

**John A. Logan College  
Dental Assisting Program  
Bloodborne Pathogens  
Exposure Control Plan  
Standard Operating Procedures  
Dental Assisting Program**

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**Exposure Control Plan  
Introduction**

The purpose of this plan is to outline the current accepted manner of safe asepsis, infection and hazard control as it relates to pathogenic contamination and environmental factors. The goal is to implement a sound infection and hazard control program. Dental personnel may be exposed to a wide variety of microorganisms in the blood and saliva of patients. Infections may be transmitted in dental practice by blood or saliva through direct contact, droplets, or aerosols. Although not documented, indirect contact transmission of infection by contaminated instruments is possible. Patients and dental health care workers (DHWs) have the potential of transmitting the infections to each other. Because all infected patients cannot be identified by health history or tests, the recommendations in this manual will be used routinely in the care of all patients in our clinical facility. Acquired Immunodeficiency Syndrome/Human Immunodeficiency Virus is not the greatest infection risk for dental personnel. In fact, the risk would appear to be extremely low. Risks for other infections are documented by the 13-28% rates of HB infection, with annual infection rates of 3-5%. Like 80% of other persons who are unaware of their Hepatitis B infection, infected personnel have up to a 42% risk of infecting their spouses and family. Public health data has not documented random HB infections that may occur between dental patients, but they do show that dentistry cannot be overlooked as a source. Transmission of Human Immunodeficiency Virus Infection (HIV/AIDS) virus by dental equipment is unlikely. However, Hepatitis B and TB can survive for over a week; non-A/non-B viruses, TB, C.V., Epstein Barr virus or herpes virus for minutes to hours. They may be transferred directly, or possibly be aerolite later. One school of thought will insist that there can be no compromise with the aseptic measures employed. Another group may insist that a rigid aseptic technique is not practical in a busy office practice dealing with minor procedures in a large volume of patients. The fact remains that infection does not differentiate minor from major surgery, large numbers from small numbers of patients, or short operations from long operations. It is generally believed that the reason for the relatively low incidence of oral infection after surgical procedures within the mouth can be traced directly to Aman=s acquired tolerance of his own microorganisms.@ No doubt these same organisms transmitted to another individual in cross infection are likely to result in virulent infection. In other words, man can tolerate his own organisms better than he can tolerate somebody else=s. This fundamentally proper concept justifies the need for aseptic technique in areas that defy complete sterilization, areas such as the

mouth. The knowledge of this and modes of application are constantly changing, being improved, and continual revisions and education is necessary. The goals will remain the same, but the application method and known risks will always be changing. Therefore, this plan will be frequently revised.

The methods and equipment are designed to protect **equally**; the patient from the provider and their environment, the providers from the patient and the patient from other patients.

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Any break in this protection could result in loss of physical and/or emotional health. The mandated procedures outlined herein are in addition to the other health provider mechanisms, such as health histories, examinations, and treatment. Every patient and every item used in the delivery of dental care must be considered a potential hazard or source of infection. Likewise it is only appropriate for those delivering the care to consider themselves as a potential source of infection to the patient. Only this philosophy will produce an environment that is as safe as possible.

### ***Infection Control Training Guidelines***

Implementation of a professional infection/hazard control program is necessary to make sure that employers are aware of the modes of transmission of Hepatitis B and Human Immunodeficiency Virus and other blood-borne infections so they can recognize situations when they might be exposed and know how to avoid or minimize personal risk. All health care professionals have a legal, as well as ethical obligation, to share in the responsibility for sound infection control management. According to the Occupational Safety and Health Administration the employer must:

- Provide appropriate staff training in infection control;
- Provide appropriate safeguards for your staff;
- Monitor compliance with the OSHA guidelines; and
- Maintain all of the above

Also, OSHA requires classification of employees, according to the type and nature of their work, specifically in dealing with body fluids; it requires a Standard Operating Procedure (SOP) program be set up regarding each of these tasks and categories; it requires that employees= compliance with these SOP be monitored; and finally, the employer must document training completed, instances of noncompliance, actions taken to initiate compliance, and instances of accidental exposure to body fluids.

### ***How to Categorize Your Personnel***

OSHA guidelines mandate that tasks performed in the dental office must be evaluated and classified into one of the three following categories. To be in compliance, therefore, you must maintain records indicating the names of employees and the category into which they fall.

***Category I C Tasks involving exposure to blood, body fluids or tissues.*** All procedures or other job-related tasks that involve an inherent potential for mucous membrane or skin contact with blood, body fluids or tissues, or a potential for spills or splashes of them, are

*Category I* tasks. Appropriate protective measures should be required for every employee engaged in *Category I* tasks. @ Dentists, hygienists, chairside assistants and laboratory technicians fall into this category.

**Category II C** *Tasks that involve no exposure to blood, body fluids or tissues, but employment may require performing unplanned Category I tasks.* A The normal work routine involves no exposure to blood, body fluids or tissues, but exposure or potential exposure may be required as a condition of employment. @ Business staff who may, as part of their duties, help clean up, set up, handle instruments or impressions, or send out lab work are generally *Category II employees*.

**Category III C** *Tasks that involve no exposure to blood, body fluids or tissues.* A The normal work routine involves no exposure to blood, body fluids or tissues. Persons who perform these duties are not called upon as part of their employment to perform or assist in emergency medical care or first aid or to be potentially exposed in some other way. @ Note:

These classifications are not rigid and there may be crossover, depending upon the job performed.

A sample A Employee Category Form @ is included at the end of this chapter. Make sure you complete it, and make updates as necessary.

### **Maintenance of Records**

Guidelines for infection control record keeping and recommendations are included in this

plan, and are necessary forms. Completion of and compliance with the procedures and practices outlined here are believed to be sufficient to comply with OSHA and Center for Disease Control guidelines. \*In the student simulated clinical setting the contact with blood is minimal.

### **Objectives of Training Program**

1. Comply with all OSHA guidelines.
2. Educate all staff members about the importance of infection control in the office.
3. Reduce the risk of cross-contamination in the dental environment.
4. Help reduce the number of pathogenic microorganisms found in the dental environment.
5. Reduce the likelihood that dental health care workers might contract infectious diseases in your practice.
6. Protect the health and careers of dental health care workers.

