiological working conditions. All staff, faculty, and students working in the Halifax Community College Dental Hygiene Facility must adhere to these procedures. Prior approval must be obtained from the RSO and the Dental Hygiene Department Head for any deviation from these procedures.

In accordance with Rule .1603© the RSO and Dental Hygiene Department Head will annually review the radiation protection program content and implementation.

____________________________                 ______________________
Verna V. High, RDH, MDH        Date
Dental Hygiene Department Head

____________________________                 ______________________
Verna V. High, RDH, MDH       Date
Radiation Safety Officer
**Patient Radiographs**

- students must secure attending dentist’s initials on the Radiographic Analysis form
- students must complete Radiographic Analysis form by critiquing the radiographs
- students must submit a copy of the exposed radiographs along with a completed Radiographic Analysis form (place them in the appropriate “To Be Graded” tray)
- after the radiographs have been graded, they are placed in the student’s mailbox
- student must initial graded Radiographic Analysis form
- student must place the Radiographic Analysis form in the appropriate tray in the clinic (1st year to the left / 2nd year to the right)
- student must place the copy of the radiographs in the tray “To Be Filed”
- students have one week to submit radiographs for grading
- students must get written approval to extend the one week grading time
- students CANNOT take patient radiographs outside of the clinic
- students can keep radiographs to be graded in their mailboxes until they are ready for grading
Section 5:

DENTAL HYGIENE COURSE DESCRIPTIONS
DEN 110 Orofacial Anatomy
This course introduces the structures of the head, neck, and oral cavity. Topics include tooth morphology, head and neck anatomy, histology, and embryology. Upon completion, students should be able to relate the identification of normal structures and development to the practice of dental assisting and dental hygiene.
PREREQUISITES: Acceptance into the Dental Hygiene Program
COREQUISITES: None

DEN 111 Infection/Hazard Control
COURSE DESCRIPTION:
This course introduces the infection and hazard control procedures necessary for the safe practice of dentistry. Topics include microbiology, practical infection control, sterilization and monitoring, chemical disinfectants, aseptic technique, infectious diseases, OSHA standards, and applicable North Carolina laws. Upon completion, students should be able to understand infectious diseases, disease transmission, infection control procedures, biohazard management, OSHA standards, and applicable North Carolina laws.
PREREQUISITES: Acceptance into the Dental Hygiene Program
COREQUISITES: None

DEN 112 Dental Radiography
COURSE DESCRIPTION:
This course provides a comprehensive view of the principles and procedures of radiology as they apply to dentistry. Topics include techniques in exposing, processing, and evaluating radiographs, as well as radiation safety, quality assurance, and legal issues. Upon completion, students should be able to demonstrate proficiency in the production of diagnostically acceptable radiographs using appropriate safety precautions.
PREREQUISITES: None
COREQUISITES: None

DEN 120 Dental Hygiene Preclinic Lecture
COURSE DESCRIPTION:
This course introduces preoperative and clinical dental hygiene concepts. Emphasis is placed on the assessment phase of patient care as well as the theory of basic dental hygiene instrumentation. Upon completion, students should be able to collect and evaluate patient data at a basic level and demonstrate knowledge of dental hygiene instrumentation.
PREREQUISITES: None
COREQUISITES: DEN 121
DEN 121 Dental Hygiene Preclinic Lab
COURSE DESCRIPTION:
This course provides the opportunity to perform clinical dental hygiene procedures discussed in DEN 120. Emphasis is placed on clinical skills in patient assessment and instrumentation techniques. Upon completion, students should be able to demonstrate the ability to perform specific preclinical procedures.
PREREQUISITES: None
COREQUISITES: DEN 120

DEN 123 Nutrition/Dental Health
COURSE DESCRIPTION: This course introduces basic principles of nutrition with emphasis on nutritional requirements and their application to individual client needs. Topics include the study of the food pyramid, nutrient functions, Recommended Daily Allowances, and related psychological principles. Upon completion, students should be able to recommend and counsel individuals on their food intake as related to their dental health.
PREREQUISITES: DEN 110, DEN 111, DEN 112, DEN 120, DEN 121
COREQUISITES: Acceptance into the Dental Hygiene Program

DEN 124 Periodontology
COURSE DESCRIPTION: This course provides an in-depth study of the periodontium, periodontal pathology, periodontal monitoring, and the principles of periodontal therapy. Topics include periodontal anatomy and a study of the etiology, classification, and treatment modalities of periodontal diseases. Upon completion, students should be able to describe, compare, and contrast techniques involved in periodontal/maintenance therapy, as well as patient care management.
PREREQUISITES: DEN 110
COREQUISITES: Acceptance into the Dental Hygiene Program

DEN 125 Dental Office Emergencies
COURSE DESCRIPTION: This course provides a study of the management of dental office emergencies. Topics include methods of prevention, necessary equipment/drugs, medicolegal considerations, recognition and effective initial management of a variety of emergencies. Upon completion, the student should be able to recognize, assess and manage various dental office emergencies and activate advanced medical support when indicated.
PREREQUISITES: Acceptance into Dental Hygiene program
COREQUISITES: None
DEN 130 Dental Hygiene Theory I
COURSE DESCRIPTION: This course continues skill development in providing an oral prophylaxis and patient care. Emphasis is placed on treatment of the recall patients with gingivitis or light deposits. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.
PREREQUISITES: DEN 120
COREQUISITES: DEN 131

DEN 131 Dental Hygiene Clinic I
COURSE DESCRIPTION: This course continues skill development in applying patient care assessment, planning, implementation, and evaluation skills to provide comprehensive care. Emphasis is placed on treatment of patients with gingivitis or light deposits. Upon completion, students should be able to assess these patients’ needs and complete the necessary dental hygiene treatment.
PREREQUISITES: DEN 120, DEN 121
COREQUISITES: DEN 130

DEN 140 Dental Hygiene Theory II
COURSE DESCRIPTION: This course continues skill development in providing an oral prophylaxis. Emphasis is placed on treatment of the recall patients with gingivitis or light deposits. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.
PREREQUISITES: DEN 120, DEN 121, DEN 112, DEN 125, DEN 111, DEN 123, DEN 110
COREQUISITES: DEN 141

DEN 141 Dental Hygiene Clinic II
COURSE DESCRIPTION: This course continues skill development in providing an oral prophylaxis. Emphasis is placed on treatment of the patients with early periodontal disease and subgingival deposits. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.
PREREQUISITES: DEN 120, DEN 121, DEN 112, DEN 125, DEN 111, DEN 123, DEN 110
COREQUISITES: DEN 140

DEN 220 Dental Hygiene Theory III
COURSE DESCRIPTION: This course provides a continuation in developing the theories and practices of client care. Topics include periodontal debridement, pain control, subgingival irrigation, air polishing, and case presentations. Upon completion, students should be able to demonstrate knowledge of methods of treatment and management of periodontally compromised clients.
PREREQUISITES: DEN 140
COREQUISITES: DEN 221
DEN 221 Dental Hygiene Clinic III
COURSE DESCRIPTION: This course provides an in-depth study of the periodontium, periodontal pathology, periodontal monitoring, and the principles of periodontal therapy. Topics include periodontal anatomy and a study of the etiology, classification, and treatment modalities of periodontal diseases. Upon completion, students should be able to describe, compare, and contrast techniques involved in periodontal maintenance therapy, as well as patient care management.
PREREQUISITES: DEN 141
COREQUISITES: DEN 220

DEN 222 General and Oral Pathology
COURSE DESCRIPTION:
This course provides a general knowledge of oral pathological manifestations associated with selected systemic and oral diseases. Topics include developmental and degenerative diseases, selected microbial diseases, specific and nonspecific immune and inflammatory responses with emphasis on recognizing abnormalities. Upon completion, students should be able to differentiate between normal and abnormal tissues and refer unusual findings to the dentist for diagnosis.
PREREQUISITES: BIO 163 or BIO 165 or BIO 168, DEN 110, DEN 111
COREQUISITES: None

DEN 223 Dental Pharmacology
COURSE DESCRIPTION: This course provides basic drug terminology, general principles of drug actions, dosages, routes of administration, adverse reactions, and actions on the systems of the body. Emphasis is placed on knowledge of drugs in both overall understanding of patient histories and health status. Upon completion, students should be able to recognize that each patient’s general health or drug usage may require modification of the treatment procedures.
PREREQUISITES: CHM 130, DEN 125
COREQUISITES: BIO 163 OR BIO 165 OR BIO 168

DEN 224 Dental Materials & Procedures
COURSE DESCRIPTION:
This course introduces the physical properties of materials and related procedures used in dentistry. Topics include restorative and preventative materials, fabrication of casts and appliances, and chairside functions of the dental hygienist. Upon completion, students should be able to demonstrate proficiency in the laboratory and/or clinical application of routinely used dental materials and chairside functions.
PREREQUISITES: Dental Hygiene, second year standing
COREQUISITES: None
DEN 230 Dental Hygiene Theory IV
COURSE DESCRIPTION: This course provides an opportunity to increase knowledge of the profession. Emphasis is placed on dental specialties and completion of a case presentation. Upon completion, students should be able to demonstrate knowledge of various disciplines of dentistry and principles of case presentations.
PREREQUISITES: DEN 220
COREQUISITES: DEN 231

DEN 231 Dental Hygiene Clinic IV
COURSE DESCRIPTION: This course continues skill development in providing an oral prophylaxis. Emphasis is placed on periodontal maintenance and on treating clients with moderate to advanced/refractory periodontal disease. Upon completion, students should be able to assess these clients’ needs and complete the necessary dental hygiene.
PREREQUISITES: DEN 221
COREQUISITES: DEN 230

DEN 232 Community Dental Health
COURSE DESCRIPTION: This course provides a study of the principles and methods used in assessing, planning, implementing, and evaluating community dental health programs. Topics include epidemiology, research methodology, biostatistics, preventative dental care, dental health education, program planning, and financing and utilization of dental services. Upon completion, students should be able to assess, plan, implement, and evaluate a community dental health program.
PREREQUISITES: Acceptance into the dental hygiene program
COREQUISITES: None

DEN 233 Professional Development
COURSE DESCRIPTION: This course includes professional development, ethics, and jurisprudence with applications to practice management. Topics include conflict management, state laws, resumes, interviews, and legal liabilities as health care professionals. Upon completion, students will be able to demonstrate the ability to practice dental hygiene within established ethical standards and state laws.
PREREQUISITES: Acceptance into the dental hygiene program
COREQUISITES: None
Section 6:

DENTAL LABORATORY

POLICIES

AND

PROCEDURES
Dental Laboratory Policies

The manipulation of restorative materials is of the utmost importance in the quality of any dental restoration. Students should always make every effort to manipulate each material properly in order to provide the best quality of restorative dentistry possible.

Lab Exercises

- Prior to each lab, each student will review the lab exercises for the day. This can be done by reviewing the textbook and/or reviewing the lecture PowerPoint slides.

Demonstrations

- At the beginning of each lab, a demonstration will be given on the materials to be used in the lab for that class period. At this time, students should ask any questions relating to the techniques. It is the student’s responsibility to observe and take notes.

Proficiencies

- Each material mixed in the lab during exercises will be mixed again in front of an instructor for a grade. In order to pass proficiency, the student must score an 85% or better and produce a clinically usable product. Class time will be provided for the grading. If a student fails to properly mix the material, he/she must repeat the exercise and be retested on his/her own time or during a make-up lab.

Assistance

- Each student is welcomed to ask the instructor for advice, consultation, and assistance. Instructors are present to aid and assist the student’s training and development.

Trays

- Alginate trays will be used often by students. When autoclavable trays are used each student must clean the trays he/she uses. Each tray will be free of all wax and debris and placed in the container of tray cleaner located on the counter in the Dental Lab Classroom. After it has been thoroughly cleaned, the tray is then placed in a clean autoclave bag. The lab aide is responsible for autoclaving and putting away the trays. Disposable trays will be discarded in the regular trash.
Lab clean-up

- Lab paper is provided and is to be used to protect the countertops. The lab is to be cleaned after each use. Each student is responsible to clean-up their work area.

- In addition, each lab session will have 3 students assigned to clean areas used by all students.

- Before each lab session is dismissed, the following items must be completed:
  - All individual work areas have been cleaned.
  - The area of the model trimmers has been cleaned.
  - The area of the lab hand piece has been cleaned.
  - The area where dental stone and alginate are dispensed has been cleaned.
  - The dental stone vibrators have been cleaned.
  - The floor has been swept.

Lab Access

- Students who wish to work in the lab must notify the supervising dental faculty member.

- The lab must be cleaned before leaving. It is the student’s responsibility to:
  1. Put away supplies.
  2. Clean their counter and work area
  3. Clean model trimmers.
  5. Clean lathes.
  6. Sterilize autoclavable alginate trays and place them on the proper rack.

- Student lab privileges may be revoked if a student does not clean their work areas.
Dental Laboratory Infection Control Policies

- Dental laboratories are considered “clean”. Therefore, masks and gloves are not used when working on dental cases in the laboratory. However, all potentially contaminated items must be disinfected prior to the item entering the laboratory.

- Therefore, laboratory materials and other items that have been used in the mouth such as impressions, bite registrations, removable prostheses, bleaching trays, sports mouth guards, and orthodontic appliances are cleaned and disinfected before entering the laboratory.

- Even though the dental laboratory is considered “clean”, all prostheses, bleaching trays, sports mouth guards, and orthodontic appliances leaving the laboratory must be cleaned and disinfected before placement in the patient’s mouth.

- Polishing agents, such as pumice, are discarded after a single use on a single patient.

- Rag wheels are individually wrapped and autoclaved after a single use on a single patient.

- Even though the laboratory is considered “clean”, food and drink is not allowed in the lab.

- Even though the laboratory is considered “clean”, food and drink is not allowed in the dental laboratory’s refrigerator.
Model Trimmers

- Model trimmers are very expensive. The machines must be properly cared for if they are to be kept running. Each student will take the responsibility to keep them properly maintained.

Operating Instructions for Model Trimmers

1. Keep your hair away from moving parts.
2. Wear eye protection.
3. Check to make sure the machine is plugged in.
4. Check to make sure the wheel is clean.
5. Check to make sure the spray tube is not clogged.
6. Turn on water valve on the side of the machine.
7. Turn on machine.
8. Water must run over the wheel at all times.
9. Adjust the water spray so water does not splash.
10. If the machine fails to start properly, leaks water onto the counter top or floor, or begins to smoke, turn the machine off and notify an instructor immediately.
11. Do not trim models that have wax on them. Wax will clog the grinding wheel and is difficult to remove.

At the End of Use

1. Allow the wheel to run for two minutes.
2. Use hand sprayer to spray water over the wheel.
3. Stop the machine.
4. Use nailbrush to scrub angle plate and wheel as needed.
5. Turn machine on and give a final rinse.
6. Clean out plaster trap on the side of the machine.
7. Wipe off thoroughly to make sure no stone or plaster is left on the machine.
Dental Materials Lab Supplies

Policies

❖ The Dental Hygiene Program provides for the students most of the materials needed for use in the dental materials lab.

❖ Dental materials are expensive. Try to dispense only the amount needed. However, once a material is dispensed, it must either be used or discarded. The reason for this is if a material is returned to the original container, the whole container of material may become contaminated and ruined.

❖ Materials containers must be wiped clean and returned to cabinets.

❖ Autoclavable alginate trays must be left clean, free of stone and plaster.

❖ Bins of stone and plaster must be kept closed and scoops not transferred from one to another.

❖ When students notice that supplies are running low, they must advise an instructor.

Lab Kit Requirements

❖ Each student will be issued instruments and supplies at no cost.

❖ At the end of the semester, the issued instruments need to be returned in a clean condition.
Dental Laboratory Safety Precautions

General Precautions

- Handle materials in accordance with manufacturers’ instructions.
- Always wash hands with soap and water after working with dental materials.
- Do not leave dental material bottles open. (Examples include copal varnish, and impression material adhesives.) Minimize chemical vapors in the air.
- Should a dental material spill occur, immediately notify the instructor so that proper clean-up procedures may be implemented.
- The fuel alcohol used in the alcohol torches is quite flammable, and can burn with a hot, almost invisible flame. The alcohol is denatured and will cause severe illness if ingested.
- Avoid tipping the alcohol torch while in use. If the torch is tipped too far, a large ball of flame can erupt from the torch. Always keep the torch away from your face and hair when in use.
- Never leave your station with an open flame. Extinguish the flame before leaving your workstation for any reason.
- Some dental materials are quite flammable, such as monomer. Do not use an open flame near flammable materials.
- Eating, drinking, or smoking in the lab is never permitted for infection control and safety reasons.
- Wear protective eyewear when working with hazardous materials. Also use protective eyewear when using the model trimmer or dental lathe.
- Scrubs are recommended for wear in the lab. Old scrubs in good repair are fine to wear.
- Avoid touching eyes, nose, and mouth while handling dental materials.
- Once a dental material is dispensed, never return unused material to the original container. The dispensed material must be used or discarded. This is done so that the original container of material is not contaminated with foreign substances or microbes.
- Immediately reclose dental alginate and dental stone containers after dispensing the dental material. This is needed to avoid moisture contamination.
- Hair must be pulled back and away from the face during lab sessions.
- Amalgam scrap is placed in the designated amalgam scrap container.
- Liquid mercury is toxic. We use encapsulated amalgam to avoid contact with liquid mercury. Should a liquid mercury spill occur, notify the instructor immediately.
Precautions When Using Equipment and Tools

- Do not allow your pockets to become “tool chests”. Keep instruments out of your pockets.
- Before leaving, all power equipment must be turned off.
- Hair must be pulled back so that it will not catch in running equipment.
- When inserting or removing electrical plugs, grasp the plug and not the cord.
- Unplug electrical equipment when not in use.
- Keep floors clean. Immediately wipe up powders and spilled non-hazardous liquids.
- If skin or hands become irritated, report to the instructor immediately.
- If any injury occurs, report to the instructor immediately.
- Protect your table with a paper cover at all times.
- Keep your work area free of all personal belongings that you will not use during the procedures.
MASTER SPILL KIT INSTRUCTIONS

Mercury Spills
- Use the goggles and nitrile gloves provided in the kit
- Sprinkle the Mercury Magnet Powder (Copper, Zinc, Iron, Sulfamic Acid) over the spilled mercury
- Wet the powder with water, forming a paste
- Scrub the paste into the mercury spill using the special abrasive mercury scrubber, forming a mercury/metal amalgam
- Continue to scrub until no liquid mercury is observed
- Pick up the solidified mercury using the end of the magnetic tool. The magnet is at the end of a flexible, spring-like tool
- Place the material in the red biohazard bag and seal
- Dispose of as you would your amalgam waste according to state and local guidelines

Chemical Spills
- Use goggles and nitrile gloves
- If a liquid chemical is spilled, pour the absorbent material (Diamatomaceous Earth) found in the white shaker container labeled, “Universal Absorbent,” over the liquid until fully absorbed
- Pick up the absorbed material using the dust pan and scooper in the kit
- Place the material in the red biohazard bag and seal
- Dispose of according to NC state and local guidelines

Biological Spills
- Use goggles and nitrile utility gloves
- Sprinkle the BioSet Body Fluid Absorbent powder (Diamatomaceous Earth, Portland Cement, Gypsum Plaster, Sand) in the red shaker over the spill
- The BioSet Absorbent will solidify the spill. Pick up the absorbed material using the dust pan and scooper
- Place the material into a red biohazard bag and seal
- Dispose of according to NC state and local guidelines
- Clean and disinfect the area using an approved hospital grade cleaner/disinfectant

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Section 7

CLINIC POLICIES

AND

PROCEDURES
Clinic Policies-General

- Courtesy and consideration of the patient will prevail at all times.
- It is unethical to discuss grades, points, or requirements in front of patients or with patients.
- Criticism of previous dental services by the student is not considered ethical.
- Patient information is confidential and will not be discussed with anyone unless it directly impacts the delivery of services or the learning experience.
- Students will conduct themselves in a professional manner at all times.
- Loud and boisterous talking in corridors, classrooms, and clinic will not be tolerated.
- The faculty and clinic manager will be addressed by their last name with the appropriate prefix including Dr., Mrs., Miss, or Ms.
- All adult patients will be addressed by their last names and their appropriate prefix.
- Faculty members will be introduced by the student to patients.
- The clinic will be open at specified times indicated in the class schedule. Students will follow these published schedules.
- Students will report to clinic 15 minutes prior to their scheduled clinic session unless otherwise posted in the course syllabus.
- Students must notify the Dental Hygiene Department if they are going to be absent or late for a clinic session. They must also notify their patients if they are going to be absent or late. (See Department Policies regarding absences).
- Students will remain in clinic until dismissed by the clinic coordinator instructor.
- Each student has two clinic sessions that may be missed. After three misses, the student may be dismissed from the program.
- A student is tardy if he/she is not in clinic 15 minutes prior to the beginning of the clinic session (or as specified for the course) and prepared to initiate treatment.
- Students will not seat or treat patients, or begin any clinic duties unless an instructor is in the clinic.
- Students will not seat patients before the clinic manager has processed the patient.
- Students will not treat minors (under age 18) without written consent of a parent or legal guardian. Parents and guardians must remain in the clinic area during patient treatment.
- An instructor must evaluate all patients before treatment begins.
When necessary, ask an instructor for assistance as soon as you need it. Do not wait until the end of the appointment. If the instructor cannot help you, ask his/her permission to enlist the help from another instructor.

All students must be out of the clinic area at the scheduled end-of-clinic time. See course outline for specific times. Schedules vary by semester.

Students will not dismiss a patient without instructor permission.

It is the student’s responsibility to document all authorizations, recommendations, dental referrals, and treatment procedures in the treatment record.

Each student is responsible for recruiting his/her own patients.

Each student is responsible for scheduling his/her own appointments.

Procedures completed on a dental hygiene student will be counted as a requirement only when an instructor has judged the procedure to be necessary and aids in the student’s learning process. Dental hygiene students, faculty, or staff, acting as patients, will be given comprehensive care just as any other patient.

Discounts

**Half-Price:** The following individuals will be given a half-price discount for services rendered in the Halifax Community College Dental Hygiene Clinic

- Student spouse
- Student mother
- Student father
- Student step-mother
- Student step-father
- Student child(ren)
- Student sibling under 18 years old
- Students currently enrolled in Halifax Community College with a valid identification badge
- Current employees of the college

**No Charge**

- Halifax Community College Dental Hygiene faculty (full and part time), staff and their immediate family members will receive dental hygiene services in the Dental Hygiene Clinic free of charge.

- Graduates of Halifax Community College Dental Hygiene Program will receive dental hygiene services in the Dental Hygiene Clinic free of charge.
Recruiting Patients and Scheduling New Patients

Recruiting:

- Each student is responsible for recruiting his/her own patients.
- Patients may have been previously seen in the HCC Dental Clinic.
- Patients may be screening patients, those who have not been to the HCC Dental Clinic previously.
- Friends, neighbors, classmates, faculty, first year dental hygiene students, and family members all make excellent patients.
- Inform prospective patients of clinic days and times.
- Inform prospective patients to ask to be scheduled with you when they call to make their appointment.
- Use caution in giving your personal contact information to patients you are not familiar with.
- Inform prospective patients of the following HCC Dental Hygiene Clinic protocol:
  - Bring current list of medications
  - Patients are scheduled with students instructed by clinical dental hygiene faculty
  - Do not anticipate full treatment to be completed in a single visit; the educational experience level of the student and a patient’s dental needs will determine the number of appointments required.
  - Dental Hygiene Treatment consists of:
    - Medical history screening
    - Blood pressure screening
    - Head and neck cancer screening
    - Dental x-rays
    - Oral health education
    - Dental prophylaxis: scaling and polishing
    - Fluoride treatment
  - A medical clearance from your personal physician may be needed
  - Referrals will be given to patients who need dental and/or dental hygiene services beyond the scope of practice in the HCC Dental Hygiene Clinic
  - HCC Dental Hygiene Clinic follows current regulations and recommendations as outlined by OSHA, CDC and ADA.
Instructions for Students Regarding Scheduling Patients

- Students are informed during orientation that they are responsible for their appointment schedules.

- Students are instructed to bring to every clinic a scheduler/planner/appointment book in order to document appointments.

- Students are instructed to schedule their own patients when able to do so.

- The Clinic Manager will assist with scheduling patients as patients call for appointments or as patients walk in asking for appointments.

- Students are instructed to check their mailboxes often throughout the day.

- Any appointment slips with appointments, cancellations or rescheduled appointments are placed in the student’s mailbox.

- Students are instructed to look ahead and if openings are needed for new patients or possible board patients or to meet certain requirements, then that student should receive approval by the instructor to block the needed days.

- The student block sheet needs to be signed by the instructor and the student with the requested days to be blocked listed.

- The student needs to turn in the student block sheet to the Clinic Manager.

- The Clinic Manager will then block the listed times.

- It is the student’s responsibility to fill the blocked days.

- When a student makes an appointment that student must complete an appointment slip and turn it into the Clinic Manager.

- The Clinic Manager then makes the appointment in the Eaglesoft appointment scheduler in the computer.
Scheduling Adolescent Patients Appointments by Phone or in Person

- Patient’s parent/guardian calls for an adolescent patient appointment.
- The Clinic Manager will look in the Student Scheduling List for Adolescent Patients.
- An attempt will be made to schedule an appointment with the next student on the list that is open.
- The Clinic Manager will look in Eaglesoft in order to find out if that student has an opening.
- If at all possible an attempt will be made to schedule the patient with this student.
- If the student that was next on the Student Scheduling List for Adolescent Patients doesn’t have an opening, then an attempt will be made to schedule an appointment with the next student on the list that is open unless the patient requests a certain day and time for the appointment due to their schedule, then the next student available for that time will be assigned that appointment.
- If the patient requests a student by name, then the appointment will be made with the requested student.
- The patient’s name will be written in the Student Scheduling List for Adolescent Patients beside the student that was assigned the appointment.
- The Clinic Manager will then fill out an appointment slip with the patient name, date of birth, phone number, students name and child prophylaxis circled with the date and the time of the appointment.
- The appointment slip is then placed in that student’s mailbox located in the clinic.
- During orientation the students have been instructed to check their mailboxes often throughout each day.
- The student then transfers the information for the appointment that was made to their scheduler/planner/appointment book. This process allows the student to keep up with each appointment that is made.
Scheduling New Patients Appointments by Phone or in Person

- Patient calls for a new patient appointment.

- The Clinic Manager will explain the clinic process and policies to the patient while stressing the importance of keeping the appointment.

- The Clinic Manager will look in the Student Scheduling List for New Patients.

- An attempt will be made to schedule an appointment with the next student on the list that is open.

- The Clinic Manager will look in Eaglesoft in order to find out if that student has an opening.

- **If at all possible** an attempt will be made to schedule the patient with this student.

- **If** the student that was next on the Student Scheduling List for New Patients doesn’t have an opening, **then**…

- An attempt will be made to schedule an appointment with the next student on the list that is open.

- **Unless** the patient requests a certain day and time for the appointment due to their schedule, then the next student available for that time will be assigned that appointment.

- **If** the patient requests a student by name, then the appointment will be made with the requested student.

- The patients name will be written in the Student Scheduling List for New Patients beside the student that was assigned the appointment.

- The Clinic Manager will then fill out an appointment slip with the patient name, date of birth, phone number, students name and new and adult prophy circled with the date and the time of the appointment.

- The appointment slip is then placed in that student’s mailbox located in the clinic.

- During orientation the students have been instructed to check their mailboxes often throughout each day.

- The student then transfers the information for the appointment that was made to their scheduler/planner/appointment book. This process allows the student to keep up with each appointment that is made.
Scheduling Patients Recall Appointments at Checkout Time

- Students have been instructed to bring their scheduler/planner/appointment book with them to the checkout window during patient checkout time.

- A recall appointment is offered during checkout time.

- If the patient agrees to a recall appointment at this time, then an appointment is given.

- Appointment card with the date and time of the next recall appointment is then given to the patient.

- The student who was assigned to that patient writes the appointment date and time in their scheduler/planner/appointment book.

- If a patient refuses to make an appointment at this time, then an appointment card is given to that patient with a note written on the card reminding patient of when it is recommended to have the next cleaning.
Scheduling Patients Recall Appointments by Phone

- Patient calls for a recall appointment.
- The Clinic Manager will look in Eaglesoft in order to find out which student was assigned to the patient at the patient’s previous appointment.
- **If at all possible** an attempt will be made to schedule the patient with the same student as before.
- An appointment will **be** made at the time the recall appointment was recommended.
- **If** the student that was previously assigned to this patient doesn’t have an opening, **then**…
- The Clinic Manager will look at the **Student Scheduling List for Recall Patients**.
- An attempt will be made to schedule an appointment with the next student on the list that is open.
- **Unless** the patient requests a certain day and time for the appointment due to their schedule, then the next student available for that time will be assigned that appointment.
- The patient’s name will be written in the **Student Scheduling List for Recall Patients** beside the student that was assigned the appointment.
- The Clinic Manager will then fill out an appointment slip with the patient name, date of birth, phone number, students name and recall circled with the date and the time of the appointment.
- The appointment slip is then placed in that student’s mailbox located in the clinic.
- During orientation the students have been instructed to check their mailboxes often throughout each day.
- The student then transfers the information for the appointment that was made to their scheduler/planner/appointment book. This process allows the student to keep up with each appointment that is made.
Scheduling Patients Recare Appointments at Checkout Time

- Students have been instructed to bring their scheduler/planner/appointment book with them to the checkout window during patient checkout time.

- If the student was unable to complete the visit, then a recare appointment is offered and made during checkout time.

- If the patient agrees to schedule a recare appointment at this time, then an appointment is given.

- Appointment card with the date and time of the recare appointment is then given to the patient.

- The student who is assigned to that patient writes the recare appointment date and time in their scheduler/planner/appointment book.

- If a patient refuses to make an appointment at this time due to not knowing their schedule, then an appointment card is given to that patient with a note written on the card reminding the patient to check their schedule and to call for the recare appointment. The phone number to the clinic is on the appointment card.

- The recare appointment is then made when the patient calls the clinic back.

- The Clinic Manager fills out an appointment slip with the patient name, date of birth, phone number, students name and recare circled with the date and the time of the appointment.

- The appointment slip is then placed in that student’s mailbox located in the clinic.

- During orientation the students have been instructed to check their mailboxes often throughout each day.

- The student then transfers the information for the appointment that was made to their scheduler/planner/appointment book. This process allows the student to keep up with each appointment that is made.
Scheduling Pedo Patients Appointments by Phone or in Person

- Patient’s parent/guardian calls for a pedo patient appointment.

- The Clinic Manager will look in the Student Scheduling List for Pedo Patients.

- An attempt will be made to schedule an appointment with the next student on the list that is open.

- The Clinic Manager will look in Eaglesoft in order to find out if that student has an opening.

- **If at all possible** an attempt will be made to schedule the patient with this student.

- **If** the student that was next on the Student Scheduling List for Pedo Patients doesn’t have an opening, then...

- An attempt will be made to schedule an appointment with the next student on the list that is open.

- **Unless** the patient requests a certain day and time for the appointment due to their schedule, then the next student available for that time will be assigned that appointment.

- **If** the patient requests a student by name, then the appointment will be made with the requested student.

- The patients name will be written in the Student Scheduling List for Pedo Patients beside the student that was assigned the appointment.

- The Clinic Manager will then fill out an appointment slip with the patient name, date of birth, phone number, students name and child prophy circled with the date and the time of the appointment.

- The appointment slip is then placed in that student’s mailbox located in the clinic.

- During orientation the students have been instructed to check their mailboxes often throughout each day.

- The student then transfers the information for the appointment that was made to their scheduler/planner/appointment book. This process allows the student to keep up with each appointment that is made.
Patient Management and Clinic Requirements
HCC Dental Hygiene Program

- Students are required to recruit patients in order to meet course requirements. The HCC Dental Hygiene Clinic may have a patient pool from which students may be assigned patients. Individuals are allowed to request any particular student and that student will be assigned to that patient. All other patients will be randomly assigned to students by the Clinic Manager and the Clinic Coordinator.

- Students are responsible for the management of patients assigned to them. They will confirm appointments and inform the patient about clinic policies and procedures.

- Students must meet patient clinic requirements. It is not recommended that a student miss any clinic sessions. Two clinic absences are allowed as stated in HCC Dental Hygiene Department Policy. These should be used only in the case of illness. More than two absences may result in dismissal from the program.

- Students are encouraged to have a scheduled patient for each clinic period, in the event a patient is not scheduled, the student is required to check with the Clinic Coordinator for further instructions.

- If a patient cancels a scheduled appointment (calls 24 hours ahead of time) and the student is unable to schedule another patient, the student will be allowed to screen potential patients. Students will schedule screening patients through the Clinic Manager.

- Students may not have more than five patients in treatment at any time. The Clinic Coordinator may approve more than the limit of five under special circumstances.

- When a patient fails to come for an appointment or calls at the last minute to cancel, students may be able to recruit individuals from friends and family waiting in the reception area or in student areas on the HCC campus. The student will need permission from the Clinic Coordinator to use clinic time for this purpose.

- The needs of the patient are top priority. Students will complete treatment once a patient is assigned under their care. Students cannot share a patient who is in treatment unless permission is granted by the Clinic Coordinator. A patient assignment may be transferred to another student if patient care has not begun, the patient agrees, or the Clinic Coordinator makes the decision to transfer the patient.

- All patient treatment will be completed within the semester. Permission may be given by the Clinic Coordinator for continued patient treatment into the succeeding semester (except in DEN 231) under special circumstances.

- The Clinic Coordinator has the authority to discontinue patient treatment. (Example of patient dismissal: a patient who consistently breaks of cancels appointments may be refused care if “no shows” and cancellations have been properly documented in the patient’s chart by the student at the time of the missed appointment.)
In the event that you are scheduled for a rotation (Clinic Assistant or Screener) and a patient arrives for you, the patient will be dismissed and the rotation attended. The clinic rotations schedule will be adhered to at all times. Schedule patients carefully, avoiding holidays and scheduled rotation days.

Students must participate in the assigned number of rotations scheduled for them for the semester. Missed rotations must be made up. Students are allowed to switch dates/times of rotations with other students with the permission of the Clinic Coordinator. Failure to complete a rotation will result in a one-point deduction from the final DEN grade (professional penalty points infraction). Students will not be allowed to switch the day of the scheduled rotation date except under special circumstances (death in family, sudden illness). Plan ahead.

In the event that two patients arrive for a student on the same day for treatment, the patient that is scheduled with the Clinic Manager’s schedule will be seen. The other person will be dismissed and the student will be responsible for rescheduling that patient at a later date. Students are responsible for keeping the Clinic Manager informed about all scheduled appointments.
Components of the Appointment

ASSESSMENT

1. Review Medical-Dental History
2. Record Vital Signs
3. Complete the Extraoral/Intraoral Inspection
4. Complete Restorative/Dental Charting
5. Complete Periodontal and Gingival Chartings
6. Complete Deposit and Plaque Assessment

DIAGNOSIS & PLANNING

7. Complete Dental Hygiene Care Plan
8. Complete Patient Education (Teach, Show, Do)
9. Take Radiographs

IMPLEMENTATION

10. Oral Prophylaxis (Remove deposits, selective polish, floss, disclose)
11. Patient Education Reinforcement
12. Adjunctive dental hygiene services

EVALUATION

13. Dismissal of Patient
14. Complete Chart / Treatment Documentation
15. Prepare Operatory for End of Clinic

DOCUMENTATION

16. All treatment rendered for the patient is documented electronically in the patient’s chart, the student signs the documentation with the approval of the clinic instructor
MEDICAL-DENTAL HISTORY

- The patient’s medical/health history is completed using the electronic form.
- The patient must sign the form. If the patient is a minor, a parent or legal guardian must sign the form.
- All questions must be answered.
- Ask appropriate follow-up questions for “yes” responses. Document patient’s comments.
- Student will document each medication, prescription or over-the-counter medicine currently being taken by the patient. The student should:
  1. Verify that the patient has taken medication for any medical condition.
  2. Use an appropriate drug reference and note all pertinent information and/or precautions.
  3. Take appropriate precautions for medications which may affect dental treatment.

- Any patient with an active infection of a communicable disease is to be evaluated for possible dismissal and reappointment upon discussion with the patient and consultation with a faculty member/dentist.

- Students must identify patients with special needs (cardiovascular diseases, respiratory diseases, disabilities, etc.) and review the special needs with the instructor and adhere to any precautions necessary to render appropriate dental hygiene care for the patient.

- Patients with a history of a communicable disease must be evaluated as to the current status of the disease. Consultation with the treating physician is made to determine carrier status of the disease when appropriate. Modifications to dental treatment and possible reappointment will be made based on this evaluation.

- Follow these procedures for obtaining physicians approval by telephone:
  1. The instructor and student must be present when approval for treatment is granted by telephone.
  2. Document that approval has been granted in the patient’s chart.
  3. Request the physician send written consent for treatment.
  4. Note that written consent has been requested from the physician in the patient’s chart.
  5. If the physician cannot be reached, the student may need to dismiss the patient and reappoint when medical consultation can be completed.

- Take and record vital signs.

- Patient initials vital signs recording and medical/health history update.

- Student initials the vital signs record.

- It is the student’s responsibility to answer any question an instructor may have regarding the patient’s medical-dental history.

- After completing the questionnaires the student is to review the history with an instructor privately. The instructor will give the student permission to continue the appropriate treatment.

- Failure to have an instructor’s permission to continue with treatment will result in failure of the clinic requirement.

- Document in the patient’s chart that the medical history was updated.
Antibiotic Pre-med Recommendations

Joint Replacements: Please refer to the following attachment

Heart Conditions:

Antibiotic prophylaxis is recommended for a small number of people who have specific heart conditions. The American Heart Association has guidelines identifying people who should take antibiotics prior to dental care.

**According to these guidelines, antibiotic prophylaxis should be considered for people with:**

- Artificial heart valves.
- A history of an infection of the lining of the heart or heart valves known as infective endocarditis.
- A heart transplant in which a problem develops with one of the valves inside the heart.
- Heart conditions that are present from birth, such as:
  - Unrepaired cyanotic congenital heart disease, including people with palliative shunts and conduit.
  - Defects repaired with a prosthetic material or device—whether placed by surgery or catheter intervention—during the first six months after repair.
  - Cases in which a heart defect has been repaired, but a residual defect remains at the site or adjacent to the site of the prosthetic patch or prosthetic device used for the repair.
Halifax Community College Dental Hygiene Program
Guidelines for Treating Patients with Joint Replacements

Any patient who identifies himself with a joint replacement must:

1. Be informed of these guidelines
2. Receive a written copy of these guidelines
3. Sign a document stating they have received these guidelines

Guidelines
Patient must present written documentation with the following information:

1. Patient’s full name
2. Patient’s date of birth
3. Surgeon’s printed name
4. Surgeon’s signature and date
5. Surgeon’s written instructions for prophylactic antibiotic coverage before dental hygiene treatment is rendered in this facility
AAOS, ADA Release CPG for Prophylactic Antibiotics

New guideline includes shared decision-making tool, implications for practice

Leeaht Gross, MPH

At their meeting on Dec. 7, 2012, the AAOS Board of Directors approved a new clinical practice guideline (CPG) on “The Prevention of Orthopaedic Implant Infections in Patients Undergoing Dental Procedures.” The evidence-based CPG, the first to be codeveloped by the AAOS and the American Dental Association (ADA), includes three recommendations (See Table 1) and will replace previous AAOS information statements on the topic.

According to David S. Jevsevar, MD, MBA, chair of the AAOS Evidence-Based Practice Committee, recommendation 1 is supported by limited evidence, but has the highest level of available evidence of the three recommendations. It proposes that the practitioner consider changing the longstanding practice of routinely prescribing prophylactic antibiotics for patients with orthopaedic implants who undergo dental procedures.

Recommendation 2 addresses the use of oral topical antimicrobials, and recommendation 3 addresses the maintenance of good oral hygiene.

“This guideline was based on research that examined a large group of patients, all having a prosthetic hip or knee, and half with an infected prosthetic joint,” said Elliot Abt, DDS, MS, MSc, one of the ADA representatives on the volunteer workgroup that developed the guidelines. “The limited research suggested that invasive dental procedures, with or without antibiotics, had no effect on the likelihood of developing a periprosthetic joint infection (PJI).”

**Background**

The previous AAOS information statement, “Antibiotic Prophylaxis for Bacteremia in Patients with Joint Replacements,” was published in 2003 and updated in 2009. Both information statements were developed as educational tools and based solely on the opinion of the authors. This new collaborative Clinical Practice Guideline, however, was developed using a systematic, evidence-based process.

To develop the CPG, the workgroup first formulated a set of preliminary recommendations that
specified what should be done when, where, to whom, and for how long. These were intended to function as the questions for systematic review by the AAOS/ADA research team. Once all relevant published articles were assembled and graded (Level I to IV), the workgroup then provided a final strength for each recommendation.

“The process used meets or exceeds all recommended Institute of Medicine standards for the development of systematic reviews and clinical practice guidelines, except for allowing patient input in the selection of topics and questions,” noted Dr. Jevsevar. “Of note, the AAOS CPG program does not allow workgroup members with relevant conflicts of interest, and the collaborating societies followed the same conflict of interest rules in selecting their representatives.”

In 2010, more than 302,000 hip replacements and 658,000 knee replacements were performed in the United States. Based on the studies reviewed for this guideline, the mean rate of hip, knee, and spine implant infections was 2 percent; management typically requires further surgery and prolonged antibiotic treatment. Causes included entry of microbes into the wound during surgery, hematogenous spread, recurrence of sepsis in a previously infected joint, and contiguous spread of infection from a local source.

In light of the significant morbidity associated with orthopaedic implant infections, preventing such infections in patients undergoing dental procedures is highly desirable. However, prophylactic antibiotics entail risks to individual patients and, if widely used, are plausible contributors to the growing problem of bacterial resistance resulting from antibiotic overuse.

**New wording, implementation aids**
The Evidence-Based Practice Committee, Guidelines Oversight Committee, Appropriate Use Criteria Committee, Council on Research and Quality, and the AAOS Board of Directors recently approved changing the word, “weak” to the word “limited” in all AAOS evidence-based CPG recommendations ratings.

In addition, a brief statement addressing the implications for practice for each rating (strong, moderate, limited, inconclusive, and consensus) was added to further clarify the meaning of the strength of recommendation rating for practitioners using the guidelines. The ADA participants had no objections to these changes. The criteria and definition/description of the ratings did not change; the term “limited” is intended to be the equivalent of the previous term “weak.”

Finally, a shared decision-making tool—a template designed to be used by both orthopaedic surgeons and dentists—was developed to accompany the guideline. Shared decision making is a collaborative process that enables patients and their healthcare providers to make treatment decisions together, taking into account both the best scientific evidence available and the patient’s values and preferences. The tool supplements, but does not replace, informed consent procedures.

Because a limited CPG recommendation requires a greater amount of patient education, as well
as consideration of patient values and clinician experience, the shared decision-making tool is meant to aid in this process.

“As clinicians, we want what is in the best interest of our patients, so this CPG is not meant to be a stand-alone document,” said Dr. Jevsevar. “Instead it should be used as an educational tool to guide clinicians through treatment decisions with their patients to improve quality and effectiveness of care.

“The experience of each clinician is valuable in this process. For example, subgroup analysis for patients at potentially higher risk was not performed. The provider of care should utilize his or her experience and clinical decision-making skills to identify those high-risk patients (eg, immunocompromised) and determine the best care choices for those patients,” he continued. “A limited recommendation implies that the CPG recommendation does not apply to all patients uniformly, but rather that the interaction between patient and clinician is critical to determining the applicability.

“The AAOS gets kudos on its CPGs because they’re well done,” added Dr. Jevsevar, “but our members have found them difficult to apply in practice. We added implications within the body of the guidelines so that people could understand them. The idea is that, if you’re dealing with a patient, how would you think about that information? How would you present it to the patient? How would you use it to make a decision?”

The full guideline, along with all supporting documentation and workgroup disclosures, is available on the AAOS website, www.aaos.org/guidelines

Leeaht Gross, MPH, is the evidence-based medicine coordinator in the AAOS department of research & scientific affairs. She can be reached at gross@aaos.org

Guideline development
The Clinical Practice Guideline on the Prevention of Orthopaedic Implant Infection in Patients Undergoing Dental Procedures was developed by a volunteer workgroup chaired by William C. Watters III, MD, and Michael P. Rethman, DDS, MS. Members of this workgroup included Richard Parker Evans, MD; Richard J. O’Donnell, MD; Calin S. Moucha, MD; Paul A. Anderson, MD; Elliot Abt, DDS; Harry C. Futrell, DMD; Stephen O. Glenn, DDS; Mark J. Steinberg, DDS, MD; John Hellstein, DDS, MS; John E. O’Toole, MD; Anthony Rinella, MD; David J. Kolessar, MD; Karen C. Carroll, MD, FCAP; Kevin L. Garvin, MD; Douglas R. Osmon, MD; and Angela Hewlett, MD, MS. Michael Goldberg, MD, served as the attending guidelines oversight chair and is currently Guidelines Oversight Committee chair. The ADA staff included Nicholas Buck Hanson, MPH, lead analyst, and Helen Ristic, PhD. The AAOS staff included Patrick Sluka, MPH; Deborah Cummins, PhD; Sharon Song, PhD; and William R. Martin III, MD.

Funding was provided by the AAOS and ADA. The guideline is based on a systematic review of the current scientific and clinical research.
The methods used to prepare the guideline were rigorous, employed to minimize bias and to develop a set of reliable, transparent, and accurate clinical recommendations for the prevention of orthopaedic implant infections in patients undergoing dental procedures. These methods are detailed in the full guideline.

The development of AAOS Evidence-Based Clinical Practice Guidelines are overseen by the Guidelines Oversight Committee and the Evidence-Based Practice Committee. It was approved by the AAOS Board of Directors on December 7, 2012. The complete guideline is available at www.aaos.org/guidelines

References


The use of prophylactic antibiotics prior to dental procedures in patients with prosthetic joints

Evidence-based clinical practice guideline for dental practitioners—a report of the American Dental Association Council on Scientific Affairs

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ABSTRACT

Background. A panel of experts (the 2014 Panel) convened by the American Dental Association Council on Scientific Affairs developed an evidence-based clinical practice guideline (CPG) on the use of prophylactic antibiotics in patients with prosthetic joints who are undergoing dental procedures. This CPG is intended to clarify the “Prevention of Orthopaedic Implant Infection in Patients Undergoing Dental Procedures: Evidence-based Guideline and Evidence Report,” which was developed and published by the American Academy of Orthopaedic Surgeons and the American Dental Association (the 2012 Panel).

Types of Studies Reviewed. The 2014 Panel based the current CPG on literature search results and direct evidence contained in the comprehensive systematic review published by the 2012 Panel, as well as the results from an updated literature search. The 2014 Panel identified 4 case-control studies.