The training program, to be conducted periodically, should ensure that all employees:

1. Know the ways HBV and HIV are transmitted.
2. Can recognize and differentiate Category I, II, and III tasks. The employee must know what category their tasks are classified.
3. Know the types of protective clothing and equipment generally appropriate for Category I and II tasks and understand the basis for selection of clothing and equipment.
4. Are familiar with appropriate actions to take and persons to contact if unplanned Category I tasks are encountered.

5. Are familiar with and understand all the infection control requirements for each procedure and protective equipment used.
6. Know where protective clothing and equipment is kept, how to use it properly, and how to remove, handle, decontaminate, and dispose of contaminated clothing and equipment.
7. Know and understand the limitations of protective clothing and equipment. For example, ordinary rubber gloves offer no protection against needle stick injuries.
8. Know the corrective exposure of fluids or tissues, recognize the appropriate reporting procedures, and how to obtain information on the medical monitoring recommended in cases of suspected parenteral exposure.

\*These guidelines would pertain to only faculty initially. By didactic knowledge obtained in the classroom and example demonstrated by faculty, this information will be transmitted to the student.

Examples of documentation of training, incident record forms, and employee category form are included.

### ***Responsible Parties***

The dental assisting coordinator is responsible for overseeing all aspects of infection control in preclinical and clinical phases of the program. This includes monitoring compliance with the exposure control plan contained in the Bloodborne Disease Pathogens Standard. As well as overseeing all aspects of infectious waste management, including assembly of state and local infectious waste regulations, the proper packaging of infectious waste and its proper disposal. The coordinator will also be responsible for overseeing the sterilization and disinfection of all instrumentation and environmental surfaces in the preclinical and clinical classes at John A. Logan College Dental Assisting Lab. Sterilization methods will be monitored by use of spore testing. These individuals will also assure that the faculty, staff, and students are in compliance of the Hygiene Exposure Control Plan.

### ***Goal***

Protection of faculty, staff, students, and patients from infection and environmental hazards within John A. Logan College preclinical and clinical sessions. This written exposure control plan is accessible to all hygiene faculty, students, housekeeping and maintenance personnel.

### ***OSHA Compliance Calendar***

Component

Items

Effective

Date

60 days

90 days

120 days

OSHA Standard

8-20-06

Exposure control  
plan

Exposure control

11-20-06  
Methods of  
compliance  
practices  
Engineering/work  
1-20-07  
Personal  
protective  
equipment  
1-20-07  
Housekeeping  
1-20-07  
HBV vaccination/  
postexposure  
procedures  
HBV vaccination/  
postexposure  
procedures  
1-20-07  
Labeling  
Labeling  
1-20-07  
Training  
Training  
5-20-07  
Recordkeeping  
Recordkeeping  
5-20-07

***Written Infection Control Plan***

A written control plan will be provided that contains the following items:

- a. identification of tasks that have the potential to cause infection;
- b. identification of all personnel that could be exposed to infection;
- c. identification of methods to be utilized by faculty, staff, and students to prevent infection;
- d. identification of methods to be utilized to protect patients from infection.

Faculty, staff, and students will receive training on the following topics:

- a. the epidemiology, modes of transmission, and prevention of HIV, HBV, and other infectious diseases;
- b. the location and use of personal protective equipment;
- c. proper work practices and universal precautions;
- d. the meaning of the biohazard symbol and the use of the red biohazard bags for infectious waste only;
- e. precaution in handling infectious waste or contaminated items;
- f. procedures to follow if an exposure incident occurs;
- g. record keeping;
- h. a copy of OSHA's Bloodborne Pathogens Standard;

- i. an explanation of John A. Logan College Dental Assisting Exposure Control Plan; and
- j. standard operating procedures for preclinical and clinical settings.

***Practice Infection Control***

***Training Record***

The lab supervisor conducts training sessions for staff and students, incorporating the latest infection control recommendations as set forth by the Center for Disease Control. All new staff and students entering the program receive infection control training. All staff receive training updates at regular intervals.

***Date:***

***Training Conducted By:***

***Signature:***

***Attended By:***

***Signature:***

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*Dental Assisting Accreditation - Exhibit Y 7*

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***Infection Control Overview***

All intraoral preclinical and clinical procedures will be considered potentially infectious. All instrumentation, handpieces etc. will be sterilized using steam under pressure, or liquid sterilant. Guidelines for time and procedures are included in this document.

***Category I:*** Task involving exposure to blood, body fluids, or tissues. All procedures or other job-related tasks that involve an inherent potential for mucous membrane to skin contact with blood, body fluids or tissues, or a potential for spills or splashes of them, at Category I task. Most but not all tasks performed by the dentist, dental assistant, dental hygienist and laboratory technician fall in this category.

This includes the following positions:

1. Clinical Faculty
2. Dental Assisting Students
3. Maintenance/Housekeeping

***Category II:*** Tasks that involve no exposure to blood, body fluids, or tissues, but employment may require performing unplanned Category I tasks.

This could include the following positions:

1. Non-Clinical Dental Assisting Faculty
2. Maintenance

***Category III:*** Tasks that involve no exposure to blood, body fluids, or tissues. Faculty members and students must be immunized for Hepatitis B or sign a release form stating they have been informed of the potential hazards and have chosen not to have the vaccine. Faculty members receive the immunization at no cost; students are responsible for the cost of their vaccine. Mantoux and Rubella Titer are also required.

***Methods of Compliance***

An effective infection control plan will require the cooperation of student, faculty, and staff. This must be achieved through education, demonstration, monitoring and evaluation. Faculty have primary responsibility for infection control in the clinical facilities. The student=s actions will determine whether or not control of infection has been effective. It is the responsibility of all personnel to practice and enforce approved infection control procedures and to assure that students in preclinical and clinical sessions are conforming to these guidelines.

The John A. Logan College Dental Assisting Program has adopted the following concepts and procedures which are specifically required by OSHA.

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### ***Standard Precautions***

Previous CDC recommendations on infection control for dentistry focused on Universal Precautions, the concept that all blood and certain body fluids should be treated as infectious. It is impossible to know why may or may not be carrying a bloodborne virus, and should be applied to all patients. The CDC replaced Universal Precautions with Standard Precautions by integrating and expanding Universal Precautions to include organisms spread by: Blood, all body fluids, secretions, and excretions except sweat, regardless of whether they contain blood, non-intact skin and mucous membranes.