Results. The 2014 Panel judged that the current best evidence failed to demonstrate an association between dental procedures and prosthetic joint infection (PJI). The 2014 Panel also presented information about antibiotic resistance, adverse drug reactions, and costs associated with prescribing antibiotics for PJI prophylaxis.

Practical Implications and Conclusions. The 2014 Panel made the following clinical recommendation: In general, for patients with prosthetic joint implants, prophylactic antibiotics are not recommended prior to dental procedures to prevent prosthetic joint infection. The practitioner and patient should consider possible clinical circumstances that may suggest the presence of a significant medical risk in providing dental care without antibiotic prophylaxis, as well as the known risks of frequent or widespread antibiotic use. As part of the evidence-based approach to care, this clinical recommendation should be integrated with the practitioner’s professional judgment and the patient’s needs and preferences.

Key Words. Antibiotic prophylaxis; evidence-based dentistry; practice guidelines; prostheses; joint replacement.

This article has an accompanying online continuing education activity available at: http://jada.ada.org/ce/home.

Copyright © 2015 American Dental Association. All rights reserved.
Implant Infection in Patients Undergoing Dental Procedures: Evidence-based Guideline and Evidence Report.\textsuperscript{3,5} The 2012 Panel initially considered 222 questions concerning the relationship between dental procedures, bacteremia (as an intermediate outcome), and the risk of developing a prosthetic joint infection (PJI) as a clinical end point. The 2012 Panel published a comprehensive evidence-based guideline. The release of this guideline was followed by calls to the ADA Member Service Center hotline requesting additional clarification, which indicated that this guideline was 1 of the top 2 issues of concern to dental practitioners. Therefore, the ADA’s Council on Scientific Affairs convened a panel of experts (the 2014 Panel) to provide dental professionals with a more specific and practical set of guidelines, the results of which are included in this article.

The 2014 Panel considered the direct evidence linking a PJI with a dental procedure but did not reevaluate intermediate outcomes, including bacteremia\textsuperscript{4} from manipulation of oral mucosa. The full report of the 2012 Panel, which includes intermediate outcomes, is available online.\textsuperscript{1} The 2014 Panel addressed the following clinical question: For patients with prosthetic joints, is there an association between dental procedures and PJI, and, therefore, should systemic antibiotics be prescribed before patients with prosthetic joint implants undergo dental procedures? In this article, we present the evidence to answer this question and provide clinical recommendations.

### EVIDENCE REVIEW

Because the 2012 Panel\textsuperscript{1} conducted a comprehensive search of the biomedical literature and screened the results of the search according to defined inclusion and exclusion criteria, the 2014 Panel chose to use the literature selected by the 2012 Panel as the foundation of this CPG. In addition, the 2014 Panel updated the literature search and screening process to identify additional evidence. The methods are presented in Appendix 1 (available online at the end of this article). The 2014 Panel assessed each identified study according to the Critical Appraisal Skills Programme case-control critical appraisal tool\textsuperscript{1} and then summarized the body of evidence to determine the level of certainty in the effect estimate and corresponding strength of the recommendation. Details about the process for generating clinical recommendations are in Appendix 2 (available online at the end of this article). The 2014 Panel did not conduct a meta-analysis because a meta-analysis of observational studies can produce precise, but possibly spurious, estimates of risk owing to the effects of confounding.\textsuperscript{6}

In their systematic review,\textsuperscript{1} the 2012 Panel identified 1 study that provided direct evidence about dental procedures as risk factors for developing prosthetic hip and knee implant infections. The study by Berbari and colleagues\textsuperscript{7} was a case-control study of 339 patients with infected hip or knee prostheses (cases), and the authors matched them with 339 patients who did not have infected hip or knee prostheses (controls) and who were hospitalized in an orthopedic service at the Mayo Clinic Care Network (Rochester, MN) from December 2001 through May 2006. The authors reviewed and abstracted information from dental records to determine the association between the dental procedures (exposure) and hip and knee infections. Exposure was measured within the previous 6 months and 2 years before hospital admission and classified as low-risk dental procedures (fluoride treatment, restorative dentistry, and endodontic treatment) and high-risk dental procedures (periodontal treatment, extractions, treatment of a dental abscess, oral surgery, and dental hygiene), as defined by Berbari and colleagues.\textsuperscript{7}

The authors controlled for confounding variables by matching control patients to case patients on the basis of joint arthroplasty location, resulting in exactly the same number of prosthetic hip (n = 164) and knee (n = 175) replacements among cases and controls. The authors also controlled for confounding by providing each patient with a yes versus no propensity score regarding whether the patient had had a dental visit during the period of data abstraction. The score took into account several covariates—including sociodemographic and behavioral information, comorbidities, and the American Society of Anesthesiologists score—that influenced a patient’s propensity to visit a dentist. The authors also controlled for covariates such as antibiotic prophylaxis, sex, and joint effect. The regression models included all of these covariates and confounding variables.

The regression modeling used odds ratios (ORs), and the results showed no statistical association between having undergone high-risk dental procedures without antibiotics and PJIs at either 6-months (OR = 0.8; 95% confidence interval [CI], 0.4-1.7) or 2-years (OR = 0.8; 95% CI, 0.4-1.6) after the procedure. High-risk dental procedures with antibiotics were statistically significant at 6 months (OR = 0.5; 95% CI, 0.3-0.9), but not at 2 years (OR = 0.7; 95% CI, 0.5-1.1). All 4 of these ORs are below the null value of 1, indicating that case patients

### ABBREVIATION KEY

The 2014 Panel identified 3 additional case-control studies via its updated literature search process. The first study was by Skaar and colleagues. They extracted data (International Classification of Diseases, Ninth Revision, Clinical Modification for procedures associated with hospital use in the United States: codes 81.5, 81.51, 81.52, 81.54, 81.56, 81.57, 81.60, 81.81, 81.84, 81.9, and 996.99) for the years 1997 through 2006 from the Medicare Current Beneficiary Survey. The nested case-control study included 168 participants who had undergone total arthroplasty—42 case participants who had PJIs matched according to age group, sex, and number of comorbid conditions with 126 control participants who did not. Dental data were based on patients’ self-reports, which are susceptible to recall bias. The authors reported that control participants were more likely to have undergone invasive dental procedures than were case participants, although this result was not significant (main results were expressed as time to event with hazard ratios [HRs] and association with ORs: HR = 0.78 [95% CI, 0.18-3.39]; OR = 0.56 [95% CI, 0.18-1.74]; P = .45; neither the HR nor the OR was significant). Invasive dental procedures, as defined by Skaar and colleagues, included teeth cleaning (including periodontal procedures), extractions, and endodontic procedures. The authors noted that the statistical power for their study was low. Despite the risk of bias, the study results appeared to be valid, generalizable, and consistent with those of other related studies in which investigators failed to demonstrate an association between dental procedures and PJI.

The second study was a nested case-control study in which Swan and colleagues addressed events associated with PJI. They identified 17 patients (of 1,641 who underwent arthroplasty between 1998 and 2006 in a tertiary referral center) in whom PJI developed more than 3 months postoperatively. The authors identified 51 control patients from a central institutional audit database, but it was unclear whether case and control participants were demographically similar. In addition, there was high susceptibility for recall bias because the exposure data were collected via telephone. The 2 factors most associated with PJI were having cellulitis or having more than 4 comorbidities. The authors used data for dental procedures as published in the article to create a 2 × 2 table and calculate the OR as 1.53 (95% CI, 0.13-18.03). We did not calculate a P value, but the CI was wide enough and includes the null value of 1; therefore, it failed to demonstrate an association between dental procedures and PJI.

The third study was a nested case-control study in which Jacobson and colleagues recruited case participants from approximately 2,700 patients with prosthetic knee or hip joints that had been placed in 1 of 2 hospitals from 1970 through 1983. The authors identified 30 case participants with late (> 6 months after implant placement) PJI and 100 control patients, although it was unclear whether or how the control patients were matched with the case patients. The authors reviewed dental charts, but they did not mention masking of data abstractors or the types of dental procedures that were performed. The authors did not account for any confounding factors such as age, sex, smoking status, or medical conditions. The authors performed a Fisher exact test, and from the published data we calculated an OR of 0.07 (95% CI, 0.01-0.56). This result provided evidence that there is an association between dental procedures and PJI; however, the OR and Fisher exact test results implied that those undergoing dental procedures were at lower risk of developing PJI. The methodological limitations of this study affect the validity and generalizability of its results; furthermore, the results are inconsistent with other studies in which investigators failed to show an association between dental procedures and PJI.

**CLINICAL RECOMMENDATION AND RATIONALE**

Using eTable 1 (available online at the end of this article) as a guide, the 2014 Panel judged with moderate certainty that there is no association between dental procedures and the occurrence of PJIs. The 2014 Panel made this judgment on the basis of the following 2 considerations. The first was consistency between results, in that the results of 3 of 4 studies failed to show an association between dental procedures and PJI, and the results of the fourth study showed a protective effect of dental procedures on PJI. The second was that although the number of studies was limited, it is unlikely that the results of the additional studies would have changed the conclusion. The 2014 Panel made the assumption that the evidence regarding hip and knee joint infections can be extrapolated to all joints on the basis of the morphologic and physiological characteristics of the tissues involved. This extrapolation is necessary for clinical relevance because, to our knowledge, no studies have been published addressing the relationship between dental treatment and infections of other types of prosthetic joints. Using the ADA’s methods for generating clinical recommendation statements as described in eTable 2 (available online at the end of this article), when there is moderate certainty of no association, the strength of the recommendation is against. The term against means that evidence suggests not implementing this intervention or discontinuing ineffective procedures (eTable 3, available online at the end of this article).

On the basis of this rationale, the 2014 Panel makes the following clinical recommendation as depicted in the Sidebar at the end of the article: In general, for patients with prosthetic joint implants, prophylactic antibiotics are not recommended prior to dental procedures to prevent prosthetic joint infection. The practitioner and
patient should consider possible clinical circumstances that may suggest the presence of a significant medical risk in providing dental care without antibiotic prophylaxis, as well as the known risks of frequent or widespread antibiotic use.

This report is intended to assist practitioners with making decisions about the prophylactic use of antibiotics to prevent PJI. The recommendations in this document are not intended to define a standard of care and rather should be integrated with the practitioner’s professional judgment and the patient’s needs and preferences.

**RISK FACTORS FOR DEVELOPING PROSTHETIC JOINT INFECTION INDEPENDENT OF DENTAL PROCEDURES**

One case-control study identified a number of nondental risk factors for developing PJI. In this study, Berbari and colleagues evaluated both preoperative and postoperative factors associated with PJI. The most clinically relevant of these factors were postoperative, especially wound drainage after arthroplasty (OR = 18.7; 95% CI, 7.4-47.2). Other postoperative factors associated with PJI were wound hematomata after arthroplasty (OR = 2.5; 95% CI, 1.3-9.5) and postoperative urinary tract infection (OR = 2.7; 95% CI, 1.04-7.1). The OR for surgical site infection could not be calculated because there were no PJIs among the control subjects. Thus, the patients at the highest risk of developing PJI had drainage, an infection, or both after undergoing arthroplasty. There were no data regarding whether use of prophylactic antibiotics decreased the risk of developing PJIs in patients with these specific postoperative conditions.

Other conditions, as defined by Berbari and colleagues, with significant ORs (ranging from 1.8 to 2.2) for PJI independent of dental procedures, were preoperative factors including prior operation/arthroplasty on the index joint, diabetes mellitus, and/or being immunocompromised (defined as rheumatoid arthritis or current use of systemic steroids/immunosuppressive drugs or diabetes mellitus or presence of a malignancy or a history of chronic kidney disease). However, the magnitude of these ORs may not be clinically relevant. Observational studies such as those with a case-control design do not involve the use of randomization and are more prone to the effects of bias and confounding. Therefore, some epidemiologists maintain that in case-control studies significant ORs of less than 4 may not be large enough to be clinically relevant. The upper limit of the 95% CIs for the preoperative factors did not include values of 4 or greater in the results of the case-control study by Berbari and colleagues. Thus, although these factors were significant, the effects of these medical conditions on the risk of developing PJI may not be clinically relevant. Independent of having undergone a dental procedure, it appears that postoperative factors such as drainage or infection after undergoing arthroplasty were associated more strongly with PJI than are having undergone previous surgery or arthroplasty of the index joint, being immunocompromised, or having a medical condition such as diabetes mellitus.

**FURTHER CONSIDERATIONS**

The following considerations contribute to the argument against antibiotic prophylaxis.

**Antibiotic resistance.** There is a long-standing and increasing concern that repeated exposure to antibiotics is a risk factor for the development of resistant bacterial species (for example, penicillin-resistant streptococci).

**Adverse drug reactions.** Although there are no data regarding the risk of developing a drug reaction from a single dose of amoxicillin prescribed to prevent a distant site infection such as PJI, older data involving prophylaxis regimens that included intramuscular injections and multiple oral doses suggest that more people who are given antibiotic prophylaxis would experience drug reactions from penicillin-type drugs—some of which may be fatal—than would be prevented from developing PJI. Of all allergens, penicillin is the most frequent medication-related cause of anaphylaxis in humans, and its use is the cause of approximately 75% of fatal anaphylaxis cases in the United States each year. Other potential antibiotic-associated adverse reactions include nausea, vomiting, and diarrhea. There also is an increased risk of experiencing adverse reactions with increasing patient age (that is, in patients 70 years or older), which is compounded by the increased frequency of arthroplasty in older patient cohorts.

Prolonged treatment with antibiotics is associated with infections secondary to changes in the gastrointestinal microbial flora, which includes that involved in the development of oral thrush. For example, Clostridium difficile infection potentially can cause pseudomembranous colitis after patients are prescribed antibiotics to treat other infections. Recognizing that a single dose of antibiotics for prophylaxis of PJI is unlikely to cause a C difficile infection, comprehensive dental care often involves multiple appointments over a short period. In addition, patients may have taken antibiotics for other medical conditions in the past, increasing their risk of experiencing changes in the gastrointestinal flora. The Centers for Disease Control and Prevention has estimated that annually there are approximately 250,000 people with C difficile infections that require hospitalization or already affect hospitalized patients, resulting in 14,000 deaths per year. Investigators have identified clindamycin, cephalosporins, and fluoroquinolones as the inducing agents.
Cost. The results of a 2013 report indicate that the annual cost of amoxicillin administered to patients with hip and knee prostheses before dental procedures in the United States may exceed $50 million.\textsuperscript{20}

CONCLUSIONS

Evidence fails to demonstrate an association between dental procedures and PJI or any effectiveness for antibiotic prophylaxis. Given this information in conjunction with the potential harm from antibiotic use, using antibiotics before dental procedures is not recommended to prevent PJI. Additional case-control studies are needed to increase the level of certainty in the evidence to a level higher than moderate.

SUPPLEMENTAL DATA

Supplemental data related to this article can be found at http://dx.doi.org/10.1016/j.adaj.2014.11.012.
Education and Licensure, Chicago, IL; Dr. Ann Eshenaur Spolarich, American Dental Hygienists’ Association, Chicago, IL; Dr. Mark J. Steinberg, The American Association of Oral and Maxillofacial Surgery, Rosemont, IL; Dr. Euan Swan, Canadian Dental Association, Ottawa, Ontario, Canada; Dr. James A. H. Tauberg, American Dental Association Council on Communications, Chicago, IL; Dr. Terry G. O’Toole, American Dental Association Council on Dental Practice, Chicago, IL; Dr. C. Rieger Wood III, American Dental Association Council on Dental Benefits Program, Chicago, IL; Society for Healthcare Epidemiology of America Guidelines Committee, The Society for Healthcare Epidemiology of America, Arlington, VA.


2. Rieger Wood III, American Dental Association Council on Dental Benefits Program, Chicago, IL; Society for Healthcare Epidemiology of America Guidelines Committee, The Society for Healthcare Epidemiology of America, Arlington, VA.

3. Watters W 3rd, Rieger Wood III, American Dental Association Council on Dental Practice, Chicago, IL; Dr. C. Rieger Wood III, American Dental Association Council on Dental Benefits Program, Chicago, IL; Society for Healthcare Epidemiology of America Guidelines Committee, The Society for Healthcare Epidemiology of America, Arlington, VA.


Appendix 1

UPDATED LITERATURE SEARCH

We conducted an updated literature search in February 2014 by using the identical search strategy as that described in Appendix IV of the 2012 Panel’s article1 to identify any articles published since the previous search was conducted in 2011. The updated literature search and full-text review process compelled the 2014 Panel to review the list of articles excluded at the full-text stage in the 2012 Panel’s manuscript (Table 58 in Appendix III of the 2012 Panel’s article1) for the reason that they were retrospective. According to the study selection criteria,2 only retrospective case series were eligible for exclusion; therefore, the 2014 Panel judged that 2 additional case-control studies3,4 that had been rejected should be included in the evidence. We screened all records independently and in duplicate. The eFigure shows the results of these searching and screening procedures. The articles that we excluded at the full-text stage are shown in eTable 44-20 with reasons for the exclusions. eTable 521-24 shows the critical appraisal results for each of the four included studies.

Appendix 2

PROCESS FOR DEVELOPING CLINICAL RECOMMENDATIONS

The level of certainty in the effect estimate is judged as high, moderate, or low, according to a grading system (eTable 1) amended from the ADA Clinical Practice Guidelines Handbook: 2013 Update.25 The level of certainty refers to the probability that the 2014 Panel’s assessment of the effect estimate is correct. The criteria for assessment include several components of the evidence, including the number of studies, number of participants, methodological quality, believability of results, applicability of the results to populations of interest, and consistency of findings across studies.

The level of certainty is combined with the net benefit rating as shown in eTable 2 to arrive at clinical recommendation strengths (that is, strong, in favor, weak, expert opinion for, expert opinion against, or against). eTable 3 shows the definitions of these strengths of recommendations.

The 2014 Panel approved clinical recommendations by means of a unanimous vote. The 2014 Panel sought comments on this report from other subject matter experts, methodologists, epidemiologists, and end users before finalizing the recommendations. The ADA Council on Scientific Affairs approved the final report for publication.
341 new records identified through PubMed/Medline and Cochrane database searches

1,157 records identified through Embase database searches

19 records rescreened from 2012 Panel excluded list for the reason “retrospective”

1,517 records screened by title/abstract

1,497 records excluded based on title/abstract review

20 full-text articles assessed by full text for eligibility

17 full-text articles excluded, with reasons:
- 5 reviews
- 1 guideline
- 4 case series
- 7 not dental related

3 studies added to the qualitative synthesis; 4 studies in total

eFigure. Results of literature search and screening procedures.
**TABLE 1**

### Level of certainty categories.

<table>
<thead>
<tr>
<th>LEVEL OF CERTAINTY IN EFFECT ESTIMATE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>The body of evidence usually includes consistent results from well-designed, well-conducted studies in representative populations. This conclusion is unlikely to be affected strongly by the results of future studies. This statement is established strongly by use of the best available evidence.</td>
</tr>
<tr>
<td>Moderate</td>
<td>As more information becomes available, the magnitude or direction of the observed effect could change, and this change could be large enough to alter the conclusion. This statement is based on preliminary determination from the current best available evidence, but confidence in the estimate is constrained by 1 or more factors, such as - the number or size of studies; - risk of bias of individual studies leading to uncertainty in the validity of the reported results; - inconsistency of findings across individual studies; and - limited generalizability to the populations of interest.</td>
</tr>
<tr>
<td>Low</td>
<td>More information could allow a reliable estimation of effects on health outcomes. The available evidence is insufficient to support the statement, or the statement is based on extrapolation from the best available evidence. Evidence is insufficient, or the reliability of estimated effects is limited by factors such as - the limited number or size of studies; - important flaws in study design or methods leading to lack of validity; - substantial inconsistency of findings across individual studies; and - findings not generalizable to the populations of interest.</td>
</tr>
</tbody>
</table>

**TABLE 2**

### Balancing level of certainty and net benefit rating to arrive at clinical recommendation strength.

<table>
<thead>
<tr>
<th>LEVEL OF CERTAINTY</th>
<th>NET BENEFIT RATING</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Benefits Outweigh Potential Harms</td>
<td>Benefits Balanced With Potential Harms</td>
</tr>
<tr>
<td>High</td>
<td>Strong</td>
<td>In Favor</td>
</tr>
<tr>
<td>Moderate</td>
<td>In Favor</td>
<td>Weak</td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td></td>
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</tbody>
</table>

**TABLE 3**

### Definitions for the strength of the recommendation.

<table>
<thead>
<tr>
<th>RECOMMENDATION STRENGTH</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong</td>
<td>Evidence strongly supports providing this intervention.</td>
</tr>
<tr>
<td>In Favor</td>
<td>Evidence favors providing this intervention.</td>
</tr>
<tr>
<td>Weak</td>
<td>Evidence suggests implementing this intervention after alternatives have been considered.</td>
</tr>
<tr>
<td>Expert Opinion For</td>
<td>Evidence is lacking; the level of certainty is low. Expert opinion guides this recommendation.</td>
</tr>
<tr>
<td>Expert Opinion Against</td>
<td>Evidence is lacking; the level of certainty is low. Expert opinion suggests not implementing this intervention.</td>
</tr>
<tr>
<td>Against</td>
<td>Evidence suggests not implementing this intervention or discontinuing ineffective procedures.</td>
</tr>
</tbody>
</table>
### eTABLE 4

**Articles excluded at full-text stage.**

<table>
<thead>
<tr>
<th>ARTICLE</th>
<th>REASON FOR EXCLUSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bell and Colleagues, 1990</td>
<td>Narrative review</td>
</tr>
<tr>
<td>Chen and Colleagues, 2014</td>
<td>Not a study; work group question and answer</td>
</tr>
<tr>
<td>Dubee and Colleagues, 2013</td>
<td>No dental exposure</td>
</tr>
<tr>
<td>Gomez and Colleagues, 2011</td>
<td>Question and answer</td>
</tr>
<tr>
<td>Jacobsen and Murray, 1980</td>
<td>Retrospective case series</td>
</tr>
<tr>
<td>Jacobson and Matthews, 1987</td>
<td>Retrospective case series from same population as 1986 article that is included</td>
</tr>
<tr>
<td>LaPorte and Colleagues, 1999</td>
<td>Case series</td>
</tr>
<tr>
<td>Legout and Colleagues, 2012</td>
<td>Review</td>
</tr>
<tr>
<td>Marculescu and Colleagues, 2006</td>
<td>No measure of dental outcomes</td>
</tr>
<tr>
<td>McGowan and Hendrey, 1985</td>
<td>Narrative review</td>
</tr>
<tr>
<td>Mercuri, 2012</td>
<td>Narrative review</td>
</tr>
<tr>
<td>Sendi and Colleagues, 2011</td>
<td>Retrospective cohort with no dental exposure</td>
</tr>
<tr>
<td>Sendi and Colleagues, 2011</td>
<td>Retrospective cohort with no dental exposure</td>
</tr>
<tr>
<td>Seymour and Colleagues, 2003</td>
<td>Narrative review</td>
</tr>
<tr>
<td>Tornero and Colleagues, 2012</td>
<td>Retrospective case series</td>
</tr>
<tr>
<td>Waldman and Colleagues, 1997</td>
<td>Retrospective case series</td>
</tr>
<tr>
<td>Zywiel and Colleagues, 2011</td>
<td>No measure of dental exposures</td>
</tr>
</tbody>
</table>
### Critical appraisals of the included studies.