### ***Preclinical and Clinical Regulations***

The following guidelines apply to all clinic personnel, including students, faculty, and staff, who may come into contact with blood, body fluids, and tissues: During lab sessions, faculty and students must be attired with appropriate protective barriers.

Food and drinks are not allowed in the laboratory areas.

### ***Professional Requirements***

All students and faculty must have a current CPR certificate. A copy of the certification will be placed in the student/faculty file.

All students and faculty must have a current TB test record on file.

All students and faculty must have current immunizations against tetanus, mumps, measles, and polio records on file.

Students and faculty are strongly recommended to obtain the Hepatitis B vaccine.

Those refusing are required to sign a waiver form.

### ***Clinical Dress and Appearance***

Approved personal protective barriers must be worn when providing patient services or when practicing on each other. During lab sessions students must be attired in approved John A. Logan College Dental Assisting uniforms.

All uniform attire must be laundered after each lab session. At the end of the clinical sessions, and between patients all blood soiled disposable items must be placed in a biohazard waste bag for elimination.

### ***Personal Hygiene for Laboratory Sessions***

1. Hair. Hair must be off the collar. Long hair must be pulled back and off collar.
2. Facial hair. Facial hair must be covered by a face mask.
3. Fingernails. Fingernails must be short (no longer than fingertips) with no polish.

4. Jewelry. Students may wear wedding ring only and no larger than 6mm earrings in the ear lobe only.

Rationale: Hair and nails are known to harbor higher levels of bacteria than skin. Long nails are more difficult to clean and may potentially penetrate gloves. Jewelry should be removed for the same reasons. Dental health care workers with injured or cracked skin, erosions, or eczema on hands or arms should exercise additional caution such as using mild soaps and lotion until the lesions are healed.

5. Handwashing. All students and employees must wash their hands before donning gloves and immediately or as soon as feasible after removal of gloves or other personal protective equipment. Students and employees must wash hands and any other skin with soap and water, or flush mucous membranes with water, immediately or as soon as feasible following contact of such body areas with blood or other potentially infectious materials.

Handwashing is mandatory:

- (1) before treatment
- (2) between patients
- (3) after glove removal
- (4) during treatment if an object is touched that might contaminate by another patient's blood or saliva
- (5) before leaving the operatory

### ***Handwashing Hygiene***

Hand hygiene is the single most important factor in preventing the spread of pathogens in health care settings. All students and employees must wash hands when they are visibly dirty, after touching contaminated objects with bare hands, and before and after gloving for patient treatment. Some alcohol-based handrubs contain emollients, or skin softeners and may help improve skin condition.

### ***Alcohol-based Preparations***

We recognize the benefits of alcohol-based handrubs for routine hand antisepsis. Handrubs are convenient, rapid, and effective. However, the following are limitations, and all students and employees must follow these guidelines for using handrubs: do not use if hands are visibly soiled. Hand softeners and glove powder will need to be washed from hands after ten uses of alcohol-based handrubs. Due to alcohol content, handrubs are flammable.

### ***Sharps***

Contaminated needles and other contaminated sharps which include exposed ends of dental wires and files must not be bent, recapped, sheared or removed, except as noted below. Shearing or breaking of contaminated needles is prohibited. Contaminated dental anesthetic needles can only be recapped by a one-handed scoop technique or by the use of a mechanical device that protects the employee/student from needle stick injuries. This exception to the general rule of no recapping is necessary as dental syringes and anesthetic cartridges and their accompanying needles are destined



to be reused on the same patient. It is a safer work environment to safely recap the needle than to over manipulate or to leave the needle uncapped on an operative tray where an accidental needle puncture injury is likely to occur. Likewise, blunt tipped irrigating needles (non-sharp) may be recapped by one handed scoop technique or the use of a mechanical device as these needles are likewise designed for reuse during an operative procedure. When use of these irrigating devices is completed, the blunt tipped needles should not be removed from the syringes. The disposable needle syringe assembly must be discarded as a single unit into a sharps container. Immediately or as soon as possible after use, contaminated reusable sharps must be placed in a container until appropriately processed. If processing immediately follows use, containerization is not necessary. These containers must be puncture resistant, labeled with the biohazard symbol or color-coded in red, and leak proof on the sides and bottom and handled as noted in the AHousekeeping@ section which follows.

### ***Personal Habits and Eating***

OSHA prohibits eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lens in work areas where there is reasonable likelihood of occupational exposure.

Likewise the OSHA standard on bloodborne pathogens prohibits storage of food and drink in refrigerator, freezers, shelves, cabinets or other counter tops or bench tops where blood or other potentially infectious materials are present.

### ***Minimizing Exposure***

All procedures involving blood or other potentially infectious materials must be performed in such a manner as to minimize splashing, spraying, spattering, and generation of droplets of these substances. An example of a method that minimizes the aforementioned exposure would be the use of high volume dental evacuation.

### ***Mouthpepeting***

Mouthpepeting/sectioning of blood or other potential infectious materials is prohibited.

### ***Specimens***

Specimens of blood or other potentially infectious material must be placed in a container that prevents leakage during collection, handling, processing, storage, transport, or shipping. The container must be labeled with the biohazard symbol or color-coded in red and closed prior to being stored, transported or shipped. If outside contamination of primary container occurs, it must be placed within a second container that prevents leakage and is labeled or color-coded according to the requirements of this standard. The primary container does not have to be labeled, if transported only within the facility, universal precautions are followed routinely, and is recognized as containing specimens.

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### ***Equipment***

Equipment that becomes contaminated with blood or other potentially infectious materials must be examined prior to servicing or shipping and must be decontaminated

as necessary, unless this is not feasible. A label must be attached to the equipment stating which portions remain contaminated. This information must be conveyed to all affected employees, the serving representative, and/or the manufacturer prior to handling, servicing, or shipping.

***Inspection schedule for engineering and work practice controls.***

***Item***

***Inspected***

***Responsible Party***

Sharps Containers

At each use

Dental Assisting Coordinator and Faculty

Suction Pumps

Weekly

Dental Assisting Coordinator and Faculty

Durability of Reusable Gloves

At each use or daily

Dental Assisting Faculty and Students

Waste Containers

Daily

John A. Logan College Building & Grounds Dept.