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Did the Study Address a Clearly Focused Issue?</strong></td>
<td>Yes: 1,000 participants from Medicare Current Beneficiary Survey. This was the cohort from which the 168 participants of the case-control study were selected.</td>
<td>Yes: It addressed sentinel events associated with prosthetic joint infection.</td>
<td>Yes: The population was selected on the basis of outcomes, which were patients with and without prosthetic joint infection. The risk factors (exposure) were high- and low-risk dental procedures with and without antibiotics.</td>
<td>Yes: The study examined the association between dental procedures and late prosthetic joint infection.</td>
</tr>
<tr>
<td><strong>Did the Authors Use an Appropriate Method to Answer Their Question?</strong></td>
<td>Yes: A nested case-control study is appropriate to answer the clinical question.</td>
<td>Yes: A nested case-control study is appropriate to answer the clinical question.</td>
<td>Yes: A case-control study starts with the outcome and typically looks retrospectively for differences in exposure. Case-control studies are excellent for rare diseases or outcomes, and this study addressed the study question.</td>
<td>Yes: A nested case-control study is appropriate for answering the clinical question.</td>
</tr>
<tr>
<td><strong>Were the Case Patients Recruited in an Acceptable Way?</strong></td>
<td>Yes: Case participants were recruited from the Medicare Current Beneficiary Survey database from 1997 through 2006. Case participants were defined clearly as having experienced a prosthetic joint infection.</td>
<td>Yes: Case participants were patients with prosthetic joint infection developing more than 3 months postoperatively, in 1,641 patients undergoing arthroplasty between 1998 and 2006 at a tertiary referral center. Seventeen case patients were identified.</td>
<td>Yes: Case participants were patients with a prosthetic hip or knee infection who were hospitalized at the Mayo Clinic (Rochester, MN) from December 2001 through May 2006. Case patients appeared to represent a geographically diverse population as well (Table 2 in the article). At 80% power, we would need a total sample of approximately 240 patients, or 120 per group. The study had 339 patients per group. The power calculation is as follows: ( \frac{(0.30 - 0.15)}{\sqrt{0.225(1 - 0.225)}} = 0.36 ), which is the standardized difference. Using Altman’s nonogram ( \frac{2}{3} ) gives the total sample at 240 patients.</td>
<td>Yes: The case participants were recruited from approximately 2,700 hospital and dental charts from 2 hospitals in Michigan from 1970 through 1983. The authors identified 30 patients with late prosthetic joint infection.</td>
</tr>
<tr>
<td><strong>Were the Control Participants Selected in an Acceptable Way?</strong></td>
<td>Yes: Selection of control patients in a case-control study is complex. The nested case-control study format was advantageous in that the control patients were selected from the same Medicare Current Beneficiary Survey database during the same period as the case patients.</td>
<td>Unable to determine: Control patients were identified from a central institutional audit database. It is unclear whether they were similar to case patients treated at the tertiary referral center. Appropriate selection of control patients is 1 of the major problems with case-control studies, and it is curious why control patients were not selected from the same referral center or geographic area. Control patients were matched in a 3:1 ratio, resulting in 51 control patients.</td>
<td>Yes: Selection of control patients in a case-control study is rather complex. This study’s authors selected for control patients those with a prosthetic hip or knee, hospitalized on an orthopedic service, who did not have a prosthetic joint infection. Paired matching was not performed (that is, individual matching to attributes such as age, sex, or smoking status). However, frequency matching was performed on the joint arthroplasty location, resulting in exactly the same number of prosthetic hip ( (n = 164) ) and knee ( (n = 175) ) replacements in the case and control groups.</td>
<td>Unable to determine: The authors identified 100 patients without prosthetic joint infection as control patients. It is unclear whether they were from the same institutions or were matched to case patients in any way.</td>
</tr>
</tbody>
</table>
**Questions** | **Kaar and Colleagues,† 2011** | **Swan and Colleagues,✉ 2011** | **Berbari and Colleagues,⁎ 2010** | **Jacobson and Colleagues,⁎七星 1986**
---|---|---|---|---
Was the Exposure Accurately Measured to Minimize Bias? | Unable to determine: The authors obtained the dental records from the Medicare Current Beneficiary Survey, but those records were based on patient self-reporting. Thus, the exposure is susceptible to recall bias. In addition, there did not appear to be any masking of those assessing the dental records, raising the possibility of detection bias. | No: The exposure data were collected by means of phone calls to both case and control patients. This method is highly susceptible to recall or memory bias. | Yes: Although measurement bias cannot be ruled out owing to uncertainty about what exactly was being measured, the authors obtained and analyzed dental records. This method minimized recall bias, which commonly is assessed by using a patient’s memory for details on exposure. Furthermore, investigators were masked during dental record analysis, minimizing detection bias. | Unable to determine: Although the authors used dental charts in this study, there is no mention of assessor masking or a detailed explanation of what type of dental procedures were performed.

A. What Confounding Factors Have the Authors Accounted For? | A. They were matched for age, sex, and Charlson comorbidity index, which measures many different medical conditions. The authors selected control cases in a 3:1 ratio. | A. Age, sex, and date of surgery were the criteria the authors used for matching. This method has its limitations, and cases should have been matched based on medical, socioeconomic, and geographic factors. | A. The authors used geographic location, education level, history of kidney disease, history of malignancy, diabetes mellitus, use of systemic corticosteroids, rheumatoid arthritis, use of immunosuppressive medications, smoking history, body mass index, American Society of Anesthesiologists status, and geographic location. | A. The authors have not accounted for any confounding factors. They should have accounted for many, including age, sex, smoking status, multiple medical conditions, American Society of Anesthesiologists status, and geographic location.

B. Have the Authors Taken Account of the Potential Confounding Factors in the Design, Their Analysis, or Both? | B. Yes: For design owing to matching. Unable to determine for analysis because there was no mention of logistic regression analysis. | B. Partially: The authors used stepwise logistic regression analysis to examine which predictor variables (sentinel events, including dental procedures) were associated significantly with prosthetic joint infection. | B. Yes: The authors controlled for many important confounding factors by using many covariates in a propensity score, which was calculated using logistic regression analysis. The authors used the propensity score to control for the propensity to visit a dentist (exposure). | B. No: The authors performed no regression analysis to account for the effects of confounding variables.

What Are the Results of This Study? | The authors expressed main results as both time to event with hazard ratios (HRs) and association with odds ratios (ORs): HR = 0.78 (95% confidence interval [CI], 0.18-3.39); OR = 0.56 (95% CI, 0.18-1.76); p = .46. Neither the HR nor the OR was significant, although they indicated a trend for a reduction in the odds of having dental procedures for the PJI group. HRs were stable and did not move closer to the null value after adjustment for confounding factors. (This is a good thing and shows that results are not likely to be spurious owing to confounding). | The 2 factors most associated with PJI were having more than 4 comorbidities (risk ratio [RR] = 3.4; 95% CI, 1.5-7.7) and having cellulitis (RR = 2.7; 95% CI, 1.15-6.3). RR is not the appropriate summary statistic to use because risk cannot be calculated with case-control studies. OR should have been used because it also is the output of logistic regression analysis. In addition, the p values of 1.000 reported in Table 4 of the article are incorrect, further complicating the statistical analysis presented in the article. The crude OR we calculated for dental infection was 1.53, which by itself is not clinically relevant for association with prosthetic joint infection. | The authors reported the main results as an OR of 0.8 (95% CI, 0.4-1.6; P = .56) for high-risk dental procedures without antibiotics. | The authors performed a hypothesis test (Fisher exact test) and reported that P = .0005, although in the text it was stated as .005. A Fisher exact test is a form of chi-square test and is appropriate for obtaining a P value for binary data when cells contain values less than 5. We performed a crude calculation for an OR of 0.07, confirming strong evidence against the null hypothesis of no association between dental procedures and prosthetic joint infection. There was no adjusting for confounding, and the results imply that dental procedures are associated with protection from PJI.
**eTABLE 5 (CONTINUED)**

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<tbody>
<tr>
<td>How Precise Are the Results? How Precise Is the Estimate of Risk?</td>
<td><em>P</em> values showed extremely weak evidence against the null hypothesis. CIs were rather wide, meaning there is a lack of precision around the summary estimates (HR and OR). However, the CIs were similar to those in the Berbari and colleagues22 study, which had a much bigger sample, which shows the statistical efficiency of a nested case-control study—that is, by 3:1 matching, one maintains a great degree of statistical power.</td>
<td>The CIs were wide, indicating imprecision with the summary estimate.</td>
<td>The CIs were wide, owing to the low number of events in each group.</td>
<td>We have no measure of precision because the authors did not report CIs.</td>
</tr>
<tr>
<td>Do You Believe the Results?</td>
<td>Yes: Owing to good methodology and because we were not rejecting the null value, the results appeared valid—that is, observational studies with positive results are likely to have false-positive findings.</td>
<td>No: ORs are always further away from the null value than are RRs, and it seems as if more than 4 comorbidities and cellulitis would have ORs around 4.5 or 5. The magnitude of these ORs would appear to be clinically relevant to developing PJI. However, the many methodological and statistical shortcomings with this article render the results unreliable.</td>
<td>Yes: This study’s authors did a good job on several fronts from a power calculation, selection of control patients, propensity score, masking outcomes assessors, and seeking dental records rather than relying on patients’ memories of dental visits.</td>
<td>No: Given the lack of information about control patients, and no matching or adjusting for confounding factors, it is unclear how accurate the results presented actually are.</td>
</tr>
<tr>
<td>Can the Results Be Applied to the Local Population?</td>
<td>Yes: The Medicare Current Beneficiary Survey would appear to be a representative sample of patients receiving prosthetic joints.</td>
<td>Yes: The patient population in this study appears to be similar in nature to the local population.</td>
<td>Yes: The participants appear to be similar to many populations undergoing this type of orthopedic surgery.</td>
<td>Unable to determine: Although the patient population was probably representative of patients with prosthetic joint infection, given the methodological and statistical shortcomings of the article, its external validity can be questioned.</td>
</tr>
<tr>
<td>Do the Results of This Study Fit With Other Available Evidence?</td>
<td>Yes: This study’s results are in alignment with those of other case-control studies showing no association between dental procedures and prosthetic joint infection.</td>
<td>Yes: Certainly the association between prosthetic joint infection and cellulitis and, to a certain, extent comorbidities fits with what has been reported in other studies on this topic.</td>
<td>Yes: The results are consistent with those of other observational studies.</td>
<td>No: The authors of the 3 other case-control studies all failed to reject the null value. This study’s authors presented strong evidence against the null value.</td>
</tr>
</tbody>
</table>


Procedure for Taking Blood Pressure

- Take the vital signs of the patient after reviewing the health questionnaire. Vital signs include blood pressure, pulse, and respiration, and temperature if patient is not feeling well.

- Record blood pressure in the treatment record.

- Record the date and arm used for the blood pressure reading. For example: 120/80 ®.

- Alert the instructor of any unusual variation from normal or from previous readings noted in the patient’s permanent record. A medical referral may be indicated.

Blood pressure Readings


**Normal and Prehypertension: Systolic 139 or lower or Diastolic 89 or lower**
1. No contraindications to dental hygiene treatment.

**Stage 1 HTN: Systolic 140 - 159 or Diastolic 90 - 99**
1. Retake and confirm blood pressure.
2. Ask patient to seek medical evaluation of blood pressure.

**Stage 2 HTN: Systolic 160 or higher or Diastolic 100 or higher**
1. Retake and confirm blood pressure.
3. Medical referral prior to treatment is indicted.
4. Once the patient has been evaluated by his/her physician, the Medical Referral Form from the patient’s physician must be placed in the chart stating that dental procedures may be performed.

**Systolic >200 or Diastolic >115 (Malamed recommendation)**
1. Immediately refer patient to physician’s care.
2. Do not provide any dental hygiene treatment.
3. Once the patient has been evaluated by his/her physician, the Medical Referral Form from the patient’s physician must be placed in the chart stating that dental procedures may be performed.
INTRAORAL/EXTRAORAL INSPECTION

- Observe patient during reception and seating to make overall appraisal.

- Approach exam with a confident attitude, give clear instructions to the patient, and provide adequate explanations. Use your patient mirror during this procedure to explain all findings to the patient.

- Observe and palpate **extraorally** with gloved hands:
  1. Frontal sinus and supraorbital region
  2. Nasa and ethmoid sinus region
  3. Infraorbital and zygomatic process region
  4. Maxillary sinus region
  5. Mandibular and parotid gland region
  6. Temporal ration
  7. Temporomandibular joint region, temporal, masseter, and metalis muscle.
  8. Submental, submandibular, and sublingual region
  9. Trachea and thyroid gland
  10. Trapezius muscle and occipital region
  11. Sternocleidomastoid muscle
  12. Submandibular and sublingual region

- Observe and palpate **intraorally**:
  1. Lips
  2. Labial mucosa, vestibule, and frena
  3. Buccal mucosa
  4. Floor of the mouth
  5. Tongue
  6. Hard palate and soft palate
  7. Uvula, tonsillar pillars, and oropharynx
  8. Alveolar mucosa
  9. Edentulous gingiva
  10. Saliva, monitoring production

- Differentiate normal from abnormal and recognize common nonpathologic deviations from normal.

- Document description of any abnormality including location, size, color, morphology, type, symptoms, and duration. Spell correctly.

- Follow-up significant findings at subsequent appointments.

- A cursory extraoral/intraoral exam is performed at every appointment and changes are noted in the patient’s chart.

- If necessary, determine the need for patient referral and identify the appropriate health professional. Complete a **Medical or Dental Referral** form, sign it and have both the patient and instructor sign the referral form. Document in the patient’s chart that a referral was made. A copy of the referral is given to the patient and a copy of the referral form remains in the chart.
Charting

Restorative Charting

- Chart all existing restorations for each patient as instructed in DEN 120/121.
- Select appropriate examination instruments and armamentarium.
- Document all existing restorations. Differentiate normal from abnormal and recognize disturbances or changes in the characteristics of teeth including:
  - number
  - size
  - form
  - color
  - structure
  - contact relationship
- Note any suspicious areas by documenting these on a paper towel until the Consulting Dentist has diagnosed the areas. Document any necessary pathology to the patient’s chart after the diagnosis.
- Students should review dental charting on each returning patient and chart changes in the patient’s record, noting the date of the changes observed. Update dental charting after exfoliation of primary teeth and dental treatment.
- Review findings with the instructor using appropriate dental terminology.
- Identify the patient’s occlusal classification and document.
- Radiographs should be used to assist with restorative/dental charting.
- Inform the patient of all findings.
PERIODONTAL CHARTING

- Periodontal probing will be completed during initial, recall, and re-evaluation appointments.
- Probe only the permanent molars of all patients under eighteen years of age.
- Patients eighteen and over will have all permanent teeth probed.
- Do not probe partially erupted teeth.
- Use the most recent radiographs, placed on the viewbox, to compare with periodontal charting.
- Correctly record, within 1 mm, the probe depth on all permanent teeth.
- All bleeding sites should be identified.
- Assess and document recession, mobility, migration, and/or furcation involvement as determined by clinical and/or radiographic examination.
- Review the patient’s periodontal condition with the instructor prior to presentation to the patient.
  - Review the patient’s periodontal status with the patient.
- Each periodontal examination should include:
  - Pocket depth measurements
  - Recession
  - Mobility
  - Furcation

  Gingival examination including:
  - Color
  - Size
  - Shape
  - Consistency
  - Texture

- Any additional findings such as exudates or suppuration or frenal involvement should be dated and documented in the patient’s record.
DEPOSIT ASSESSMENT

Calculus Assessment

- Evaluate the presence of hard deposits using the appropriate equipment
- Record surface areas of detected calculus using the appropriate form
- Determine the patient’s Deposit Classification using the following criteria:

<table>
<thead>
<tr>
<th>Calculus</th>
<th>Class I</th>
<th>Class II</th>
<th>Class III</th>
<th>Class IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Supra</td>
<td>Light Supra</td>
<td>Moderate Supra</td>
<td>Heavy Supra</td>
<td></td>
</tr>
<tr>
<td>No Sub</td>
<td>Light Sub</td>
<td>Moderate Sub</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light Supra</td>
<td>Moderate Supra</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light Sub</td>
<td>30% - 40%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30% or less</td>
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</tbody>
</table>

Plaque/Biofilm Assessment

- Evaluate the presence of soft deposits using the appropriate equipment
- Record surface areas of detected plaque using the appropriate form
- Calculate patient’s Plaque Free Score (PFS) using the following guidelines:
  - Total the number of teeth present
  - Total the number of surfaces with biofilm that appear in red on the tooth diagram
  - To calculate the “Plaque-Free Score”
    - Multiply the number of teeth by 4 to determine the number of available surfaces
    - Subtract the number of surfaces with biofilm from the total available surfaces to find the number of biofilm-free surfaces
    - Plaque-free score = \( \frac{\# \text{ of plaque-free surfaces} \times 100}{\# \text{ of available surfaces}} \)
CLASSIFICATION OF PATIENTS

Periodontal Classifications 1-5

1 - Gingivitis:
Inflammation of the gingiva characterized clinically by change in color, gingival hyperplasia, edema, form, surface appearance, gingival pocket formation (pockets may or may not be present) and no bone loss, and the presence of bleeding and/or exudate. The inflammatory response can be acute or chronic, ANUG, medication influenced, and/or systemic associate (pseudopocket).

2 - Early Periodontitis:
Progression of gingival inflammation into deeper periodontal structures and alveolar bone crest with slight horizontal bone loss. Early bone loss resulting in moderate pocket formation, 4-5 mm. Localized areas of moderate periodontitis.

3 - Moderate Periodontitis:
A more advanced state of the above condition with increased destruction of periodontal structures associated with moderate to deep pockets, 5-7 mm, moderate-to-severe bone loss and tooth mobility, furcation involvement may or may not be present, and localized areas of advanced periodontitis.

4 - Advanced Periodontitis:
Further progress of periodontitis with severe destruction of the periodontal structures with increased tooth mobility, furcation involvement, pocket depths ranging from 6 mm and greater with an average pocket depth of 7 mm or more.

5 - Refractory Periodontitis:
Resistant to normal therapy.

Classification of Clinical Patients

<table>
<thead>
<tr>
<th></th>
<th>Class I</th>
<th>Class II</th>
<th>Class III</th>
<th>Class IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probing Depths</td>
<td>4 mm</td>
<td>≥ 6 mm</td>
<td>≥ 6 mm</td>
<td>≥ 7 mm</td>
</tr>
<tr>
<td>Inflammation</td>
<td>Minimal</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Mobility</td>
<td>None</td>
<td>Slight</td>
<td>Moderate</td>
<td>Severe</td>
</tr>
<tr>
<td>Calculus</td>
<td>No Supra, No Sub</td>
<td>Light Supra</td>
<td>Moderate Supra</td>
<td>Heavy Supra</td>
</tr>
<tr>
<td></td>
<td>Light Supra 30% or less</td>
<td>Light Sub</td>
<td>Moderate Sub 50 – 60%</td>
<td>Heavy Sub 60 – 100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moderate Supra</td>
<td>Moderate Sub 30 – 40%</td>
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DENTAL HYGIENE TREATMENT PLAN

- A Dental Hygiene Treatment Plan will be developed for all new and recare patients.

- The Dental Hygiene Treatment Plan is to be signed by the patient, student, and faculty after the Medical-Dental Questionnaire, Extraoral/Intraoral Inspection, Restorative Charting, Periodontal Assessment, and Deposit Assessment are completed.

- The treatment plan is based on information in the medical-dental history, extraoral and intraoral inspections, radiographs, and charting.

- Develop and document a planned sequence for completing all educational and clinical dental hygiene services needed by the patient.

- Document the procedures and services to be performed at each visit which include, but not limited to:
  - anesthesia
  - polishing
  - preventive
  - radiographs
  - scaling
  - therapeutic

- Discuss the plan with the instructor prior to presentation to the patient.

- Discuss the plan with the patient prior to treatment in terminology that the patient can understand.

- Obtain the patient’s signature on the Informed Consent for Treatment form. Along with your signature, the form must have an instructor’s signature.

- Review the American Dental Association’s (ADA) guidelines for radiographs to determine the need. State the rationale for patient exposure. If additional services are necessary, inform Clinic Manager for collection of fees.

- Assess and modify the plan as necessary at subsequent appointments.
ORAL PROPHYLAXIS

Calculus Removal

- The effectiveness of calculus removal will be evaluated using mirror, explorer, air, disclosing agent, and periodontal probe and by observing the soft tissue condition in response.
- All tooth surfaces will be free of deposits without injury or damage to the hard or soft tissue.
- All root surfaces will be free of residual calculus and altered cementum by instrumentation, creating a surface that is smooth and hard when explored. This creates an environment that will promote a soft tissue that does not bleed when probed and is normal in color.
- All teeth must be scaled to completion.

Stain and Soft Deposit Removal

- Procedures used for stain and soft deposit removal include selective polishing with the slow speed handpiece with prophylaxis angle or the use of an air polisher.
- The objective of selective polishing is to remove extrinsic stain and plaque not otherwise removed during scaling or by a toothbrush and floss.
- Assess the need for polishing and use the least abrasive agent needed.
- Utilize proper technique for stain/plaque removal to ensure that the tissue is not traumatized and that all plaque and stain are removed.
- Use appropriate aids for interproximal surfaces, orthodontic appliances, and prosthodontic appliances.
- If plaque is tenacious, it may be necessary to remove it by instrumentation.
- Polish gold restorations with the least abrasive agent to avoid scratching.
- If the decision is made not to polish, remove plaque and soft deposits with an appropriate method and explain to your patient why engine polishing was not recommended.
- Disclose the patient’s teeth after polishing and flossing.
- A clinic instructor must evaluate the effectiveness of soft deposit and stain removal and flossing before the patient is dismissed.
- Document stain and soft deposit removal in the patient’s chart.
PROCEDURE FOR FLUORIDE TREATMENTS

Assess necessity of fluoride treatment and explain the procedure to the patient.

Select the most appropriate fluoride product:

Fluoride tray administration:
- Assemble armamentarium: fluoride tray, fluoride gel, saliva ejector, air/water tip, timer/watch, paper towel
- Seat patient in an upright position for procedure.
- Determine the correct tray size.
- While wearing gloves, fill the tray with fluoride to cover tooth surfaces. Use gloves when handling the fluoride bottle to prevent contamination.
- Dry the teeth thoroughly and slowly.
- Have patient sit upright and slightly forward. You may need to have the patient hold a paper towel under the chin to catch dripping saliva.
- Place the trays in the mouth. Place saliva ejector in center of trays in mouth. Instruct the patient to try not to swallow.
- Time the procedure, starting from the time the last surface is exposed to the fluoride. Leave on for 4 minutes.
- Do not leave the patient. Monitor the patient during the entire procedure.
- Remove the trays and immediately remove any excess fluoride using a saliva ejector.
- Instruct patient to continue using the saliva ejector to clear the mouth of fluoride, using the paper towel to wipe the. Remind patient to not swallow if possible.
- Instruct client not to rinse, drink or eat, for 30 minutes.
- Educate patient about the benefits of fluoride.