Biohazard

As needed

John A. Logan College Building & Grounds Dept. then BFI

Medical Waste Services

***Personal Protective Equipment (PPE)***

***Provision***

When there is occupational exposure, appropriate personal protective equipment will be provided at no cost to the faculty. This includes gloves, gown, masks, and eye protection. Personal Protective Equipment (PPE=s) will be considered Appropriate@ only if they do not permit blood or other potentially infectious material to pass through to or reach the employees work clothes, street clothes, under garments, skin, eyes, mouth or other mucus membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

***Use***

Faculty and students must use appropriate PPEs unless the faculty person or student temporarily and briefly declines to use the PPEs when under rare and extraordinary circumstances, it was the faculty person or student=s professional judgment that in the specific instance, its use would have prevented the delivery of health care or public

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safety services or would have posed an increased hazard to the student, student partner or faculty member. This allowance must be a rare and extraordinary circumstance. When the faculty person or student makes this judgment, the circumstances will be investigated and documented in order to determine whether changes in the exposure plan can be instituted to prevent such

occurrences in the future. OSHA's example of Arare and extraordinary circumstances@ include a Asudden change in patient status that puts the patient=s life in immediate jeopardy@. PPE=s can only be worn at the worksite. They are not to be worn out of the designated worksite.

### **Removal and Storage**

PPEs that are penetrated by blood or other potentially infectious materials must be removed immediately or as soon as feasible. All PPEs must be removed prior to leaving the work area. PPEs must remain on during treatment, cleanup, and transport of contaminated items within the worksite. When PPEs are removed, they must be placed in an appropriate area or bag for washing or disposal.

1. Gloves. Various kinds of gloves can be used in dentistry: vinyl, latex rubber or nitrile, and plastic film. Latex or vinyl gloves are used for most treatment procedures. When extensive surgical procedures are anticipated, sterile latex or vinyl gloves are required. Nonsterile latex or vinyl treatment gloves are adequate for most procedures.

Rubber utility or nitrile puncture-resistant gloves are used for housekeeping procedures such as cleaning instruments prior to sterilization of surface disinfection. Plastic film gloves may be used temporarily over a latex treatment glove when it is necessary to prevent contaminating of an object such as drawer handles.

Disinfecting agents may cause deterioration of glove materials, and minute tears or punctures in gloves may occur during treatment, resulting in contamination of hands. If tears or punctures do appear, gloves must be removed and replaced. Hands should then be washed before regloving. Utility gloves may be decontaminated for reuse if the integrity of the glove is not compromised; however, they must be discarded if they show any signs that their effectiveness as a barrier is compromised. Powderless gloves are available for faculty who are allergic to the gloves normally provided. All individuals having patient contact or when handling or touching contaminated items or surfaces must wear disposable gloves whenever there is contact with blood, saliva or mucous membranes. Gloves must **NOT** be washed or reused. Gloves must be changed between patients. Gloves must be removed and hands washed before leaving the clinical area. Over gloves are to be worn over the exam gloves if the health care provider must interrupt provision of care and touch anything else.

2. Masks, Eye Protection, and Face Shields. Disposable masks and protective eye wear must be worn when splashes, spray, splatter, aerosols, or droplets of blood or other infectious material may be generated that could contaminate eyes, nose, or mouth. Chin length face shields replace protective eye wear and masks for purposes of OSHA, but for infection control purposes, a mask must still be worn in

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combination with a chin length face shield. The chin length face shield only replaces or serves in lieu of eye wear.

The mask should be adjusted so that it fits snugly against the face so as not to allow spatter to enter around its edges. It should be removed as soon as treatment is over. When removing the mask, handle it only by the elastic or cloth

tie strings. The mask itself should not be touched. OSHA does not consider masks to be regulated waste. A new disposable mask is to be worn for each patient treatment session. When not in use, the mask is not to be placed on the forehead or around the neck. Masks are to be exchanged if they become soiled or splattered from any procedures. Masks are to be discarded in waste containers at the operatory or other worksite.

The type of mask required for students while using silica containing materials (such as gypsum and alginate) needs to be NIOSH approved (N95). These masks are available at Wal Mart, Target, etc. The infection control masks are not designed to provide respiratory protection.

Protective eye wear is not disposable. Protective eye wear must be worn by the student and the faculty when projectiles and splashes, spray, or spatter of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated. Protective eye wear may include conventional glasses with solid side shields, safety glasses, or goggles. As an alternative to protective eye wear, a face shield may be worn.

Eye wear must be disinfected when contaminated between uses, being certain not to handle them with unprotected hands. Eye protection is defined as goggles, glasses with solid side shields, or chin-length face shields.

***Housekeeping Definitions:***

**Sterilization.** The complete elimination of microbial viability. Sterilization should be used for all dental items that can withstand the process.

**Disinfection.** To render free of infection, but less lethal process than sterilization. Inactivates most pathogens, but not all microorganisms. Does not render sterile. Disinfection is only used when sterilization is not possible and sterilizable items are not available.

**Aseptic.** Free from infection or septic material.

**Surface Disinfectant.** A disinfectant chemical that is safe to use on environmental surfaces and dental units.

**ACold Sterilization@.** Unacceptable term - surface or environmental sterilization is not achievable.

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**Chemical Sterilization.** Sterilization by chemical rather than dry heat or moist heat.

**Immunity.** Antibodies present as a result of vaccination or previous disease exposure.

**Active Immunity.**

***Cleaning, Disinfection and Sterilization***

John A. Logan College will assure that the laboratories and preclinical areas are maintained in a clean and sanitary condition. The Coordinator for Dental Assisting has determined an appropriate schedule for cleaning and the method of disinfection for the various surfaces, equipment and room in this institution. All employees/students will wear gloves when cleaning and disinfecting surfaces or items contaminated with blood or other potentially infectious material.

Disinfectants used for the above mentioned surfaces or items contaminated with blood or other potentially infectious materials

include chemical germicides that are approved for use as hospital disinfectants and are tuberculocidal when used at the recommended dilutions and approved by the American Dental Association for such use. Blood spill or spills of other potentially infectious materials must be pre-cleaned and then disinfected with a solution of 5.25% sodium hypochlorite diluted between 1:10 in 1:100 with water. The Coordinator for Dental Assisting will oversee the method and schedule for disinfection:

1. Dental operatory work surfaces and fixed equipment will be cleaned before and after practice session when using partners. Work surface and fixed equipment does not require disinfection if non-contaminating patient interactions are accomplished.
2. Sterilization and preparation work area environmental surfaces will be cleaned and disinfected at the end of each use.
3. Dental laboratory work surfaces will be cleaned and disinfected at the end of each laboratory session.

### ***Cleaning and Disinfection***

All equipment as well as surfaces that could be contaminated must be properly cleaned and decontaminated after coming in contact with blood or other potentially infectious materials.

Work surfaces should be decontaminated with a hospital and ADA approved disinfectant after procedures:

1. when surfaces are overly contaminated
2. immediately after a spill of blood or other potentially infectious material
3. at the end of each preclinical/laboratory session

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Protective covering such as plastic wrap, aluminum foil, or imperviously backed absorbent paper may be used to cover equipment and environmental surfaces. If used, these coverings should be removed and replaced after each patient.

Equipment that may become contaminated with blood or other potentially infectious materials must be cleaned and decontaminated per the above schedule and cleaned and decontaminated prior to servicing or shipping. All pails, cans and similar receptacles designed for waste must be lined with a trash can liner that prevents potential contamination with blood or other potentially infectious materials. Routine noncontaminated trash does not require special handling. Contaminated regulated waste defined in the next section must be handled in accordance with regulated waste rules.

Broken glassware that may be contaminated must not be picked up directly with the hands. It must be retrieved using mechanical means and placed in a sharps container. Reusable sharps contaminated with blood or other potentially infectious materials must be decontaminated prior to washing and or reprocessing. These items cannot be stored

in a manner that requires the student or faculty person to reach by hand into a container where the sharps have been placed. Baskets such as those used in ultrasonic cleaning devices may be used and the instruments dumped because reaching into containers *Ablind@* is not allowed. Another method would be for

the employee/student to use a mechanical device such as tongs to remove instruments.

### ***Sterilization Procedures***

All students/employees handling contaminated instruments must consider those instruments to be highly contagious for serious diseases. The cleaning of these items must therefore be accomplished in a safe manner. The following outline must be utilized:

1. Students/employees cleaning instruments must wear protective gloves to protect from inadvertent skin puncture and contamination. In addition, protective eye wear and a mask must be worn to guard against splatter of cleaning solutions.
2. Clean all instruments and items to remove visible and invisible surface debris (bioburden). The items must be free of blood, saliva, and protein before sterilization. Mechanical washing or ultrasonic cleaning is appropriate. Rinse after cleaning.
3. Sort the instruments, if appropriate.
4. Individually or by Aset@, bag the instruments in their sterilization/storage container.
5. Place the Abagged@ items in the autoclave and sterilize by the appropriate method. Utilize the drying cycle before unloading.
6. Instruments, handpieces, impression trays, burs and bur changers must be sterilized after each preclinical session when using each other as partners.
7. During laboratory sessions, bulk disposal items, such as cements, should be 16 dispensed in anticipated use amounts. Unused amounts must be discarded and not returned to their bulk containers. Single use packaging should be utilized when possible.
8. Any item not suitable for heat sterilization must be chemically disinfected in a manner designed to render it free of infection.
  - a. Scrub with detergent and brush over sink to remove Abioburden@. Rinse.
  - b. Spray with a disinfectant and leave wet for 10 minutes.
  - c. Rinse under water before use.
9. Sterilized and disinfected items should be stored in a manner designed to maintain the initial degree of asepsis. Bulk-closed packaging is a secondary choice. Loose non-packaged items are not acceptable, must be considered contaminated, and require re-sterilization before use.

### ***Methods of Sterilization***

#### ***Method***

- < Steam Autoclave/steam under pressure
- < (AFlash@ cycles)

#### ***Conditions***

- < 20-30 minutes at 250 degrees F
- < **OR** 15-20 minutes is unwrapped @ 15-20 PSI.

#### ***For Flash Sterilization***

- < 3-10 minutes at 273 degrees F
- < @ 15-30 PSI

**Advantages**

- < Time efficient
- < Good penetration
- < Sterilizes water-based liquids in standard cycles

**Precautions**

- < Do not use closed containers
- < Damage to plastic and rubber
- < Non-stainless steel metal items corrode
- < Use of hard water may leave deposits

**Precautions for Flash Sterilization:**

- < Items may be wet after cycle
- < Unwrapped items quickly contaminated after processing

**Method**

- < Unsaturated Chemical Vapor

**Conditions**

- < 20 minutes at 270 degrees F

**Advantages**

*Dental Assisting Accreditation - Exhibit Y 17*

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- < Time efficient
- < No corrosion
- < Items dry quickly after cycle

**Precautions**

- < Do not use closed containers
- < Damage to plastic and rubber
- < Must use special solution
- < Redry instruments
- < Provide adequate ventilation
- < Cannot sterilize liquids
- < Cloth wraps may absorb chemicals
- < Unwrapped items quickly contaminated after processing

**Methods**

- < Dry Heat/Oven type sterilizer (static air)

**Conditions**

- < 60 minutes @ 340 degrees F
- < 120 minutes at 320 degrees F

**Advantages**

- < No corrosion
- < Can use closed container
- < Low cost
- < Items are dry after cycle

**Precautions**

- < Long sterilization time
- < Damage to plastic and rubber
- < Redry instruments
- < Do not open door during cycle

- < Cannot sterilize liquids
- < Unwrapped items quickly contaminated after processing

**Method**

- < Rapid heat transfer (forced-air)

**Conditions**

- < 12 minutes at 375 degrees F (unwrapped)
- < 6 minutes at 375 degrees F (wrapped)

**Advantages**

- < No corrosion
- < Short cycle
- < Items are dry after cycle

**Precautions**

- < Damage to some plastic and rubber
- < Redry instruments
- < Do not open door during cycle

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- < Cannot sterilize liquids
- < Unwrapped items quickly contaminated after processing

**Asepsis Regulations**

**Unit Preparation Prior to Seating the Patient**

1. Wash hands
2. Clean unit and cart, the entire unit, light arm, chair base, extension arms, rheostat and carts, footrest, etc.
3. If operatory has not been prepared, scrub entire unit and work area with Vital Defense (chlorine dioxide). Use a scrub brush/sponge and spray carrier for the liquid chloride dioxide. The liquid chlorine dioxide is sprayed onto the surface to be cleaned and the sponge/brush soaked in chlorine dioxide is used to scrub entire unit.
4. After the unit is cleaned with the chlorine dioxide, it is once again sprayed with the same solution. The disinfectant is allowed to remain on the surface for five minutes.
5. After five minutes, the surface is wiped with an alcohol gauze to remove the chlorine dioxide residue.
6. Flush all the water lines for at least 3 minutes to reduce any microorganisms that may remain overnight.