Fluoride varnish administration:
- Assemble armamentarium: fluoride varnish, disposable brush, saliva ejector
- Dry teeth prior to application
- Apply a thin coat of varnish evenly to all of the tooth surfaces
- Let the varnish dry for approximately 10 seconds and then instruct the patient to close their mouth
- Instruct patient to only eat soft foods and drink cold liquids for two hours after the fluoride varnish application

Document the type of fluoride treatment application in patient’s record.
Prosthesis Management

1. Wear all PPE including gloves, mask, and safety glasses.
2. Explain procedure to patient and ask patient to remove appliance with paper towel. Along with patient, inspect appliance for any defects.
3. Patient places appliance in zip-lock plastic bag labeled with patient's first and last name.
4. Take bagged appliance to the clinic lab room. Pour appliance cleaner into zip-lock bag.
5. Place sealed bag in ultrasonic filled with water up to the operating level line. The bag must not float. Add water if necessary and remove all excess air.
6. Set the timer for 10 minutes for an appliance with light stain or 15 minutes for moderate to heavy stain.
7. Prepare sink by filling with warm water and covering bottom with paper towel.*
8. Remove appliance from ultrasonic. Inspect for cleanliness and stain removal. Repeat ultrasonic if necessary.
9. Rinse appliance under lukewarm water to remove solution and any loose debris. Brush appliance if necessary with patient home care devices such as denture brush or toothbrush.
10. With instructor permission, use scaler or ultrasonic scaler to remove tenacious deposits from the surface. Maintain fulcrum. Do not scale soft tissue side. Avoid excessive pressure.
   Support clasp area and/or metal bars. Use toothbrush to clean soft tissue side.
11. With instructor permission, polish external surface with a fine, moist abrasive agent. Rinse appliance.
12. Examine appliance for alterations before returning to patient.
13. Place clean appliance in paper cup with diluted mouthwash during appointment.
14. Provide disease control instructions to patient including specific techniques for daily appliance cleaning and maintenance.
15. Record services in patient’s chart.
16. Maintain asepsis throughout procedures above.*
PATIENT EDUCATION

Check the current oral hygiene status by disclosing prior to instrumentation
Utilizing medical-dental histories and the deposit assessment, identify and document the patient’s preventive needs.

Plan the oral hygiene instruction based on relevant dental factors such as:

- Missing teeth
- Defective restorations
- Caries incidence
- Mucogingival involvement
- Educational background
- Socio-economic level
- Dietary habits

- Open contacts
- Orthodontic appliances
- Gingival condition
- Prosthodontic appliances
- Pocket depth
- Furcation involvement
- Occupation
- Previous dental experiences
- Current oral hygiene routine

Record patient health education on the Dental Hygiene Treatment Plan
Select and document brushing techniques and other oral aids on the Dental Hygiene Treatment Plan
Position the patient in an upright sitting position during oral hygiene instruction.
Explain to the patient the status of his/her homecare, restorative work, periodontal condition, etc.
Identify, explain, and demonstrate selected homecare items. It is the student’s responsibility to educate the patient on matters related to oral health and overall health. Instruction should include:

- Specific procedures to be used with the selected aid
- Methods that the patient may use for self-evaluation
- Benefits of proper prevention procedures
- Methods for correcting a harmful habit
- Methods for improving nutrition

Have the patient demonstrate the use of homecare items. Record the patient’s dexterity and ease-of-learning. Correct the patient’s technique in a positive and constructive manner.

Re-evaluate, review, and update homecare information at every appointment. Record this in the Treatment Record.

Alter the plan as needed to meet the patient’s needs and responses.

It may be necessary to schedule a follow-up appointment for preventive maintenance if further reinforcement appears needed.

Use the appropriate amount of time for each step of education according to the patient’s needs. Be sure that the patient is aware of his/her condition as each procedure is performed.
Re-Evaluation Appointments

Re-evaluation appointments are determined by oral/dental assessments, patient periodontal classification, medical conditions, and response to dental hygiene treatment. Students and/or faculty may determine that a re-evaluation appointment is needed for other conditions.

The re-evaluation appointment is scheduled for 4-6 weeks after the final scaling appointment.

Complete the following procedures at the re-evaluation appointment:

1. Update the medical-dental history.
2. Take and record vital signs.
3. Perform an oral evaluation, noting changes in health/pathology noted at previous appointments.
4. Perform a periodontal assessment, documenting the current status of tissue tone, bleeding points, pocket depth, recession, and furcations.
5. Reclassify the patient’s periodontal, calculus, plaque, and stain status.
6. Obtain instructor evaluation.
7. Perform and record a plaque index.
8. Have the patient demonstrate oral hygiene aids and make suggestions to improve the patient’s performance and compliance.
10. Determine and complete additional scaling in non-responsive areas and/or polishing of any teeth.
11. Complete a fluoride treatment if necessary.

The re-evaluation appointment is usually the last part of the patient’s treatment plan, so an additional treatment plan is not necessary.

Recare frequency is then determined and patient is scheduled for his/her next visit to the clinic. If any referral needs to be made, it is made with the general dentist and/or speciality practice at the end of this appointment.

Purposes of re-evaluation:
- prevent new disease from starting
- prevent recurrence of previous infections
- monitor educational and behavioral changes
- monitor clinical signs of health and disease
- provide specialized instruction
- offer motivational encouragement
REFERRALS

Dental Referrals
- If a patient needs to be referred back to the dentist of record, complete a Dental Referral Form. Have this ready for the instructor’s signature at check-out and attach X-rays needed.
- Dental referrals are made to the patient’s general dentist if the patient has a dentist.
- The instructor will determine if a dental referral is necessary.

Procedure for Dental Referrals
1. Explain to the patient the reason for referral.
2. Have the patient sign the form.
3. Student signs the form.
4. Instructor signs the form.
5. Record in the patient’s chart that a dental referral was made, to whom, and rationale.
6. Give the clinic manager the original copy of the Dental Referral Form. The Clinic Manager will make a copy. The clinic manager will give the patient a copy and keep one in the chart.

Medical Referrals
- If a patient needs to be referred based on the medical-dental history, fill out a Medical Referral Form. Have this ready for the instructor’s signature at check-in.
- The instructor will decide if medical referral is necessary.
- It is the patient’s responsibility to see his/her physician for consultation and to bring back the Medical Referral Form with written consent for dental treatment.

Procedure for Medical Referrals
1. Explain to the patient the reason for referral.
2. Have the patient sign the form.
3. Student signs the form.
4. Instructor signs the form.
5. Record in the patient’s chart that a medical referral was made, to whom, and rationale.
6. Give the clinic manager the form for copying and distribution to the patient.
7. Once the medical referral form is returned with the physician’s approval, document in the patient’s chart that consent has been given for treatment.
8. If the patient refuses to accept the medical referral, the student will document the refusal in the patient’s chart.
Patient Charts

- Patient charts are important legal records and under no circumstances are to be taken out of the Allied Health Building. Improper placement of patient records will result in dismissal from the HCC Dental Hygiene Program.

- All patient charts are kept in the Clinic Manager’s office unless the patient is being seen on the clinic floor.

Obtaining Charts

- Only a dental instructor or Clinic Manager is allowed to go into the files where patient records are kept.

- To receive a chart, request what you need from the Clinic Manager. Students are allowed to look at charts in the Clinic Manager’s office only when not in a scheduled clinic session.

Arranging the Components of the Chart

- Do not remove any documents that are attached in the chart when you receive the chart.

- Keep new documents that you will be completing in clinic unattached to the chart until the clinic session is over.

- Review all documents for accuracy and completeness before returning the chart to the Clinic Manager at the end of the clinic session.

- An instructor must check-off the chart for accuracy and completeness before the chart is returned to the Clinic Manager.
CHART DOCUMENTATION

Patient chart documentation is a vital aspect of the patient’s health record, which is a legal document; therefore, documentation should illustrate the appropriate use of proper English, grammar, and correct spelling. Use only standard and accepted abbreviations.

The following items should be included in the patient’s chart documentation:

Medical History Review and Update
- No changes (since last visit)
- List Changes (if any)
- Record measurements for blood pressure, pulse, and respirations
- List ASA Classification (any special needs)
- List all medications patient is taking

Extraoral/Intraoral Soft Tissue Examination
- Describe any findings that are atypical or abnormal.
- Enter any pathological findings that require consultations or referrals.
- If findings are “within normal limits” (WNL), note them as such.

Hard Tissue Exam
- Only list significant findings (such as missing restoration #19)

Periodontal Examination
- List AAP Classification
- Give narrative to describe gingival conditions as assessed: color, contour, consistency.

Deposit/Calculus Examination
- List calculus classification

Treatment Plan and Signatures
- Treatment plan reviewed and signed by patient, student, and instructor

Oral Hygiene Instructions
- List instructions provided to patient with rationale for those suggestions.
- (Comments from the patient can be included in the narrative, as they may provide insight into patient’s motivation and compliance with oral health care status)

Radiographs
- List any radiographs that were exposed and their findings

Services Provided
- List a summary of dental hygiene services provided at this visit
  - hand-scaling, ultrasonic scaling
  - polishing
  - flossing
  - fluoride application (with post application instructions)

Next appointment
- Return to clinic (RTC) instructions
Halifax Community College Dental Hygiene Clinic
CHART AUDITS

Halifax Community College Dental Hygiene Clinic charts will be audited using the following procedures:

**Daily**
The clinic instructors will audit all charts each clinic session by reviewing the paper charts to verify all paper forms have proper documentation.
The clinic instructors will audit all electronic charts each clinic session by reviewing the electronic tabs in each patient’s chart to verify proper documentation.
Each chart must have an instructors initials and date on the Chart Review Form.

**Annually**
Revisions to chart auditing will be completed at the end of each spring semester. Clinic faculty will make recommendations for changes to clinic forms. The revisions to the forms will be completed during the summer semester, and will be included in the HCC Dental Hygiene Program Manual for the subsequent year.

*Chart Audit Form listed on next page.*
Halifax Community College Dental Hygiene
Chart Audit Form

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Completed Correctly</th>
<th>Needs Correction</th>
<th>Date Correction Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>All chart entries are legibly written in blue or black ink</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient’s name and birthdate are on each form</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment notes include all services and treatment rendered to the patient for that clinic session</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment plan is signed by patient or guardian and faculty member</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment notes thoroughly document treatment rendered</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment notes are “signed” by student and faculty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All radiographs are mounted correctly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All radiographs include the patient’s name and date of exposure and patient’s birthdate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All documented forms are in correct order</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Left Side                                                                      |                     |                  |                           |
| Personal History                                                              |                     |                  |                           |
| Patient Consent                                                               |                     |                  |                           |
| Privacy Practices Acknowledgement                                             |                     |                  |                           |
| Medical Referrals                                                             |                     |                  |                           |

| Right Side                                                                    |                     |                  |                           |
| Initial Screening Assessment                                                   |                     |                  |                           |
| Deposit Assessment                                                            |                     |                  |                           |
| Treatment Plan                                                                |                     |                  |                           |
| Dental Referrals                                                              |                     |                  |                           |
Section 8:

CLINIC FORMS

Clinic forms are subject to change as needed.
DENTAL REFERRAL FORM

Patient ________________________________________________________     DOB______________
Address________________________________________________________

________________________________________________________   Phone ______________

The following findings need further evaluation or treatment:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Tooth Number(s)/Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible caries/faulty restoration</td>
<td></td>
</tr>
<tr>
<td>Periodontal Evaluation</td>
<td></td>
</tr>
<tr>
<td>Orthodontic Evaluation</td>
<td></td>
</tr>
<tr>
<td>Endodontic Evaluation</td>
<td></td>
</tr>
<tr>
<td>Prosthetic Evaluation</td>
<td></td>
</tr>
<tr>
<td>Pain</td>
<td></td>
</tr>
<tr>
<td>Pathological Evaluation</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Radiographs</td>
<td>___ Enclosed    ___None Available    ___Prior Radiographs Available</td>
</tr>
<tr>
<td>Prophylaxis</td>
<td>___Complete      ___In Progress     ___Pending Evaluation</td>
</tr>
</tbody>
</table>

The patient understands that it is his/her responsibility to see you for further evaluation.

Signature     Date

Patient  ______________________________________  __________________
Student ______________________________________  __________________
Instructor ______________________________________  __________________

HCC Dental Hygiene Clinic     P. O. Drawer 809     Weldon, NC 27890     252-536-7219
MEDICAL REFERRAL FORM

Patient’s Name_________________________________________ DOB _________________

Address _______________________________________________________________________
____________________________________________________________________________

Phone _________________________________________________________________________

This patient was recently seen in the Halifax Community College Dental Hygiene Clinic and is being referred to your office for the evaluation of:

____ High Blood Pressure
____ Prophylactic antibiotics prior to dental cleaning due to a history of __________________________
(In December 2012, the AAOS recommendations for antibiotic premeds for total joint replacement changed. Please see attached summary. What is your premed recommendation for this patient?)

____ History of Hepatitis. (A Serum Hepatitis B Surface Antigen Test is required if type is unknown by physician)
____ Cardiac conditions
____ The following condition(s) contraindicate dental hygiene treatment in this facility:

____________________________________________________________________________________

The patient understands that it is his/her responsibility to see you for further evaluation. Please complete the section below. Patient treatment in the HCC Dental Hygiene Clinic is pending your approval and recommendation.

____ No medical contraindications for dental treatment
____ Patient requires pre-medication prior to dental treatment and has been issued a prescription
____ Patient is Hepatitis B Surface Antigen negative (results attached)
____ Patient should not receive treatment in the HCC Dental Hygiene Clinic due to the following:

Signatures & Date

Patient ______________________________________ ____________________________

Student ______________________________________ ____________________________

Instructor ______________________________________ ____________________________

Physician’s Name ______________________________

Physician’s Address ______________________________

Physician’s Phone Number __________________________

___________________________________________________________ ____________________

Physician’s Signature _______________________________ Date

HCC Dental Hygiene Clinic P. O. Drawer 809 Weldon, NC 27890 252-536-7219
HCC Dental Hygiene

Initial Screening Assessment Form

Initial Screening Date___________________________

Patient________________________________________ Date of Birth__________________

Blood Pressure_________________________________

Patient Response to Oral Health Status: _____Good _____Fair _____Poor
Please put an “X” in front of the appropriate classification

Patient Category: _____Child _____Adolescent _____Adult _____Senior

Patient Classification
Please put an “X” in front of the appropriate classification.  PSR

<table>
<thead>
<tr>
<th>Periodontal</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class II</td>
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<td>Class III</td>
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</tr>
<tr>
<td>Class IV</td>
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</tbody>
</table>

<table>
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<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
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<tr>
<td>Class II</td>
<td></td>
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<tr>
<td>Class III</td>
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</tr>
<tr>
<td>Class IV</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Probing Depths</th>
<th>Class I</th>
<th>Class II</th>
<th>Class III</th>
<th>Class IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 4 mm</td>
<td>≥ 5 mm</td>
<td>≥ 6 mm</td>
<td>≥ 7 mm</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inflammation</th>
<th>Class I</th>
<th>Class II</th>
<th>Class III</th>
<th>Class IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimal</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mobility</th>
<th>Class I</th>
<th>Class II</th>
<th>Class III</th>
<th>Class IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Slight</td>
<td>Moderate</td>
<td>Severe</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Calculus</th>
<th>Class I</th>
<th>Class II</th>
<th>Class III</th>
<th>Class IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Supra</td>
<td>Light Supra</td>
<td>Light Sub</td>
<td>Moderate Supra</td>
<td>Heavy Supra</td>
</tr>
<tr>
<td>No Sub</td>
<td>Light Supra</td>
<td>Light Sub</td>
<td>Moderate Sub</td>
<td>Heavy Sub</td>
</tr>
<tr>
<td>Light Supra</td>
<td>Moderate Supra</td>
<td>Moderate Sub</td>
<td>50% - 60%</td>
<td>60% - 100%</td>
</tr>
<tr>
<td>Light Sub</td>
<td>30% or less</td>
<td>30% - 40%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Student___________________________________________ Date____________________

Instructor_________________________________________ Date____________________

*********************************************************

Assigned Student_____________________________________________________________

Clinic Manager________________________________________________________________
CALCULUS Charting
Mark each area of calculus with an “X” in red on the appropriate tooth surface

Plaque Charting
Color in each surface of plaque in red

Plaque Free Score _________
Please read the following information carefully so that you will understand the conditions under which patients are treated in this clinic. Please sign and date this page indicating that you understand these conditions.

I understand that:

1. the treatment will be provided by a dental hygiene student under the supervision of a licensed dental hygienist and dentist, and that the treatment will proceed more slowly than in a private dental office since the treatment is rendered by students and carefully evaluated by clinical faculty members.

2. the treatment will be limited to preventive treatment and is not intended to take the place of a dental examination by a dentist. It is recommended that you have an established dental home and continue oral care provided by your dentist.

3. while optimal dental treatment can be expected, the results of this preventive dental health care cannot be guaranteed.

4. there may be circumstances where I may be reappointed, referred to a private dentist or denied treatment if it is determined to be in my best interest.

5. I will not be guaranteed a recall appointment with this clinic at the advised recall interval that is specific to my oral health conditions.

6. students are required to obtain a medical and dental history of each patient before initiating services. Such information is confidential and considered essential for adequate dental hygiene care.

7. all records are property of the college; however, radiographs may be sent to my private dentist upon request by him/her. Radiographs will be kept on file indefinitely.

8. excessive cancellations or failure to keep appointments may lead to dismissal as a clinic patient.

9. fees are charged for treatment rendered. Fees will be collected after radiographs are taken and after completion of treatment procedures. Cash or check payments only. Receipt will be given once payment is received. (In order to keep the fee schedule to a minimum, insurance forms for third-party payment are not completed for clinic patients.)

10. if the use of anesthesia is indicated, I consent to the administration of such as the clinical supervising dentist may deem advisable and proper.

11. I consent to the use of my intraoral photographs, radiographs (x-rays), study models or any part of my treatment record for dental, scientific or educational purposes and to professional observation of treatment for the purposes of advancing dental hygiene education.

12. audio, video, or photographic recording students and clinical staff in the HCC Dental Hygiene Clinic is prohibited.

Having read the above, I verify that I understand the information contained herein, and I grant authority to Halifax Community College Dental Hygiene Program to perform those diagnostic and treatment procedures deemed necessary.

Signature of Patient/Guardian: ____________________________________Date: ___/___/____

Note: (Parent or Guardian must sign if patient is under 18 years of age.)
(Please print in black ink)

Date: ________/_______/________

Name________________________________________________________________________ Date of Birth ___/___/___
First                              Middle                        Last

Address____________________________________________________________________________________________________

City_________________________________________ State___________Zip____________________

Home Phone (____)_________________________ Cell Phone (____)______________________________

Occupation__________________________________ Business Phone (____)________________________

Spouse____________________________________________________________________ Spouse's Cell Phone (____)__________________________
(IF MARRIED)

Parent/Guardian
(IF PATIENT IS UNDER 18 YEARS OF AGE) First        Middle          Last

Address____________________________________City_______________________State_________Zip_________
(PARENT/GUARDIAN)

Occupation_________________________ Home Phone (____)_______________ Cell Phone (____)______________

Patient's Physician _______________________________ Phone (____)_______________________________

Address__________________________________City___________________State_____________Zip___________

Dentist ______________________________________ Phone (____)___________________________________

Address__________________________________City_____________________State___________Zip___________

Referred to our clinic by______________________________________________________________
Acknowledgement of Receipt of Notice of Privacy Practices

I acknowledge that I have been provided the Halifax Community College’s Notice of Privacy Practices:

It tells me how HCC will use my medical/dental health information for the purposes of my treatment, payment for my treatment, and HCC’s health care operations

The Notice also explains in more detail how HCC may use and share my health information for other than treatment, payment, and health care operations.

HCC will also use and share my health information as required/permited by law.

Patient’s complete legal name: __________________________________________________

Please Print

Signature:___________________________________________________________________

Patient or Legally Authorized Representative

Relationship of Legally Authorized Representative: _________________________________

Date: ______________________________________________________________________
Scheduling Form for Clinic Patients
Halifax Community College
Dental Hygiene Program

Scheduling Form: Return to Mrs. Taylor, Dental Clinic Manager

Patient Name: ____________________________ DOB: __________ Phone No. __________

Student Name: ____________________________

Date of Appointment: ______________ Time of Appointment: __________

Circle Those That Apply: New Recare Recall Your Parent/Spouse/Child

Circle the services to be provided: Adult Prophy/Child Prophy FMX BWX PAN SEALANTS QUADS
Dear Dr. ________________________________:

Please be advised of the following dental hygiene services completed on:

<table>
<thead>
<tr>
<th>Services</th>
<th>Date Services Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>_____ Medical and Health History Review</td>
<td>_______________________</td>
</tr>
<tr>
<td>_____ Intraoral and Extraoral Examination</td>
<td>_______________________</td>
</tr>
<tr>
<td>_____ Restorative and Dental Charting</td>
<td>_______________________</td>
</tr>
<tr>
<td>_____ Periodontal Examination</td>
<td>_______________________</td>
</tr>
<tr>
<td>_____ Hard and Soft Deposit Assessment</td>
<td>_______________________</td>
</tr>
<tr>
<td>_____ Patient Education</td>
<td>_______________________</td>
</tr>
<tr>
<td>Radiographs</td>
<td></td>
</tr>
<tr>
<td>_____ Bitewings</td>
<td>_______________________</td>
</tr>
<tr>
<td>_____ FMX</td>
<td>_______________________</td>
</tr>
<tr>
<td>_____ Panorex</td>
<td>_______________________</td>
</tr>
<tr>
<td>_____ Periapical(s)</td>
<td>_______________________</td>
</tr>
<tr>
<td>Tooth #’s__________________________</td>
<td></td>
</tr>
<tr>
<td>_____ Scaling</td>
<td>_______________________</td>
</tr>
<tr>
<td>_____ Polishing</td>
<td>_______________________</td>
</tr>
<tr>
<td>Sealants</td>
<td>_______________________</td>
</tr>
<tr>
<td>Tooth #’s________________________________</td>
<td></td>
</tr>
<tr>
<td>_____ Fluoride Treatment</td>
<td>_______________________</td>
</tr>
</tbody>
</table>

Other services performed: _______________________________________________________

_____________________________________________________________________________

Student ________________________________  Date __________________________

Instructor ______________________________ Date __________________________

8-9
HCC DENTAL HYGIENE PROGRAM COMPREHENSIVE TREATMENT PLAN

Patient___________________________________________  DOB __________   Date_______________________

Student____________________________________________Patient Classification_______   _______   ______
Perio             Deposit           Instructor

The completed medical/dental histories, extra/intraoral examinations, dental and periodontal chartings, and the deposit assessment on this patient warrant the following services:

ANESTHESIA
_____ Local Anesthetic   _____ Oraqix
_____ Topical Anesthetic  _____ Tooth Desensitization

POLISHING
_____ Air Polishing   _____ Rubber Cup Polishing   _____ Toothbrushing

PREVENTIVE
_____ Fluoride Treatment (stannous, sodium, acidulated phosphate, varnish)
_____ Nutritional Counseling
_____ Patient Education (Specifics:________________________________________________________)
_____ Sealants (Teeth Numbers __________________________________________)

RADIOGRAPHS
_____ Bitewings (2BWX) (4BWX) (7BWX)  
_____ Full-Mouth X-Rays (FMX)  _____ Occlusal Radiograph(s)
_____ Panorex  _____ Periapical /Specific Tooth________________________

SCALING
_____ Hand Scaling Entire Mouth   _____ Ultrasonic Scaling
_____ Half-Mouth Scaling (Right Side / Left Side)
_____ Scaling Specific Teeth (Tooth #’s___________________________________________)
_____ Quadrant Scaling (Upper Right / Lower Right/ Upper Left / Lower Left )

THERAPEUTIC
_____ Antibiotic/Antimicrobial Therapy ________________________________________________
_____ Oral Irrigation
_____ Re-Evaluation

ADJUNCTIVE SERVICES
_____ Referral (_________________________________________________________________________)

I have been informed of the prescribed dental hygiene treatment that would benefit me. I also understand these treatment procedures may require more than one visit. I hereby consent to the above dental hygiene treatment plan.

Patient/Parent Signature___________________________________________   Date _______________________
Instructor  Signature         __________________________________________    Date _______________________
Student Signature              __________________________________________     Date  _______________________

Patient’s Refusal of Comprehensive Care: I relinquish the Halifax Community College Dental Hygiene Program and this student’s responsibility for completing the following treatment service(s):
________________________________________________________
________________________________________________________
________________________________________________________
________________________________________________________
Patient/Parent  Signature  Date
<table>
<thead>
<tr>
<th>Services</th>
<th>Charges</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-K Screening</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>Child Cleaning</td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td>Whole mouth is assigned prophy. 1st visit charge.</td>
<td>20.00</td>
<td>01110</td>
</tr>
<tr>
<td>Whole mouth assigned, subsequent visits</td>
<td>NO CHARGE</td>
<td></td>
</tr>
<tr>
<td>Return in 3 months for recall</td>
<td>15.00</td>
<td>01110</td>
</tr>
<tr>
<td>Return in 6 months for recall</td>
<td>20.00</td>
<td></td>
</tr>
<tr>
<td>Half mouth 1st visit</td>
<td>15.00</td>
<td>04341</td>
</tr>
<tr>
<td>Half mouth 2nd visit</td>
<td>10.00</td>
<td>04341</td>
</tr>
<tr>
<td>Quad scale 1st appointment</td>
<td>15.00</td>
<td>04341</td>
</tr>
<tr>
<td>Quad scale 2nd appointment</td>
<td>10.00</td>
<td>04341</td>
</tr>
<tr>
<td>Quad scale 3rd appointment</td>
<td>10.00</td>
<td>04341</td>
</tr>
<tr>
<td>Quad scale 4th appointment</td>
<td>10.00</td>
<td>04341</td>
</tr>
<tr>
<td>Re-evaluation</td>
<td>NO CHARGE</td>
<td></td>
</tr>
<tr>
<td>Periapical Film</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occlusal Film</td>
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<td></td>
</tr>
<tr>
<td>BWX (1 film)</td>
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<td></td>
</tr>
<tr>
<td>BWX (2 films)</td>
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<td>00272</td>
</tr>
<tr>
<td>BWX (4 films)</td>
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<td>00274</td>
</tr>
<tr>
<td>FMX</td>
<td>10.00</td>
<td>00210</td>
</tr>
<tr>
<td>PAN</td>
<td>10.00</td>
<td>00330</td>
</tr>
<tr>
<td>Sealants (per tooth)</td>
<td>5.00/tooth</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$10.00/quadrant</td>
<td>Max/40.00</td>
</tr>
</tbody>
</table>

8/2016

Halifax Community Dental Hygiene Clinic Charges
Dental Hygiene Student______________________________________          Date____________________

The purpose of this questionnaire is to assist us in determining our patients’ level of satisfaction with the clinic. Please answer the following:

1. Why did you have your teeth professionally cleaned? (May select more than one)
   _____It was recommended by my dentist/dental hygienist.
   _____I was influenced by the media (TV, radio, newspaper, magazine, etc.).
   _____I have my teeth cleaned regularly.
   _____I was concerned about my teeth.
   _____Other:_____________________________________________________________________

2. Where have you had your teeth cleaned previously? (May select more than one)
   _____This is the first time I have ever had my teeth cleaned.
   _____At a private dental office
   _____At a military clinic
   _____At a public health clinic
   _____Here in the HCC Dental Hygiene Clinic
   _____Other:_____________________________________________________________________

3. How would you rate the quality of service that you received here in the HCC Dental Hygiene Clinic?
   _____Excellent  _____Good  _____Fair  _____Poor

4. How would you describe the dental hygiene student who treated you?
   Technical Skills:  _____Excellent  _____Good  _____Fair  _____Poor
   Concern for my dental/oral health:
   _____High (very concerned)      _____Average (somewhat concerned)      _____Low (not concerned)

5. How would you describe the dental hygiene instructor(s) who worked with you and the student?
   (May select more than one)
   _____Interested in me   _____Interested in the student
   _____Not interested in me   _____Not interested in the student
   Other:__________________________________________________________________________

6. The following was explained to me:  (Select all that apply)
   _____dental plaque  _____periodontal (gum) disease  _____dental caries
   _____toothbrushing  _____nutrition    _____flossing
   _____sealants   _____fluoride    _____radiographs (x-rays)
   _____other:______________________________________________________________

7. As a result of coming here, I plan to change the following things about by dental health/habits:
   __________________________________________________________________________

8. I will recommend the HCC Dental Hygiene Clinic to my family and friends.
   _____Absolutely  _____Most Likely  _____Maybe  _____No

9. Other Comments:  _____________________________________________________________
<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Completed Correctly</th>
<th>Needs Correction</th>
<th>Date Correction Completed</th>
</tr>
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<tbody>
<tr>
<td>All chart entries are legibly written in blue or black ink</td>
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<td>Treatment notes include all services and treatment rendered to the patient for that clinic session</td>
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<tr>
<td>All radiographs are mounted correctly</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>All radiographs include the patient’s name and date of exposure and patient’s birthdate</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>All documented forms are in correct order</td>
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</tbody>
</table>

**Left Side**

- Personal History
- Patient Consent
- Privacy Practices Acknowledgement
- Medical Referrals

**Right Side**

- Initial Screening Assessment
- Deposit Assessment
- Treatment Plan
- Dental Referrals
Section 9:
STUDENT CLINIC ROTATIONS
Radiography Lab Assistant

A lab assistant will be assigned for each radiography lab session. A schedule will be provided at the beginning of DEN 112. The radiography lab assistant should report to the lab 15 minutes prior to the lab session.

**Beginning of Lab Session:**

- **Preparation of darkroom:**
  1. Turn on overhead light and safelights
  2. Remove prop from processors and close lids completely
  3. Turn on both processors
  4. Check solution levels under the cabinets, change bottles if necessary, (ask instructor if not sure)
  5. Run cleaning film through both processors after temperature reaches 82 degrees
  6. Turn off overhead light
  7. Run quality assurance films if scheduled, check log for scheduled responsibilities

- **Place DXXTR mannequins in operatories**
- **Obtain any supplies requested by instructor during lab session**
- **Distribute supplies and materials to classmates**
- **Verify that all students are wearing film monitoring badges**

**End of Lab Session:**

1. Turn processors off, place prop under lid to hold it open
2. Check maintenance calendar and perform any maintenance procedure required
3. Disinfect counter, pick up trash, empty trash container
4. Clean exterior of processor with soap and water
5. Turn off safelights and overhead light
6. Leave outer door closed
7. Verify the presence of the following equipment:
   - Adult lead aprons in each operatory
   - View boxes turned off
8. Empty trash from all x-ray rooms
9. Make sure all viewboxes and lights are turned off in the x-ray rooms
10. Return DXXTR’s to storage areas
Radiography Lab Assistant Grade Form

DEN 112

Student ___________________________________________ Date _______________

Pass / Fail

<table>
<thead>
<tr>
<th>Skill Criteria</th>
<th>S=Satisfactory</th>
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</thead>
<tbody>
<tr>
<td>1. Arrive 15 minutes prior to lab</td>
<td></td>
</tr>
<tr>
<td>2. Prepare the darkroom according to instructions posted in darkroom</td>
<td></td>
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<tr>
<td>3. Place DXXTR manikins in x-ray rooms</td>
<td></td>
</tr>
<tr>
<td>4. Obtain any supplies requested by the instructor for the session</td>
<td></td>
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<tr>
<td>5. Distribute supplies and materials to classmates</td>
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<tr>
<td>6. Verify all students and faculty are wearing film badges</td>
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<tr>
<td>7. Close the darkroom at the end of the lab session according to instructions posted in darkroom</td>
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</tr>
<tr>
<td>8. Replace or replenish supplies in darkroom</td>
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</tr>
<tr>
<td>9. Replace or replenish supplies in radiography rooms</td>
<td></td>
</tr>
<tr>
<td>10. Check the cabinets and drawers for supplies with instructor’s permission</td>
<td></td>
</tr>
<tr>
<td>11. Take inventory when scheduled on calendar</td>
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</tr>
<tr>
<td>12. Turn x-ray machines and lights off at end of lab session</td>
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<tr>
<td>13. Empty trash in x-ray rooms and darkroom</td>
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</tr>
<tr>
<td>14. Return DXXTR manikins to storage area</td>
<td></td>
</tr>
</tbody>
</table>

Three or more U’s = Failure

********** | Signatures | Date |
---------- |------------|------|
Student    |            |      |
Instructor |            |      |
Screener/Radiography Assistant Responsibilities

A student will be assigned screener responsibilities for each clinic period. Screeners will take responsibilities for screening, maintaining x-ray rooms, the darkroom, and any reception duties as requested by the Clinic Manager.

Arrive 30 minutes prior to the clinic session.

**Beginning of Clinic:**

Prepare darkroom for clinic

1. Turn on overhead light and safelights
2. Turn processors on. Check fluid levels under cabinet and refill if necessary.
3. Run cleaning films through the AT-2000 processors once the temperature as reached 82 degrees
4. Perform quality control tests as scheduled
5. Perform any maintenance procedures as specified by the calendar

Prepare Operatory 1 for screening by cleaning and disinfecting all surfaces following proper infection control protocol.

**Screening**

1. Seat the patient and review his/her health questionnaire. If patient needs to be premedicated before the cleaning appointment, explain this to him/her. Complete appropriate medical referral forms. Have patient sign health questionnaire
2. Review the medical history and vital signs with the instructor and obtain permission to proceed. Have the instructor sign the health questionnaire
3. Make a brief oral inspection to make sure there are no lesions
4. Inspect for hard and soft deposits
5. Classify periodontal and deposit status of patient
6. Verify periodontal classification with instructor
7. Give the patient the *HCC Dental Hygiene Program Pamphlet* describing procedures, services, and Patient’s Rights
8. Complete a treatment record indicating treatment rendered
9. Have instructor review and sign treatment record
10. Complete in pen the Initial Screening Assessment form
11. Return the patient chart to the clinic manager
12. Prepare the screening operatory for the next patient
End of Clinic

1. Turn off processors and place a prop under the lid
2. Disinfect counter, empty trash, and clean the exterior surfaces of processors with a wet paper towel
3. Document any maintenance procedures performed
4. Turn off safelights and overhead lights
5. Close darkroom door

In x-ray rooms:

1. Replenish supplies in the x-ray rooms (cups, paper towels, soap)
2. Verify the presence of lead aprons and view boxes
3. Turn off x-ray machines and lights
4. Leave x-ray room units in the “End of Day” position and close door
**Screener/Radiography Assistant Grade Form**

**Student’s Name:** ___________________________________  **Date:**____________________

### Screener Responsibilities

<table>
<thead>
<tr>
<th>Skill Criteria</th>
<th>S/U</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Arrive 30 minutes prior to clinic start time.</td>
<td></td>
</tr>
<tr>
<td>2. Prepare darkroom, radiographic rooms, and automatic processors. Perform maintenance procedures as indicated by monthly calendar. Perform quality control procedures as required. Run cleaning films.</td>
<td></td>
</tr>
<tr>
<td>3. Prepare screening room(s) and x-ray rooms for patients using appropriate infection controls.</td>
<td></td>
</tr>
<tr>
<td>4. After each radiography/screening patient remove barriers, disinfect the operatory, and prepare for the next patient.</td>
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</tr>
<tr>
<td>5. Assist the Clinic Manager or Clinic Assistant to complete their duties.</td>
<td></td>
</tr>
</tbody>
</table>

#### Procedures for Screening Patients

| 6. Seat client, review medical history, research medications, and explain any contraindications to treatment. |
| 7. Conduct a brief oral examination to verify there are no lesions present. Do not complete an extra-& intraoral exam form. |
| 9. Explain clinic policies and procedures for scheduling patients. |
| 10. Provide client with client information documents and record in chart. |

**11. Complete Treatment Record. Include client classification in documentation.***

**12. Complete Initial Screening Assessment form with date, client classification, and services listed.**

**13. Create client chart and file all forms used during screening appointment.**

#### End of Clinic Day

| 14. Turn off automatic processors, clean and disinfect darkroom, and turn off lights. Place sponges under lid of processors. Remove trash in all x-ray rooms as well as the processor room and place fresh trash liners in each trash can. Wipe disinfectant bottle and soap & water bottle with disinfectant. |
| 15. Replace or replenish supplies in radiography operatories or darkroom. |
| 16. Verify presence or equipment in all radiography operatories. Leave chairs in end-of-day position. |

#### Overall

| 17. Follow all infection control procedures.* |
| 18. Complete all necessary documentation in the appropriate logs.* |
| 19. Arrive on time and behave in a professional manner. |
| 20. Perform any other duties to assist the Clinic Manager, faculty, Clinic Assistant, or other students. |

*Three or more “U’s” warrants failure.***

**Pass/Fail**

*Denotes critical error. Student will correct error prior to dismissal from clinic.*

<table>
<thead>
<tr>
<th>Required</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td></td>
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<tr>
<td>Instructor</td>
<td></td>
<td></td>
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<tr>
<td>Clinic Coordinator</td>
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</tbody>
</table>
CLINIC ASSISTANT RESPONSIBILITIES

The Clinic Assistant will be responsible for infection control procedures in central sterilization and the dispensary and for providing assistance to student operators during the clinic session. No other students should be in the sterilization room during the clinic session to ensure the highest degree of asepsis and least amount of congestion.

Arrive 30 minutes prior to clinic session.

Get clinic assistant grade sheet.

Follow all HCC Dental Hygiene Program infection control guidelines and protocol.

The clinic assistant will distribute patient charts to hygiene students after the patients have been checked in by the clinic manager.

Prior to Clinic
1. Turn pumps on in clinic manager’s office
2. Be sure all items necessary for the clinic session are out on the counters for students to pick up
3. Check the solution levels in the holding solution tank and ultrasonic tanks
4. Check supplies in the sterilization room and replenish if necessary (paper towels, soap, cleaners, disinfectants, etc.)
5. Put away any sterilized instruments
6. Conduct biological monitoring and any maintenance responsibilities when dictated on the clinic assistant calendar

During Clinic
1. Assist students with infection control procedures
2. Place dried utility gloves in the appropriate drawer in the dispensary
3. Replenish dispensary with necessary supplies
4. Assist the clinic manager

End of Clinic
1. Empty trash in the sterilization room, dispensary, and patient education room
2. Document activities in the Clinic Assistant log book
3. Leave sterilization room and dispensary in orderly manner
4. Have instructor sign log book and grade sheet
5. Make sure all units are left in the “End of Day Position”
Clinic Assistant Grade Form

Student___________________________________________________________   Date: ____________________

**Clinic Assistant Responsibilities**

<table>
<thead>
<tr>
<th>Skill Criteria</th>
<th>S/U</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beginning of Clinic Day:</strong></td>
<td></td>
</tr>
<tr>
<td>1. <strong>Arrive 30 minutes prior to clinic start time.</strong></td>
<td></td>
</tr>
<tr>
<td>2. Turn switches on in Clinic Manager’s office.</td>
<td></td>
</tr>
<tr>
<td>3. Put out all items necessary for clinic. Put out instrument packs.</td>
<td></td>
</tr>
<tr>
<td>4. Put away any sterilized instruments in sterilization area.</td>
<td></td>
</tr>
<tr>
<td>5. Check <strong>sterilization calendar</strong> and perform any necessary maintenance or monitoring procedures.</td>
<td></td>
</tr>
<tr>
<td>6. Check with clinic manager and bring back patient charts after they have been checked in. Deliver to student operators.</td>
<td></td>
</tr>
<tr>
<td>7. Check dispensary for supplies. Inform faculty of supplies needed.</td>
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<tr>
<td><strong>During Clinic Session:</strong></td>
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<tr>
<td>8. Assist students with any infection control procedures.</td>
<td></td>
</tr>
<tr>
<td>9. Assist students with supplies.</td>
<td></td>
</tr>
<tr>
<td>10. Place dried utility gloves in the appropriate drawer in dispensary.</td>
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</tr>
<tr>
<td>11. Replenish any supplies in the dispensary. Fill spray bottles if necessary.</td>
<td></td>
</tr>
<tr>
<td>12. Assist Clinic Manager if needed.</td>
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</tr>
<tr>
<td>13. Disinfect all countertops and faces in dispensary.</td>
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</tr>
<tr>
<td>15. Roll cart into clinic with holding solution.</td>
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<tr>
<td><strong>At End of Clinic Session:</strong></td>
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<tr>
<td>17. Place instruments in ultrasonic for 10 minutes.</td>
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</tr>
<tr>
<td>18. Rinse cassettes and drain for 5 minutes.</td>
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</tr>
<tr>
<td>19. Wrap cassettes and label. Place in autoclave.</td>
<td></td>
</tr>
<tr>
<td>20. Place handpieces in Assistina and wrap in pouches. Place in autoclave.</td>
<td></td>
</tr>
<tr>
<td>21. Run autoclave.*</td>
<td></td>
</tr>
<tr>
<td>22. <strong>Sign sterilization log for each load run in autoclave for session.</strong></td>
<td></td>
</tr>
<tr>
<td>23. Collect trash from central sterilization, dispensary, ultrasonic room, and patient education room.</td>
<td></td>
</tr>
<tr>
<td>24. Disinfect counters in central sterilization area. Leave areas clean, neat, and organized.</td>
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</tr>
<tr>
<td>25. Turn pumps off in Clinic Manager's office.</td>
<td></td>
</tr>
<tr>
<td>26. Perform any other duties to assist the Clinic Manager, clinic faculty, the Screener, or other students. Behave in a professional manner</td>
<td></td>
</tr>
<tr>
<td>27. <strong>Follow all infection control procedures and make necessary documentation in the appropriate log book.</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Denotes critical error. Student will correct error prior to leaving clinic.

**Pass / Fail**

<table>
<thead>
<tr>
<th>Required</th>
<th>Signature</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>Student</td>
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<tr>
<td>Instructor</td>
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<tr>
<td>Clinic Coordinator</td>
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</tr>
</tbody>
</table>

9-6
Section 10:

EVALUATION

CRITERIA
Preclinic/Clinic Evaluation Definitions

**Evaluation/Proficiency** is a “graded” process evaluation. This evaluation tests the students on the performance of a newly learned skill. The student performs independently without faculty assistance, while faculty observes. Evaluations/Proficiencies are used to determine the student’s achievement of competence. Minimum performance levels and criteria are stated for each task.

**Critical Errors** are given on evaluations/proficiencies and end product evaluations. Critical errors are errors that may affect the patient/student welfare and thus warrant special attention. These errors are noted by an asterisk (*).

**Competence** is the quality or condition of being legally qualified to perform a task.

**Clinical Competence** is developed during the repeated delivery of dental hygiene services with close supervision of faculty. These services are mastered on peer and clinic clients. Once graduated from the Dental Hygiene Program, students will be legally and ethically capable of delivering those services within the scope of the dental laws.

**Laboratory Competence** is developed in a laboratory setting on a mannequin, extracted teeth, or dental model. With additional experience beyond graduation, students will develop clinical competence. Legally and ethically graduates must inform employers that they have been trained to laboratory competence. The employer will directly observe and supervise the delivery of such services until clinical competence is obtained.

**Mastery Level** refers to the percentage grade that students must achieve on proficiencies in order to receive credit. Mastery levels change each semester.

**Preclinical Lab Evaluations/Proficiencies**
Students in DEN 121 (Preclinic Lab) will complete evaluations/proficiencies on a manikin or fellow student.

**Clinical Evaluations/Proficiencies**
Students in DEN clinical courses will complete evaluations/proficiencies on live patients.
Earning Credit for Evaluations/Proficiencies

DEN 121, 131, 141, 221, & 231

1. Proficiencies/evaluations forms will be given to each student at the beginning of the semester, and it is the student’s responsibility to keep up with the forms.

2. Complete blanks on the form that may include your name, instructor’s name, etc.

3. Have an instructor observe and evaluate your evaluation/proficiency.

4. Verify that all documentation is complete. No signature = no credit.

❖ You must repeat a proficiency until satisfactory performance is attained. There is no penalty for repeated attempts.

❖ All clinic evaluations/proficiencies for each course need to be completed in order to pass the course.
<table>
<thead>
<tr>
<th>Course</th>
<th>Evaluations/Proficiencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEN 121</td>
<td>Handwashing&lt;br&gt;Vital Signs/Medical History&lt;br&gt;Positioning&lt;br&gt;Extraoral/Intraoral Examination&lt;br&gt;Instrument Grasp &amp; Mirror&lt;br&gt;Periodontal Probe&lt;br&gt;Explorer&lt;br&gt;Charting and Explorer&lt;br&gt;Sealers&lt;br&gt;Universal Curet&lt;br&gt;Area-Specific Curets</td>
</tr>
<tr>
<td>DEN 131</td>
<td>Biological Indicator Testing &amp; Instrument Sterilization&lt;br&gt;Deposit Assessment &amp; Disclosing Solution&lt;br&gt;Extraoral and Intraoral Examination&lt;br&gt;Extrinsic Stain Removal (Polishing)&lt;br&gt;Fluoride Treatment-Tray Method&lt;br&gt;Instrument Sharpening&lt;br&gt;Patient Education&lt;br&gt;Periodontal Charting&lt;br&gt;Radiographic Technique&lt;br&gt;Restorative Charting&lt;br&gt;Unit Preparation and Patient Seating&lt;br&gt;Vital Signs and Medical History</td>
</tr>
<tr>
<td>DEN 141</td>
<td>Air polishing&lt;br&gt;Caries Risk Assessment&lt;br&gt;Operation of Oxygen Tank and Emergency Protocol&lt;br&gt;Panoramic Radiograph&lt;br&gt;Patient Education&lt;br&gt;Periodontal Charting&lt;br&gt;Periodontal Risk Assessment&lt;br&gt;Restorative Charting&lt;br&gt;Topical Anesthetic&lt;br&gt;Ultrasonic Scaling&lt;br&gt;15/16 Gracey Curet&lt;br&gt;17/18 Gracey Curet</td>
</tr>
<tr>
<td>DEN 221</td>
<td>Anti-microbial Delivery (Arestin)*Lab&lt;br&gt;Chisel, File, and Hoe *Lab&lt;br&gt;Desensitization (Oraqix)*Lab&lt;br&gt;Implant Maintenance *Lab&lt;br&gt;Intra-oral Camera (2 pictures on Adult)&lt;br&gt;Nitrous-oxide oxygen Sedation *Lab&lt;br&gt;Oral Irrigation (Monoject)&lt;br&gt;Periodontal Dressing *Lab&lt;br&gt;Re-evaluation&lt;br&gt;Sealants</td>
</tr>
<tr>
<td>DEN 231</td>
<td>Intra-oral camera (2 pictures on Adult)&lt;br&gt;One-Handed Instrument Transfer (Lab)&lt;br&gt;Oral Irrigation-Monoject&lt;br&gt;Pulp Vitality Testing (Lab)&lt;br&gt;Re-evaluation&lt;br&gt;Senior Peer Evaluation</td>
</tr>
</tbody>
</table>
Minimum Requirements per Semester

Students will receive the minimum requirements for each clinic course on the first day of the course each semester.

- Students must complete the minimal required number of patients and radiographs, and clinic evaluations each semester to earn a “C”/77 average in clinic.

- Students must be in clinic with a scheduled patient regardless of whether or not they have met minimal requirements.

- All radiographs and patient requirements that exceed the minimum requirements per semester will be used to improve the student’s final course grade and/or be credited to the next semester.

- Mid-semester and end-of-semester grade conferences will be held with each student to verify the grade and progress in the course.