Prior to attaching handpiece, run foot control until no condensation appears.

Flush ultrasonic scaler lines for three minutes.

Cover surfaces that will be contaminated with approved barriers:

- a. place plastic drape on patient chair
  - b. wrap all handles, including knobs, air/water syringe and light handle, saliva ejector, handpieces
  - c. the unit lamp should be turned on during unit preparation and remain on during patient treatment. Disinfection of the on/off switch is required.
7. Attach disposable saliva ejector tip, three way syringe tip and sterilized handpieces.
  8. Attach a plastic waste bag to an accessible area that will not interfere task



performing. This bag is for OSHA defined regulated waste.

**Laboratory/Clinical Protocol**

1. Wash hands and wrists at the unit and glove. Once gloved, touch only the patient and barrier-covered areas that have been cleaned and disinfected.
2. Charting. Do not touch the record with contaminated gloves. If an entry has to be made in the record during treatment, overgloves must be worn.
3. High-speed Evacuation System. High-speed evacuation should be used at all possible times when using the high-speed handpiece, water spray, or ultrasonic scaler or during a procedure that could cause splatter.
4. Three-way Syringe. The three-way syringe is hazardous because it produces spatter. Therefore, caution must be used when spraying teeth and the oral cavity. When used, a potential for spatter must always be considered and appropriate precautions taken such as the use of nonspatter-producing methods of cleansing, such as use of warm, moist cotton pellets or use of water before air.
5. Dropped Instruments. An instrument that is dropped during treatment will not be picked up and reused. If the instrument is essential for the procedure, a sterilized instrument must be obtained.
6. Disposable Items. Used disposable items should be discarded immediately to avoid contamination of other items. Regulated waste must be placed in the plastic bag. Non-regulated waste should be placed in the standard waste container.
7. Storage and Transport of Contaminated Patient-related Items. Any patient-related item such as bit registrations, impressions, models, dies and prostheses become contaminated. These items should be cleaned and disinfected, as described later, prior to removal from the preclinical/clinical area.
8. Storage of Sterilized Items. The shelf life of correctly packed autoclaved instruments is 2-6 months as long as the packaging remains intact. Do not store instruments for intraoral use unwrapped. Instruments may be stored as sterile tray setups and grouped or may be individually wrapped. There must be evidence on the wrapping, such as color indicator, that the correct temperature was achieved in the sterilization cycle. Instruments must be repackaged and resterilized if there is any sign of damage to the wrapping. Sterilizers must be routinely monitored using biological indicators to guarantee destruction of bacterial spores.

**Clean up after Patient Treatment**

All surfaces that become visible contaminated with blood must be cleaned immediately and disinfected using a solution of bleach or a liquid chemical germicide registered with the Environmental Protection Agency (EPA) as a tuberculocidal hospital disinfectant.

These products are usually applied, carefully wiped off with a disposable wipe, reapplied, and left moist for the recommended time interval. Blood and saliva should be thoroughly and carefully cleaned from instruments and materials that have been used in the mouth.

Properly dispose of regulated and non-regulated waste.

1. Remove gloves and wash hands immediately.
  2. Complete entries on all forms and records relating to the treatment and dismiss the patient.
  3. Put on utility gloves before beginning the cleanup.
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4. Remove barriers from apparatus and items from the operatory. Clean and disinfect as necessary.
  5. Remove all disposables and discard.
  6. Discard needles, such as anesthetic and suture needles, and any disposable sharp instruments, such as scalpel blades, broken instruments, used burs, or any item that could puncture skin, into a rigid biohazard container.
  7. Disinfect all patient contaminated items to be transported to the laboratory, such as impressions, prostheses, bite registration, models, etc.
  8. Remove all barriers from the unit and discard. Clean and disinfect eyeglasses or face shield with detergent and water. Set aside to dry.
  9. Clean, disinfect, and prepare the unit or equipment for the next patient. Any area covered by a barrier may be recovered without cleaning and disinfecting if the barrier was not punctured.
  10. Any surface disinfectant solution is to be applied with a **Asaturated 4x4 gauze.**@
    - a. Mist surface with soap/water mixture, and scrub clean with paper toweling.
    - b. Follow cleaning with 4x4's saturated with disinfectant and scrub surfaces to be disinfected.
    - c. Allow surfaces to dry.
  11. After all waste has been discarded, all handling of contaminated items and surfaces have been completed, and disinfection procedures completed, only then can gloves be removed, discarded, and hands immediately washed.
  12. Remember to clean from the cleanest area to the dirtiest area.

### **X-Ray Unit**

The x-ray unit should be disinfected as should the lead apron and thyroid collar. The door to the x-ray room, exposure button, KVP/MA dial, time control, head, cone, yoke, and arm of the unit all become contaminated during the exposing of films. Double film packets in a protective Abarrier@ will be used for all radiographic procedures provided in the John A. Logan College Dental Assisting Clinic. For radiographic procedures, uncontaminated gloves must be worn. The routine follows:

1. Receive the number of films needed from the clinic instructor/dentist.
2. Set x-ray room up by covering tub head, chain and button with plastic wrap.
3. On cart, place 2 paper cups (one containing the unexposed film, the other empty one will be used for the exposed film). A small brown sack can be placed or taped to the cart for placing the removed plastic Abarrier@ covering the film once it has been exposed.

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4. Seat patient and drape with lead apron.
5. Expose film and remove barriers. Give to x-ray assistant for processing if available.

### ***Infection Control for Handpieces***

Because of the need to provide optimal infection control protocol when treating all patients, it is recommended that all handpieces be sterilized. Only when the manufacturer states that a particular model cannot be sterilized should high-level disinfection be substituted for sterilization.

Follow the directions provided by the manufacturer of your handpiece. This is particularly important because:

- C some handpieces are not able to tolerate either chemical vapor or steam autoclave sterilization;
- C some handpieces may be able to tolerate either;
- C some handpieces should only be sterilized in the steam autoclave, and not in chemical vapor device;
- C while most manufacturers recommend lubrication before and after sterilization, some only advise before;
- C some manufacturers recommend running the handpiece after lubrication with a bur in place, while others do not;
- C certain new ceramic turbine handpieces require no lubrication.

While you must refer to the manufacturer's instructions, certain basic procedures normally apply to the sterilization of all the major brands of handpieces.

1. Scrub contaminated handpiece with a cleaner/detergent before sterilization, then dry. Remember to wear mask, nitrile gloves and safety glasses.
2. Lubricate (use a can of lubricant only for contaminated handpieces and another for sterile handpieces).
3. Place in sterilization bag.
4. Do not pack sterilizer tightly, which would prevent proper penetration.
5. After sterilization cycle is complete, remove from sterilizer immediately and allow to cool in bag.
6. Lubricate handpiece and run prior to use.
7. Monitor and document sterilization with a commercial spore preparation.
8. Always use bags with process indicator strips.

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All potentially infectious materials, which includes all of the previous items, must be separated from other types of waste and placed in containers that are rigid, leak resistant, impervious to moisture, and of sufficient strength to prevent tearing or bursting under normal conditions used in handling, and sealed to prevent leakage during transport. Sharps and sharps with residual fluids must be packaged in a container that is puncture resistant. According to the EPA recommendations, these primary containers must be marked to indicate that medical waste is within. In addition, outer containers must indicate both potentially infectious wastes and biohazard material is within. For sharps specifically, the word sharps must be placed on the outer package and must contain the international biohazard symbol.

While any of this material is on sight and prior to treatment or disposal, it must be stored in a manner that maintains the integrity of the packaging, maintained in a nonputrescent state (which may include refrigeration), be locked if stored in an outside facility, have limited access with access by authorized employees only

and be stored in a manner that affords protection from animals, insects and rodent pests. Material can be stored until it reaches a putrescent state. Facilities generating less than 50 pounds per month are considered small generators and are regulated by more lenient guidelines than those who generate more than 50 pounds per month. Small quantity generators in Illinois (except Chicago) may transport medical waste to a treatment facility that has a permit. Commercial haulers must be licensed as potentially infectious medical waste haulers.

No documentation or tracking records are necessary for small waste generators. Medical waste can be sterilized within the dental facility and therefore rendered noninfectious. The exception to this general principle, however, is that sharps in addition to being sterilized must also be rendered unrecognizable which would include grinding and/or crushing. Otherwise, sharps, even sterilized sharps are still considered medical wastes. Once items are sterilized (except sharps) they can be disposed of in ordinary trash.

Any materials, including blood and saliva, that are suctioned to a sanitary sewer system are not considered potentially infectious medical wastes.

OSHA defines regulated waste as:

1. liquid or semi-liquid blood or other potentially infectious material
2. contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed
3. items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling
4. contaminated sharps, Any contaminated object that can penetrate the skin including but not limited to needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires
5. pathological and microbiological waste containing blood or other potentially infectious materials

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### ***Disposal of Medical/Dental Waste***

Medical waste must be disposed of in accordance with State guidelines. Medical waste is defined as human pathologic waste (except teeth and the contiguous structures of bone and gum), human blood and blood products, i.e., saturated materials containing free flowing blood and blood components, used and unused sharps (medical needles), syringes, Pasteur pipettes, scalpel blades, or blood vials, animal waste, and cultures and stocks. OSHA regulates medical wastes while still within the dental office, however, once that waste leaves that office, OSHA has no authority and regulation falls under either Federal EPA and/or State medical wastes disposal laws.

### ***Contaminated Sharps Discarding & Containment***

Immediately or as soon as feasibly possible, sharps must be disposed of in closable, puncture resistant disposable containers that are leak proof on the sides and bottom and labeled with the biohazard symbol or color-coded in red. Commercial sharps container receptacles are acceptable. For purposes of disposal, OSHA categorizes dental wires as sharps. Sharps containers shall be

easily accessible to all faculty and students that is located in areas of immediate use. The sharps containers will be maintained upright, replaced routinely, and not allowed to become overfilled. When moving containers of contaminated sharps, they must be closed to prevent spillage or protrusion of contents. If leakage is possible, the initial container must be placed in a second container that has the same characteristics as the first. Reusable containers must not be opened, emptied, or cleaned manually or in any other manner that will expose employees to the risk of percutaneous injury.

### ***Medical Waste Disposal at John A. Logan College***

Any soaked gauze that is saturated and contains free flowing blood or blood components, must be placed in a container (cup or small attached bag) at the unit when such waste is generated. Expected procedures for generation of this type waste includes, but are not limited to, surgical procedures. This waste must be separated from regular trash and disposed of in the red designated contaminated waste containers located in the clinic areas. When the red biohazard container is full, the janitor assigned to the area transports the container to a central holding area. It is then picked up by BFI Medical Waste Services for final disposal.

### ***Other Regulated Waste Containment***

Regulated waste shall be placed in containers that are:

1. closable
2. constructed to contain all contents and prevent leakage of fluids on handling, storage, transport or shipping
3. labeled or color-coded in accordance with the OSHA standard
4. closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport or shipping

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If outside contamination of regulated waste container occurs, it must be placed in a second container.

The second container must be:

1. closable
2. constructed to contain all contents and prevent leakage of fluids on handling, storage, transport or shipping
3. labeled or color-coded in accordance with the OSHA standard
4. closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport or shipping

Disposal of all regulated waste will be in accordance with applicable regulations of the United States and the State of Illinois. It will also be in accordance with any other regulatory agency that may have jurisdiction in this geographic area. At this time, sharps and sharps containers will be heat sterilized and closed. Handling of these sterilized sharps containers will then be deferred to hazardous waste disposal at John A. Logan College.

### ***Manner of Presentation***

Information and training should be provided:

- at the time of initial assignment to duties that may result in occupational exposure.

- at least annually or as soon as possible when there are changes in procedures or in job assignments.
- in a manner and language that can be understood by all employees.
- in an interactive style that encourages questions and answers.
- by a person knowledgeable in the subject matter specified by the Standard.
- during working hours.
- office specific.