- Incomplete patient requirements must be met by the end of spring semester before graduation.

- A student will not be allowed to graduate if total patient requirements are not met.
## HCC DENTAL HYGIENE PATIENT & RADIOGRAPH REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Class I</th>
<th>Class II</th>
<th>Class III &amp; Class IV</th>
<th>Pedo</th>
<th>BWX</th>
<th>Pedo/Mixed BWX</th>
<th>FMX</th>
<th>Pano</th>
<th>DXXTR X-Rays</th>
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<tbody>
<tr>
<td>DEN 112</td>
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<td>15</td>
<td>5</td>
<td>6</td>
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<td>5 6</td>
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</tbody>
</table>

### Definitions:

**Pedo:** Patients under 12 years old.

**Adolescent:** Patients between 13 and 17 years old.

**Senior:** Patients over the age of 55.

**Special Needs:** Patients whose medical, physical, psychological, or social situations make it necessary to modify dental routines in order to provide dental hygiene treatment for that individual. These individuals include, but are not limited to, people with developmental disabilities, complex medical problems, and significant physical limitations.

*Requirements subject to change.*
Dental Hygiene Program
Grade Conference Guidelines

- Each student in the HCC Dental Hygiene Program is required to attend two grade conferences every semester with his/her advisor. One conference will be scheduled mid-semester and one at the end of the semester but before finals.

- It is the student’s responsibility to make an appointment with his/her advisor for the conference. There are no exceptions to this rule. Students should begin to schedule these appointments no earlier than two weeks before the due date. Failure to schedule appointments will result in a 1 point deduction in professionalism points for that clinical semester grade.

- Mid-semester grade conferences must be scheduled within the 8th week of the semester. End-of-semester grade conferences must be scheduled within the 15th week of the semester. Although advisors will work with students to schedule mutually agreeable appointment dates and times, the advisor has the right to schedule conferences at his/her convenience.

Attending the Conference

- Arrive at your grade conference on time and prepared. Each student will have an equally designated amount of time scheduled.

- Bring the following documents with you to the Grade Conference:
  - Completed Professionalism Self-Assessment Form.
  - Grade Sheets for each DEN course.

  Be prepared to discuss grades in other courses taken within the curriculum that are not DEN.
Self-Assessment Fall Semester First Year

Student: __________________________________________  Date___________________
Rate yourself using the rating scale below in all areas listed. Make any comments in the area provided on
the table. Do not sign the self-assessment form until you meet with your advisor.

**Rating Scale**
- 5 = Extremely well or almost always
- 4 = Good or very often
- 3 = Moderately or occasionally
- 2 = Slightly or seldom
- 1 = Unsatisfactory or not at all

### General Behavior Performance

<table>
<thead>
<tr>
<th>Performance</th>
<th>Rating</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Preparation</td>
<td></td>
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<tr>
<td>Dependability</td>
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<tr>
<td>Confidence</td>
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<td>Cooperation</td>
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<tr>
<td>Professional Attitude</td>
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<tr>
<td>Flexibility</td>
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<td>Organization</td>
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<td>Energy</td>
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<tr>
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### Clinical Behavior Performance

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<td>Communication</td>
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<tr>
<td>Scaling Proficiency</td>
<td></td>
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</tr>
<tr>
<td>Teamwork</td>
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<tr>
<td>Radiographic Proficiency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infection Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honesty</td>
<td></td>
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</tr>
</tbody>
</table>

Strengths
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________

Weaknesses
_____________________________________________________________________________________  
_____________________________________________________________________________________  
_____________________________________________________________________________________  

Student Signature: __________________________________________ Date: __________________

Advisor Signature: __________________________________________ Date: __________________
Professionalism
Self-Assessment

Student: ___________________________________

- Rate yourself using the rating scale below in all areas listed. Make any comments in the area provided on the table and answer the questions on the back of this page.

- Refer to “Professionalism Guidelines- Performance Areas” found in the HCC Dental Hygiene Student Manual Section 1 for clarification of behaviors listed on the chart below.

- Complete this Self-Assessment once a semester and bring one to the mid-semester grading conference.

Rating Scale
I display all characteristics of this performance area:
  5 = Extremely well or almost always
  4 = Good or very often
  3 = Moderately or occasionally
  2 = Slightly or seldom
  1 = Unsatisfactory or not at all

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Performance Rating</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Concern for Patient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Perseverance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Ability to Follow Directions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Honesty &amp; Integrity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Energy &amp; Industry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. Punctuality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. Initiative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. Personal Appearance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. Attitude</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J. Response Towards Clinical Evaluation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Student: _________________________________________________

Describe the general progress you’ve made in this clinical session toward achieving optimal professional behavior.

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

What do you consider your strengths and weaknesses in your development of professional behavior?

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

Additional Comments:

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

I have discussed this self-evaluation with my advisor at the grading conference. Together, areas of weakness have been addressed and modifications for improvement have been developed.

Student Signature: __________________________________________ Date: ____________

Advisor Signature: __________________________________________ Date: ____________
Professional Responsibility Infractions and Penalties

- Each student will be graded on his/her professional responsibility in all laboratory and clinic courses.
- No penalty will be imposed for the first infraction, but a warning will be issued to the student to sign.
- The student will be informed in writing when professional points are deducted. These points will be recorded on the daily end product evaluation in clinic.
- The list of infractions below IS NOT INCLUSIVE OF ALL POSSIBLE INFRACTIONS. Instructors have the right to assess infractions and determine point deductions.
- Professional Infraction Penalty Points will be deducted from the student's final course grade.
- Maximum number of infractions per semester is three. More than three infractions is grounds for dismissal.

<table>
<thead>
<tr>
<th>Infraction</th>
<th>Points Deducted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Failure to use appropriate procedures when absent. Call ahead to clinic manager and clinic coordinator as well as your patient to reschedule in the event of absence or tardy.</td>
<td>1</td>
</tr>
<tr>
<td>2. Taking radiographs or chart out of clinic</td>
<td>Dismissal</td>
</tr>
<tr>
<td>3. Taking film badges out of clinic</td>
<td>1</td>
</tr>
<tr>
<td>4. Not returning chart to proper place</td>
<td>1</td>
</tr>
<tr>
<td>5. Not submitting written patient appointment time/date</td>
<td>1</td>
</tr>
<tr>
<td>6. Recording inaccurate patient information</td>
<td>1</td>
</tr>
<tr>
<td>7. Duplicating patient’s chart</td>
<td>1</td>
</tr>
<tr>
<td>8. Falsification of records or x-rays</td>
<td>Dismissal</td>
</tr>
<tr>
<td>9. Failure to update medical-dental history and vital signs</td>
<td>2</td>
</tr>
<tr>
<td>10. Making unauthorized chart/appointment entries</td>
<td>1</td>
</tr>
<tr>
<td>11. Failure to submit radiographs for a grade within one week</td>
<td>1</td>
</tr>
<tr>
<td>12. Failure to attend or schedule grade conference</td>
<td>2</td>
</tr>
<tr>
<td>13. Wearing incorrect, dirty, or wrinkled clinic clothes/shoes or smelling like cigarette smoke</td>
<td>1</td>
</tr>
<tr>
<td>14. Unprofessional appearance: clinic attire including scrubs, socks, shoes, makeup, hair style or color, personal hygiene, ill-manicured nails, jewelry, tattoos not covered</td>
<td>1</td>
</tr>
<tr>
<td>15. Not wearing film badge</td>
<td>1</td>
</tr>
<tr>
<td>16. Having dirty, messy hair</td>
<td>1</td>
</tr>
<tr>
<td>17. Inappropriate use of cell phones and computers during class, clinic or lab</td>
<td>1</td>
</tr>
<tr>
<td>18. Using unprofessional language : verbiage, tone, non-verbal</td>
<td>1</td>
</tr>
<tr>
<td>19. Exhibiting unprofessional behavior</td>
<td>3</td>
</tr>
<tr>
<td>20. Failure to make appropriate use of lab or clinic time</td>
<td>1</td>
</tr>
<tr>
<td>21. Failure to maintain adequate appointment control</td>
<td>1</td>
</tr>
<tr>
<td>22. Failure to be prepared for class, lab or clinic session</td>
<td>1</td>
</tr>
<tr>
<td>23. Having food or drinks in classrooms, labs, or clinics</td>
<td>1</td>
</tr>
<tr>
<td>24. Being tardy to clinic, lab, or class</td>
<td>1</td>
</tr>
<tr>
<td>25. Failure to maintain work area in a professional manner, neat and organized</td>
<td>1</td>
</tr>
<tr>
<td>26. Performing any action that could cause harm to any patient, student, instructor, or visitor to the clinic</td>
<td>3</td>
</tr>
<tr>
<td>27. Failure to sign in with an instructor or clean up work area when working outside scheduled class time</td>
<td>1</td>
</tr>
<tr>
<td>28. Seating patient before faculty present in clinic</td>
<td>2</td>
</tr>
<tr>
<td>29. Failure to comply with the regulations and policies as stated in this HCC Dental Hygiene Program Manual or the HCC Catalogue</td>
<td>Dismissal</td>
</tr>
<tr>
<td>30. Accessing patient information on the computer without authorization</td>
<td>Dismissal</td>
</tr>
</tbody>
</table>
Professional Infraction Penalty

Student Name: ________________________________________________

Clinic/Course Date & Time: _____________________________________

Number of Penalty Points Awarded: _______________________________

Name of Instructor: ____________________________________________

Description of Infraction:
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

__________________________________________________ ______________

Student Signature: ________________________________________________

Instructor Signature: _______________________________________________

Clinic Coordinator Signature: ________________________________________

Department Head Signature: ________________________________________
Remediation Request

Student__________________________________________                  Date________________
Instructor Requesting Remediation__________________________________________________
Remediation Needed_____________________________________________________________
______________________________________________________________________________

Remediation Completion

Instructor Signature________________________________________  Date_____________
Student Signature_________________________________________             Date_____________
Comments______________________________________________________________________
______________________________________________________________________________
Section 11:

EMERGENCIES
Communicable Diseases

Persons infected with a communicable disease will not be excluded from enrollment or employment or restricted in their access to college services, unless medically-based judgments in individual cases establish that exclusion or restriction is advised for the health and safety of the individual or for the health and safety of other members of the College community.

Any student, College employee (either full- or part-time), the parents/guardians of any child attending the Child Care Center, or any employee of contractors or contracted services who knows or has reasonable basis for believing that he/she or his/her child is infected with a communicable disease has the responsibility for reporting this fact, on a confidential basis, to the appropriate administrator or dean.

Persons who know or have reasonable basis for believing that they are infected with a communicable disease are expected to seek expert advice about their health circumstances and are obligated ethically and legally to conduct themselves in accordance with such knowledge for the protection of other members of the community.

Bloodborne Pathogens

It will be the policy of Halifax Community College to cover and protect all employees who could be “reasonably anticipated,” as the result of performing their responsibilities, to face contact with blood and other potentially infectious materials. “Good Samaritan” acts such as assisting co-workers with nose bleed, lacerations, and abrasions would not be considered an occupational exposure. A comprehensive bloodborne pathogens policy is in place at the College. Copies may be obtained from the nursing department.

The College will publicize and carefully observe the safety guidelines established by the United States Public Health Service and the Center for Disease Control for the handling of blood and other body fluids and secretions in all areas of the College where such fluids or secretions may be encountered.


http://www.halifaxcc.edu/catalog/HCC%20catalog%202016_2018%20final%20for%20web_march%202016.compressed.pdf
Halifax Community College
Protocol for Exposure Incident

What to do if there is an exposure:

1. Record time of exposure
2. Record name of exposed person
3. Record name of patient the contaminated sharps were used on
4. Record how exposure happened
5. Call the below facilities to report the incident:
   - Halifax Regional Medical Center Emergency 252-535-8425 (before 8 a.m. and after 4 p.m.)
   - Halifax Works 252-535-8463 to report the incident (between 8 a.m. & 4 p.m.)
6. Send exposed person to:
   - Halifax Works
     250 Smith Church Road
     Roanoke Rapids, NC  27870
7. Send patient who contaminated the sharps to:
   - Halifax Regional Medical Center Emergency Room---252-535-8011
     250Smith Church Road, Roanoke Rapids, NC  27870
8. Report exposure incident to HCC Security
9. Complete Halifax Community College Exposure Incident Form
10. The completed Halifax Community College Exposure Incident Form is given to:
    a. Dental Hygiene Department Head
    b. School of Health Sciences Chair
    c. Security Officer
    d. Dean of Curriculum
    e. Business Office
    f. Dean of Student Services
    g. VP of Academic Affairs
HALIFAX COMMUNITY COLLEGE
Exposure Incident Form
Attachment 4

Name of Employee/Student: __________________________ SSN: ________________

Date of Incident: ___________________ Time of Incident: ____________

Location: __________________________________________________________________________

Type of exposure (puncture, splash, cut, etc.): ____________________________________________

Type of infectious material (blood, body tissue, body fluid, vomit) and amount if known:

Parts of Body Exposed: __________________________________________________________________

Severity of Exposure: (depth of puncture, etc.): ____________________________________________

Circumstances (work being performed etc.):
1. How and why the exposure incident occurred
2. The job duty being performed at the time
3. Whether the duty being performed is a normal Routine part of the student’s/instructor’s responsibilities

Methods of control in place: __________________________________________________________________

Personal protective equipment being used: __________________________________________________________________

If personal protective equipment was not being used, explain why: __________________________________________________________________

Action taken (decontamination, clean-up, reporting, etc.): __________________________________________________________________

Recommendations for avoiding future incidents: __________________________________________________________________
Post-Exposure
For accidental exposure, immediately take the following steps:

1. Immediately take appropriate precautionary measures. For eye, mouth, and other mucous membrane exposures, flush/rinse the exposed area thoroughly with running water for at least ten to fifteen (10-15) minutes. For needle sticks, other punctures wounds, or contamination of any body part with blood, scrub for a minimum of five (5) minutes.

2. Report the incident to the appropriate persons (e.g. supervisor, division director, or department head) IMMEDIATELY.

3. If the source individual is known and present, the Department Dean will inform the individual of the incident and the need for him/her to be tested. Testing of the source individual must be done at no cost to him/her. If the source individual is known but unavailable, contact him/her as soon as feasible to inform him/her of the incident and the need to be tested.

4. If the source individual refuses to be tested or does not report for testing within a reasonable time, the source individual’s physician should be contacted; or if the physician is not known, contact the County Health Department Director.

5. Be sure to contact the Human Resources office to complete an Exposure Incident Report (Attachment 4). Additional information should be obtained if the source individual is known. It will be necessary to report the incident to the insurance representative within forty-eight (48) hours so that a worker’s compensation form can be completed.

6. Arrangements for a confidential medical consultation and follow-up are made at no cost to the employee, and at a convenient time and location. A letter and incident report form is sent to the physician by the Program Coordinator, Attachment 3. Halifax Community College medical provider information is listed in Attachment 1, Section J.

7. Halifax Community College will provide documentation detailing the route(s) of exposure, the circumstances under which the exposure incident occurred, and the identity of the source individual, unless such identification is not feasible or is prohibited by state or local law. (Recorded on Incident Report form, Attachment 3)

8. If known, the source individual’s blood will be tested by a physician for HBV and HIV as soon as feasible, within forty-eight (48) hours; however,

9. If the source individual is already known to be infected with HBV or HIV, testing need not be repeated.

10. Whether the source individual’s blood tests are done as a result of the exposure incident or previous testing has revealed the source individual to be infected with HBV or HIV, the results from the Health Department of the source individual’s blood tests will be given to the exposed employee.

11. The Human Resource officer will inform the employee of applicable laws and regulations concerning disclosure of the identity and the infectious status of the source individual at the time the source individual’s testing results are given to the employee.

12. If the source individual cannot be identified, the exposed employee’s blood will be tested for HBV and HIV infectivity as soon as feasible within forty-eight (48) hours and with consent.
13. If the exposed employee consents to baseline collection of blood, but refuses HIV testing, the laboratory is instructed to preserve the sample for ninety (90) days. (If, the employee elects to have the sample tested during this time period, this shall be done.)

14. If all tests on the source person and the exposed employee are negative, and the exposed employee has an adequate Hepatitis B immunity response, there will not be a need for further testing. Each case will be evaluated individually and test results reviewed. If the source person is positive for Hepatitis B or HIV at six (6) weeks, twelve (12) weeks, and six (6) months after exposure, the employee must give consent for re-testing on each occasion.

15. Follow-up of the exposed employee will include counseling, medical evaluation of any acute febrile illness that occurs within twelve (12) weeks post-exposure, and use of safe and effective post-exposure measures according to recommendations for standard medical practices.

16. Following an exposure incident, Halifax Community College will provide the healthcare professional with the following information if the employee chooses to be treated by their personal physician:
   a. A copy of The Standard: 29 CFR 1910.1030 if they do not have one.
   b. A description of the exposed employee’s duties as they relate to the exposure incident.
   c. Documentation of the route(s) of exposure and the circumstances under which the exposure occurred.
   d. Results of the source individual’s HIV and HBV testing if available.
   e. All records relevant to the appropriate treatment of the employee, including his/her vaccination status.

17. An evaluation of the employee’s work practices and protective equipment or clothing used at the time of the incident must be made by the Program Coordinator and changes made as indicated.

18. Halifax Community College will provide the exposed employee with a copy of the evaluating healthcare professional’s written opinion within fifteen (15) days of completion of the medical evaluation.
HCC Crime Incident Report

Suspect: __________________________________________________________

Victim: __________________________________________________________

Address: _________________________________________________________

City, State Zip

Date of Birth: __________________________ Social Security Number: __________

Student ________ Visitor ________ HCC Employee ________

Date: ________________ Time: __________ Location: _______________________

Type of Crime:

Assault ________ Motor Vehicle Theft ________

Burglary ________ Robbery ________

Destruction/Damage to Property ________ Vandalism ________

Drug/Alcohol Possession ________ Weapon Possession ________

Larceny ________ Other: __________________________

Was the police notified?

Yes ________ No ________

Yes Officer: __________________________________________

Narrative:

Witnesses:

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Phone #</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

Reporting Person: __________________________________________

Time: __________________ Date: __________________________

11-3
PROTOCOL FOR LOCK DOWN DRILL

(Faculty and staff should have a written roster with students’ and patients’ names for each drill.)

Reception Room (B140)
- Mrs. Taylor along with Clinic Assistant and Screener are responsible for escorting patients into the clinic (Room B123)
- They are to lock the outside door as well as the clinic door
- Patients in the reception area will then be escorted into the Sterilization Room (B115) and into the Sterilization Room Closet (B116)

Clinic (Room B123)
- Each zone instructor is responsible for the students and patients in their zone
  - Zone 1: Units 1, 2, 15, 16---escort students and patients into Room B119
  - Zone 2: Units 3, 4, 13, 14---escort students and patients into Room B121
  - Zone 3: Units 5, 6, 11, 12---escort students and patients into Room B105
  - Zone 4: Units 7, 8, 9, 10 ----escort students and patients into Room B106

Classroom (B126)
- Faculty and students close the door (automatic lock) and move away from the door

Dental Lab (B128)
- Faculty and students close and lock the door and move away from the door

PROTOCOL FOR FIRE DRILL
- All rooms and all persons in the Dental Hygiene Department leave the building as quickly as possible from the nearest exit and proceed to Rally Point 6
- Rally Point 6 Leader will notify proper authorities of everyone’s safety

PROTOCOL FOR TORNADO
- Everyone in the Dental Hygiene Department proceeds to the hallway in front of the classroom
HALIFAX COMMUNITY COLLEGE EMERGENCY ACTION PLAN

INTRODUCTION
Halifax Community College is committed to preventing or reducing the risk of injury or property damage to students and employees resulting from foreseen or unforeseen danger. Risks include fire, utility disruptions, gas leaks, identity theft, bomb threats, criminal activity, violent intruder, hazardous material, tornado, hurricane, medical emergency, explosion, or terrorist activities. Risk may be avoided by the closing of the College or other risk management techniques if the risk is foreseen. Risk may be avoided or reduced by implementing the Emergency Response Plan if the risk is unforeseen, such as evacuation or “Sheltering-In” until evacuation is possible. It is acknowledged that emergency response connotes, for many people, evacuation only. HCC is committed to training students and staff (required by OSHA) about other possible alternatives, such as Sheltering in Place.

Procedures for rapid response to emergencies must be well known to students, faculty, and staff, and each person must understand and practice these procedures. Information will be communicated via student, faculty, and staff handbooks, College website, and other ways. In addition, all students and employees will be provided with a rapid response card that reminds them of what to do in a certain kind of emergency. Putting this plan into action with only seconds’ notice is the goal, and nothing short of excellence is expected in practicing and understanding the plan. Definition of “emergency”: A sudden and unexpected situation that needs immediate response.

EVACUATION DRILLS
Training of students and staff is crucial to effective evacuation and precedes each evacuation drill. Evacuation drills include fire, bomb threat, chemical spill, etc.

1. Unannounced at beginning of every semester – ALL building occupants
2. Refresher course on procedures—students and employees
3. Drills coordinated with Weldon Fire Department
4. Fire alarm silenced by campus police officer

EVACUATION ROUTES
Evacuation routes are identified in red on floor plans posted in classrooms and office areas. The route leads to a specific rally point outside.

SAFE AREAS
One Safe Area is designated for each building in addition to the hallway or nearest area without windows. It is located on the lowest level, in inner hallways or inner rooms. Occupants are instructed to stay away from windows and glass areas. The purpose of the Safe Area is to provide a secure place in case of severe weather such as a tornado. Safe Areas are identified in green on the floor plan posted in classrooms and office areas. Instructors are responsible for taking their roll sheets with them and
reporting to Security any students unaccounted for. Supervisors will be responsible for reporting to Security any staff unaccounted for.

SHELTER IN PLACE
Some emergencies require that students, employees, clients, and visitors take shelter inside the room where they are working or visiting. A violent intruder poses such an emergency.

If directed to Shelter in Place until further notice, students and staff are instructed as follows:
- Move into or stay inside your building area.
- Close and move away from windows and doors. Lock doors if possible. Deadbolts have been installed on all classroom and safe area locations.

AUDIBLE ALERTS
HCC has a system in place to alert students, faculty, and staff to warnings and dangers. A telephone upgrade allows designated staff to use a special code and any campus telephone to activate ceiling speakers in all classrooms and hallways and outside facing all parking lots, and speaker phones so that a verbal message can be transmitted in an emergency. Instructions will be provided concerning evacuation or other actions.

RESPONSIBILITIES
STUDENT RESPONSIBILITIES
1. Know for the area you are in at all times
   - The Evacuation plan
   - The Severe Weather plan
   - The Shelter in Place plan
   - The location of your Rally Point

2. After the drill or incident is over
   - If you have evacuated, do not reenter the building until given permission by campus police, Rally Point Leader, or other emergency personnel.
   - If you have gone to a safe area in case of severe weather, do not leave the area until instructed to do so.
   - If you have Sheltered in Place, do not move until you receive instructions.
   - Do not leave campus without notifying an official.

PERSONS WITH DISABILITIES
Individualized Emergency Care Plan
Every student receiving accommodations will have an Individualized Emergency Care Plan developed at the same time that accommodations are developed. The student shall sign a Release of Information Form which grants permission for Counseling Services to provide a copy of the Emergency Care Plan to each of the student’s instructors, to security, and to the Dean of Student Services. A copy of the plan will
be given to the student as well. The plan will be reviewed each semester and revisions made accordingly.

Students are instructed as follows:

- Plan ahead for emergencies and know the evacuation route or shelter location beforehand. Refer to their Individualized Emergency Care Plan located on the back of the Accommodations Form. Identify the primary and alternate persons who will assist you in an emergency.

If you use a wheelchair

- If evacuation is ordered, proceed to the nearest designated exit.
- If in a building with more than one story, exit to the nearest stairwell and call campus police at 252.536.2551 or 252.536.4221.
- Ask someone else to notify campus police of your location.
- Remain with the assigned faculty or staff who has been assigned to assist you during an emergency.

If you have a Mobility Impairment (use crutches, cane, or walker)

- If evacuation is ordered, proceed to the nearest designated exit.
- If in a building with more than one story, exit to the nearest stairwell and call campus police at 252.536.2551 or 252.536.4221.
- Ask someone else to notify campus police of your location.
- Remain with the assigned faculty or staff who has been assigned to assist you during an emergency.

If you are Deaf or Hearing Impaired

- If evacuation is ordered, proceed to the nearest designated exit.
- Look for the visual fire alarm in the hallway.
- Ask for assistance by writing a note or using hand gestures.
- Remain with the faculty or staff who has been assigned to assist you during an emergency.

If you are Blind or Visually Impaired

- If evacuation is ordered, proceed to the nearest designated area.
- Listen for the audio fire alarm or other warning signal.
- Remain with the faculty or staff who has been assigned to assist you during an emergency.
- Tell the person how to assist you.
- Give the person assisting you additional instructions if you have a guide dog.

The instructor of each of the student’s classes will be the primary assistant for the student with a disability. Additionally, the instructor shall identify an alternate faculty or staff person to assist
individuals with disabilities during an emergency. The instructor will be responsible for identifying the alternate faculty or staff person during the first class period of each semester and reporting the name of the alternate to the student and to Counseling Services. The instructor will name a new alternate immediately upon faculty or staff turnover.

AREAS WITH CLIENTS OR PATRONS
Follow the specific plan for your area. Patients and visitors must be accounted for.
The Centre
Cosmetology
Child Care Center
Dental Clinic

DISTANCE LEARNING
Emergency plans for distance learning are included in the Disaster Recovery Plan.

SAFE AREAS & RALLY POINTS
IMPORTANT: The secondary rally points are NOT to be publicized. Rally Point 1-7 signs encircle the campus buildings and are positioned for optimum visibility during an evacuation.

ALLIED HEALTH
SAFE AREA
B128 and B126

RALLY POINTS
Primary
Out back door of clinic
RALLY POINT 6 - Back parking lot of The Centre

Secondary (unpublicized)
Back parking lot over by maintenance shop

EMERGENCY LEVEL CLASSIFICATION

[11-5]
The following guide provides examples of situations requiring rapid assessment of the severity of the emergency and the chain of notification needed.

<table>
<thead>
<tr>
<th>SEVERITY TYPE</th>
<th>INCIDENT TYPE</th>
<th>ACTIONS/NOTIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEVEL 1</td>
<td>Minor incident. Examples: Communicating threats, minor injury, traffic accident.</td>
<td>Campus police determines there is no further hazard to persons and/or property. Campus police notifies administrator in charge of the area or dept. where incident occurs</td>
</tr>
<tr>
<td>LEVEL 2</td>
<td>Incident with potential to pose a minimal hazard to persons and/or property. Examples: contained fire, tornado watch</td>
<td>Campus police notifies administrator in charge of the area or dept. where incident occurs</td>
</tr>
<tr>
<td>LEVEL 3</td>
<td>Incident with potential for widespread impact to public safety and/or property which requires assistance from outside agency. Example: bomb threat, utility outage.</td>
<td>Campus police contacts Vice President of Administrative Services or designee, who notifies President and other Vice Presidents.</td>
</tr>
<tr>
<td>LEVEL 4</td>
<td>Incident(s) that pose significant risk to persons and/or property requiring substantial outside assistance. Examples: major fire, explosion, terrorist act.</td>
<td>Campus police contacts Vice President of Administrative Services or designee, who notifies President and other Vice Presidents.</td>
</tr>
</tbody>
</table>

**QUICK-REFERENCE INFORMATION**

<table>
<thead>
<tr>
<th>NAME</th>
<th>PHONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Response System (Fire, Police, Rescue)</td>
<td>9-911</td>
</tr>
<tr>
<td>Security</td>
<td></td>
</tr>
<tr>
<td>President</td>
<td>217</td>
</tr>
<tr>
<td>VP, Administrative Services</td>
<td>269</td>
</tr>
<tr>
<td>VP, Instructional Services</td>
<td>256</td>
</tr>
<tr>
<td>VP, Institutional Advancement</td>
<td>239</td>
</tr>
<tr>
<td>Dean, Continuing Education</td>
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**General Accident or Injury, Including Shop Accidents**

[11-5]
If you are involved in or witness an accident on campus, take the following steps:

• Check the scene to make sure it is safe for you to respond

• Call or instruct someone else to call 911 if necessary and THEN notify Campus Police at 252-536-2551 or 252-536-4221 or dial “0”

• Remain on the telephone with Campus Police unless instructed otherwise

• Properly trained individuals should render immediate first aid. Do **Not** attempt to move injured persons unless a life-threatening condition such as a fire exists

• If the cause of the accident still poses a danger to others, notify the Campus Police and provide assistance as requested to reduce or eliminate the danger

**Medical Emergency**

• Check the scene to make sure it is safe for you to respond

• Call or instruct someone else to call 911 if necessary AND Campus Police at 252-536-2551 or 252-536-4221 or dial “0”

• Remain on the telephone with Campus Police unless instructed otherwise

• Do **not** move injured persons unless a life-threatening condition such as a fire exists

• Remain or instruct someone to remain at the scene as long as necessary to assist Campus Police or other responding personnel

**Disruptive Behavior/Civil Disturbance**

NOTE: A civil disturbance does **NOT** exist if there is “peaceful picketing or demonstrating as a means of expressing dissent or point of view.” A civil disturbance **DOES** exist “if picketing or demonstrating does jeopardize public order or harass organized meetings in such a manner as to deprive speakers of the right of expression.” Interference of regular classroom, laboratory, or office activity is included.

• If the situation is dangerous or potentially dangerous, call 911. THEN notify Campus Police by dialing 252-536-2551 or 252-536-4221 or “0.”

**Non-Threatening Disruptive Behavior**
Dealing properly with non-threatening behavior may prevent that behavior from escalating to threatening or violent behavior.

- Clear the area of spectators who are not involved in the situation or remove the person from the area.

ONLY FIRST RESPONDERS NEED TO INTERACT WITH THE PERSON EXHIBITING THE BEHAVIOR (Counselor, Dean, Security, etc.). Other responders may be on standby in the event the behavior escalates.

- Respond quietly and calmly using “I” statements throughout the dialogue.
- Do not take the individual’s behavior personally.
- Demonstrate concern by listening closely and asking open-ended questions (e.g., tell me what happened).
- Summarize often what you heard the individual say (e.g., it sounds like you are saying…).
- Focus on being honest with the individual about the outcome of the situation (e.g., It sounds like you think you were being picked on and you then became angry. I understand what you are saying; however, you know there is a zero tolerance policy for the kind of language that was used and, as a result, you will have a one-day suspension.).
- Notify others as appropriate (supervisors, Personnel, Campus Police).
- If the disruptive behavior escalates, assess whether or not the individual is exhibiting behaviors that may be dangerous to self or others (e.g., displaying a weapon, punching furniture/walls, hitting palm of one hand with fist from the other hand).
- If you believe the individual is upset but not a danger to self or others, mutually develop a coping plan.

**Threatening Behavior**

In the event of overtly threatening behavior constituting an immediate threat to self or others, call 911 and then Campus Police at 252-536-2551 or 252-536-4221 or dial “0.”

- Respond quietly and calmly using “I” statements throughout the dialogue.
- Do not take the individual’s behavior personally.
- Demonstrate concern by listening closely and asking open-ended questions (e.g., tell me what happened).
- Summarize often what you heard the individual say (e.g., it sounds like you are saying…).
- Focus on being honest with the individual about the outcome of the situation (e.g., It sounds like you think you were being picked on and you then became angry. I understand what you are saying; however, you know there is a zero tolerance policy for the kind of language that was used and, as a result, you will have a one-day suspension.).
- Clear area of spectators or remove person from area and from feeling like being on exhibit.
- Ask the individual to walk to a quiet location to discuss the matter.
• Alert others for assistance by using the prearranged distress signal or device. In turn, they should immediately notify Campus Police at 252-536-2551 or 252-536-4221 with as many details as possible of the ongoing incident.
• Inform the individual of what may happen next and of how they can help to de-escalate the situation. (Security has been notified and will arrive shortly. You want to be respectful when talking to them so that you can put this behind you.)

**Mental Health Emergency**
In a student is exhibiting behavior that creates concern, call 252-536-2551 or 252-536-4221 or dial “0.”

• Ask the individual if he or she would like to be accompanied to a Counselor.
• Observe behavior:

**NON-EMERGENCY BEHAVIOR—REFER TO COUNSELOR OR COMMUNITY AGENCY:**
- Stumbling, smell of alcohol, staggering, slurred speech, squirming, fidgeting
- Easily upset, cries easily, displays anger quickly
- Annoyed with routine procedures, irritability
- Impaired speech or garbled/disjointed thoughts
- Morbid, violent or depressing themes in written assignments
- Verbal expression of suicidal or violent thoughts

**TRUE EMERGENCY:**
- Uttering threat if the individual includes details. You MUST notify whom the threat is made against (Duty to Warn).

**Bomb Threat**
All bomb threats are to be taken seriously. Call 911 and then notify Campus Police at 252-536-2551 or 252-536-4221 or dial “0.”

If you receive a bomb threat by telephone, remain calm, write down the caller’s exact words and note the time of the call. Listen carefully to background noises. Check for Caller ID information. Ask the caller the following:

- When is the bomb going to explode?
- Where is the bomb right now?
- What does it look like?
- What kind of bomb is it?
- What will cause it to explode?
- Did you place the bomb?
- What is your name and address?
Inform your supervisor / department head of the bomb threat phone call.

If you receive a bomb threat in written form, do the following:
• Notify 911 and Campus Police at 252-536-2551
• Do a quick visual inspection of your area. Do not touch or move any suspicious objects
• Do not use radios or cell phones as they can trigger an explosive device
• If you are told to evacuate the area by authorized personnel, move to the appropriate Rally Point

**Explosion or Aircraft Down (Crash)**
An explosion is caused by a rapid expansion of gas from chemical reactions or incendiary devices. Signs of an explosion may be a very loud noise or series of noises and vibrations, fire, heat or smoke, falling debris or building damage.

• Evacuate the building as quickly and calmly as possible, call 911 AND notify Campus Police at 252-536-2551 or 252-536-4221 or dial “0”
• If items are falling above your head, get under a sturdy table or desk
• If there is a fire, stay low to the floor and exit the building as quickly as possible
• Assist others in exiting the building and move to designated evacuation areas
• Keep streets and walkways clear for emergency vehicles and crews
• Untrained persons should not attempt to rescue people who are inside a collapsed building, wait for emergency personnel to arrive
• DO NOT use elevators. Persons with mobility concerns should go to an area of safety and await emergency rescue teams

The responding emergency agency will make decisions regarding the control and abatement of the explosion incident, and issue or not issue the all-clear for safe building re-entry and occupancy.
**Explosion or Aircraft Down (Crash)**

An explosion is caused by a rapid expansion of gas from chemical reactions or incendiary devices. Signs of an explosion may be a very loud noise or series of noises and vibrations, fire, heat or smoke, falling debris or building damage.

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**Fire and Emergency Evacuation**

Leave your building immediately when an alarm sounds or if you are instructed to do so by authorized emergency personnel.

- Remain calm
- Cease hazardous operations if possible
- Take important personal items—in particular, identification
- Close doors behind the last person out and cease hazardous operation IF possible.
- Follow the nearest evacuation route
- Walk quickly, single file—DO NOT RUN
- DO NOT use elevators, except to assist a person with disabilities under the following situations:
o Evacuation is urgent
o Use of elevator is necessary
o Elevator is operated by Fire Department personnel

- Notify others on your way out
- QUICKLY check restrooms, copy rooms or storage rooms for people unaware of the evacuation
- Assist and accompany persons with disabilities
- Move to the designated Rally Point
- Follow the instructions of Police and Fire personnel

Additionally, faculty members and supervisors assume the role of monitors or coordinators for their students and staff during such emergencies. Therefore, faculty members or supervisors should do the following:
  - Be aware of the evacuation routes before an emergency
  - Ensure that classroom and office doors are closed after everyone has evacuated
  - Proceed to designated Rally Point
  - Take roll sheets with you—account for who is missing and report to campus police

Flooding & Water Damage

Flooding on or near campus can result from major or multiple rainstorms, water main breaks, plumbing problems or roof leaks.

- Quickly move to safe areas within the building, or evacuate building as instructed by Campus Police

- If it is safe to do so, secure vital equipment, records, chemicals, laboratory experiments and electrical equipment prior to evacuation

- Once evacuated, avoid areas susceptible to flooding and seek shelter as necessary

- Remain as a group and wait for further instructions

- If assisting in cleanup, immediately report any oil, chemical or hazardous materials suspected of mixing with floodwater to Campus Police at 252-536-2551 or 252-536-4221 or dial “0”

- If instructed to evacuate campus due to outside flooding, depart immediately to avoid becoming stranded

- If you are in a car and it stalls, abandon it immediately and proceed to higher ground

- Avoid driving or walking through flooded areas or swiftly moving water
Gas Leak
The following steps should be followed if a gas leak is suspected:

• Cease all activity immediately

• Do not use cell phones or any other electrical equipment

• Notify Campus Police at 252-536-2551 or 252-536-4221 or dial “0” immediately if a gas leak is suspected. Provide details about the location and circumstances

• Evacuate the area as quickly as possible, moving to an outside location at least 500 feet from the location of the suspected leak

Hazardous Material Spill
• Call 911
• Isolate area—evacuate, if necessary
• Keep exposed people separate from others
• Notify Campus Police
• Notify supervisor or the nearest supervisor (whichever is fastest)

Public Utilities or Service Disruptions
If a power outage occurs in your office or building, do the following:

• Remain calm

• Call Campus Police at 252-536-2551 or 252-536-4221 or dial “0” to report any room, building, or campus power outages

• After initial report, keep telephone lines to Campus Police clear for emergency calls and other needs related to power outages

• Help those in your area who may be unfamiliar with your space

• If in an unlighted area, cautiously move toward an area with emergency lighting

• If in an elevator, stay calm. Use the emergency phone, or other phone to contact Campus Police at 252-536-2551 or 252-536-4221

• If in a laboratory area, fume hoods will not work properly during an electrical outage. Laboratories should not be used until power has been restored. Evacuate the building if instructed to do so.

Active Shooter NOT in Your Building
Shootings and other violent acts are unpredictable, and your immediate response depends on the situation you face.

- Shelter in Place immediately and remain in place until told to leave
- Call 911 and notify Campus Police at 252-536-2551 or 252-536-4221 or dial “0,” providing the dispatcher with the following information, if known:
  - Your name
  - Location of the incident (be as specific as possible)
  - Number of shooters or assailants, if known
  - Identification or description of shooter(s) or assailant(s) (race, gender, clothing description, physical features, type of weapon, etc.)
  - Your exact location
  - Injuries to anyone, if known

Active Shooter in Your Building

An active shooter is a person whose activity is immediately causing serious injury or death and has not been contained. Active shooters use firearms, and there is often no pattern or method to their selection of victims. These situations evolve rapidly, demanding immediate deployment of law enforcement resources to stop the shooting and minimize harm to innocent victims. If you are directly involved in an incident and exiting the building is not possible, take the following actions:

- Go to the nearest room or office
- Close and lock the door. Barricade the door if possible
- Turn off lights, radios and computer monitors
- Close blinds and block windows
- Seek protective cover away from windows and doors (behind concrete walls, filing cabinets, thick desks, etc.)
- Keep quiet and act as if no one is in the room. Silence cell phones
- Do not answer the door
- Do not respond to any voice commands until you can verify the source
- Call 911 and notify Campus Police at 252-536-2551 or 252-536-4221,
providing the dispatcher with the following information:
- Your name
- Your location
- Number of shooters or assailants, if known
- Identification or description of shooter(s) or assailant(s) (race, gender, clothing description, physical features, type of weapon, etc.)
- Injuries to anyone, if known

- Wait for Campus Police or local police to assist you out of the building

**Suspicious Object, Package, etc.**
If you receive or observe a letter or a package whose appearance is somehow suspect, do the following:

- Do not move, open, cover or interfere with the letter or package
- Move away from the area
- Do not use cell phones or radio equipment within 100 feet of object
- Call 911 and notify Campus Police at 252-536-2551 or 252-536-4221
- Wash your hands with soap and water
- Follow Police and Fire personnel instructions

**Severe Weather Emergency**
Campus Police monitors a weather radio which broadcasts news of severe weather watches and warnings. Your building will be alerted if conditions deteriorate.

**Severe Weather WATCH**
Issued whenever conditions are favorable for formation of such storms

**Severe Weather WARNING**
Issued when such storms have formed and pose an imminent threat

**TORNADO**
- Follow your building’s shelter plan
- Take shelter in a basement or the smallest, most interior rooms and hallways on the lowest floor
- Avoid glass-enclosed places or areas with wide-span roofs such as auditoriums or gymnasiums
- Crouch down and cover your head
- Wait for the “all clear” signal from authorized emergency personnel
and Campus Police

THUNDERSTORM
• Stay away from windows
• Draw shades or blinds to reduce injury from flying glass
• Minimize use of electrical appliances including computers

College Closing Information

Please do NOT call the campus operator for cancellations.
If the College is closed due to inclement weather or other circumstances, the President will inform you via e-mail and/or the College intercom system. You may also access information through the following means:

• If there is power, an e-mail will be sent to all faculty, staff and students via Groupwise.

• Media outlets will be notified (see Safety Plan).

The President or a designee will authorize all closings.

You may be instructed to leave campus via a designated route.
DENTAL CLASSROOM EMERGENCIES

In case of an accident or injury:

- Never leave an injured student unattended.
- The instructor will determine the status of the victim and will direct treatment.
- If the instructor is the victim, a supervising (pre-designated) student will take charge of the situation. This student will ask another student to summon help at the Clinic Manager’s desk. The Clinic Manager will find an instructor or other faculty member to attend the emergency situation. The supervising student will remain with the victim and begin basic first aid procedures until help arrives. All other students are asked to remain in their seats unless their assistance is requested.
- A student may be asked to retrieve the first aid kit or other emergency equipment. The student will place the first aid kit within reach of the instructor/supervising student. The first aid kit is located in the cabinet in the sterilization room in the cabinet marked with a large Red Cross. The oxygen tank is located to the right of the sterilization door.
- If so advised, the student will use the telephone in the Clinic Manager’s office to call for help. The student should dial 0 and ask the front desk operator to report the emergency. The student will answer all pertinent questions and follow the directions provided by emergency personnel.
- The supervising instructor will complete and remit appropriate safety forms.

General Safety Guidelines:

- Maintain a clean and organized classroom.
- Keep walkways clean of obstruction.
- Turn off power and unplug all electrical devices prior to exiting the classroom.
- All students are responsible for knowing the location of and how to use/operate emergency equipment and supplies. Faculty has the right to ask a student to demonstrate these abilities at any time.
DENTAL CLINIC EMERGENCIES

Examples of emergencies that require assistance include:

- Cardiac Arrest
- Airway Obstruction
- Grand Mal Seizure
- Myocardial Infarction
- Angina (does not respond to nitroglycerin)
- Acute Adrenal Insufficiency
- Acute Pulmonary Edema
- Hyperglycemia
- Acute Thyroid Dysfunction
- Allergic Response (respiratory or anaphylaxis symptoms)
- Severe Overdose Reaction

In case of accident, injury, or other emergency:

- Never leave the patient unattended.

- The student (HYGIENIST) will announce an emergency by speaking the nearest instructors first name in a loud voice. Begin basic first aid procedures until help arrives.

- The closest available student (ASSISTANT) hearing the announcement above will summon the supervising DENTIST. Use the DENTIST'S first name when summoning the DENTIST. This will clue the DENTIST that there is an emergency situation. This ASSISTANT will await further instruction. All other students will remain with their patients and keep a calm atmosphere by continuing to work.

- The HYGIENIST will provide the DENTIST with information about the patient’s medical history and symptoms, monitor and record vital signs, record details of emergency treatment, and assist the DENTIST as necessary.

- The DENTIST will determine the status of the patient and will direct treatment.

- The ASSISTANT may be asked to retrieve the first aid kit or other emergency equipment. The ASSISTANT will place the first aid kit within reach of the DENTIST. The first aid kit is located in the closet of the sterilization room in the RED first aid cabinet. The oxygen tank is located to the left of the first aid cabinet.

- If so advised by the DENTIST, the ASSISTANT will use the telephone in the Clinic Manager’s office to call for help. The Clinic Manager will dial zero to reach the front desk to summon 911. If the Clinic Manager is not in the office, the ASSISTANT should dial zero and ask the front desk to report the emergency. The ASSISTANT will answer all pertinent questions and follow the directions provided by emergency personnel.

- The DENTIST will complete and remit appropriate safety forms and will assure appropriate information has been recorded by the HYGIENIST in the patient chart.
EMERGENCY EQUIPMENT

The emergency cart in the Dental Clinic is equipped to handle emergencies based on the training level of the students and instructors and the HCC’s proximity to emergency medical services. The cart and oxygen tank, with masks, are located in the storage room off of the sterilization area. The door is marked with a red cross.

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<tr>
<td>Antihistamine</td>
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<tr>
<td>Respiratory Stimulant</td>
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<td>Sugar Substitute</td>
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<td>Vasodilator</td>
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**Other items:**
Comfit face masks  Pens

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<tr>
<th>Second Drawer</th>
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<tbody>
<tr>
<td><strong>Category</strong></td>
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<tr>
<td>Bronchodilator</td>
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**Other Items:**
Magill forceps  Alcohol prep pads
PVP prep pads  Scissors
Safety syringes  1 ml syringes
Microshield  Pocket mask
Pupil pen

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<tr>
<td><strong>Category</strong></td>
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<tr>
<td>Antimicrobial</td>
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❖ **Call Poison Control at 1-800-222-1222**

Induce vomiting  Syrup of Ipecac  Poisoning
Absorption  Activated Charcoal  Instant Milk  Poisoning
Other Items:
Berman airway
Pediatric rebreathing mask
Glucometer
Stethoscope
Robertazzi Nasophymgeal airway
Adult rebreathing mask
Blood pressure cuff

Fourth Drawer:
Sharps container
Emesis basin
Biowipe Econ kit
Kwik Kold Instant Ice Pak
Triangular bandages
Regular stretch gauze

Oxygen Cart (located beside Emergency Cart)
“E” size oxygen tank regulator
Nasal cannula
Directions for use of tanks and masks
Non-rebreather mask

Eyewash Stations
Located in the dispensary and the clinic lab in the dental clinic and in Dental Materials Laboratory. They are marked with green “Eye Wash Station” signs.

Ammonia Vaporole
Taped inside overhead cabinet in each dental operatory in the clinic and in the Emergency Crash Cart.

Fire Blanket and Pillow
Located in the Storage room off the sterilization room on shelf next to Emergency Cart.

Fire Extinguishers
One is located in the Dental Materials Laboratory and two are located in the Clinic.

First Aid Kits
One first aid kit is located in the clinic lab and one in the materials lab classroom. Both are marked with “First Aid Kit” signs.