### ***Contents of the Training Program***

According to the OSHA Standard a training and education program must be designed for and presented to all staff with occupational exposure. The training program must contain the following elements:

#### ***OSHA Standard***

An accessible copy of this standard (under AAppendices@ tab in this section@) and an explanation of its contents must be part of the training program.

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### ***Epidemiology, Modes of Transmission, and Symptoms of Bloodborne Disease***

#### ***Hepatitis B***

***Epidemiology.*** Numerous studies document that workers occupationally exposed to blood have a prevalence of serum HBV marker, which indicates previous infection several times that of the general population or worker not exposed to blood. Prevalence of serum HBV markers is related to the number of exposures to blood and/or needles but on patient contact per se. High-risk groups for Hepatitis B include, among others, operating room staff, phlebotomist, surgeons, dental professionals, and blood bank technicians.

***Modes of Transmission.*** Blood and body fluids contaminated with blood contain the highest quantities of virus and are the most likely vectors of HBV transmission. Certain other body fluids such as saliva and semen contain infectious virus by a one-thousandth of the concentration found in blood. Other body fluids such as urine or feces contain only small quantities of virus unless they are visibly contaminated with blood. Lesions on the hands from injuries incurred at the workplace or at home or from dermatitis may provide a route of entry for the virus. In addition, transfer of contaminated blood via inanimate objects or environmental surfaces has been shown to cause infection in health care workers.

***Symptoms.*** About one third of infected individuals have no symptoms when infected with the virus, one third have a relatively mild clinical course of a flu-like illness that is usually not diagnosed as hepatitis, and the remaining third have a much more severe clinical course of jaundice, dark urine, extreme fatigue, anorexia, nausea, abdominal pain, and sometimes joint pain, rash, and fever. Of the estimated 18,000 infections in health care workers each year in the United States, there are about 500 to 600 hospitalizations and over 200 deaths. Approximately 1,000 of these health care workers will annually become carriers of HBV, at risk of chronic liver disease, cirrhosis, and liver cancer.

#### ***Human Immunodeficiency Virus Infection (HIV)***

**Epidemiology.** While at the present there have been over 200,000 cases of AIDS in the United States, 60% of which have ended in death, only an extremely small number of HIV infections have been documented in health care workers with no other risk factors. The modes of transmission in these few cases involved needle sticks, extensive contact with blood or other body fluids to mucous membrane and/or skin, the latter probably involving skin with open lesions.

**Modes of Transmission.** HIV has been isolated from human blood, semen, breast milk, vaginal secretions, saliva, tears, urine, cerebrospinal fluid, and amniotic fluids. However, epidemiologic evidence implicates only blood, semen, vaginal secretions, and possibly breast milk in the transmission of the virus. Documented modes of HIV transmission include: engaging in sexual intercourse with an HIV-infected person; using needles contaminated with the virus; having parenteral, mucous membrane, or nonintact skin contact with HIV-infected blood, blood components, or blood products; receiving transplants of HIV-infected organs and tissues, including bone; receiving transfusions of HIV-infected blood; and perinatal transmission (from mother to child around the time of birth). The actual amount of virus may be very important in the likelihood of transmission since it appears that there is a greater probability of infection from HIV-contaminated blood transfusions (890 infections per 1,000 persons receiving such transfusion) than from accidental needle sticks with needles that have been contaminated with HIV (approximately three infections per 1,000 persons injured with contaminated needles).

**Symptoms.** Within a month after exposure, an individual may experience an acute retro viral syndrome, the first clinical evidence of HIV infections. This is a flu-like illness with signs and symptoms that can include fever, lymphadenopathy, myalgias, arthralgias, diarrhea, fatigue, and rash. This syndrome is usually self-limiting and is followed or accompanied by the development of antibodies. Following this acute illness, HIV infection leads to a continuum of events in which the patient is initially asymptomatic and apparently healthy and then, after an indeterminate time, sometimes longer than 10 years, may develop symptoms uniquely associated with a later stage of HIV infection that is classified as acquired immune deficiency syndrome or AIDS. Some of the signs and symptoms of HIV infection are persistent generalized lymphadenopathy, fever for more than one month, significant weight loss, persistent diarrhea, or combination of these. An individual with HIV infection is considered to have AIDS when one or more so-called Aindicator@ diseases has been diagnosed. The most common of these indicator diseases are pneumocystis carinii pneumonia, esophageal candidiasis, neurological disorder or dementia, and cancers such as Kaposi=s sarcoma and non-Hodgkin=s lymphoma. An HIV infected person is also considered to have AIDS if he or she has less than 200 CD4+ lymphocytes per cubic millimeter of blood. The CD4+, or T-helper, lymphocyte is the primary target cell for HIV infection and a decrease in number of these cells correlates with the risk and severity of HIV-related illness.

### **Hepatitis C**

**Epidemiology.** HCV, like all bloodborne pathogens, can be transmitted through

occupational exposure to infectious body fluids. Although few data exist to estimate the occupational risk of HCV infection in dentistry, most studies suggest that the prevalence of HCV infection among dentists is no greater than the general population. The average risk of HCV infection after occupational percutaneous exposure is about 3% and is about 10 times less than the risk of HBV infection after an equivalent exposure.

**Modes of Transmission.** HCV has been isolated from human blood and bodily fluids and is transmitted primarily through large or repeated direct percutaneous exposures to blood e.g. intravenous drug use and blood transfusions. In other countries, different kinds of percutaneous injuries such as tattooing and body piercing have been associated with HCV infection; however, cases studies in the United States have not shown this association. Although inconsistencies exist among studies, data indicate overall that sexual transmission of HCV does occur, but a relatively low rate.

**Symptoms.** Only approximately 30% of individuals with newly acquired HCV infections develop clinical symptoms such as jaundice, fatigue, abdominal pain, and loss of appetite. The average time period from exposure to symptom onset is 6-7 weeks while the average time period for seroconversion is 8-9 weeks. HCV does have a high rate of chronic infection due to its genetic diversity that enables the virus to allude the host=s immune system.

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### ***Bloodborne Infectious Disease Policy***

When proper hygienic/isolation techniques are practiced, the chances of a health care worker becoming infected with a Bloodborne Infectious Disease or any other infectious disease in the workplace are almost nonexistent. Because it is the policy of most health care agencies to treat Bloodborne Infectious Disease/Hepatitis B clients and because there is no legal right for an employee to refuse to treat such patients, it is the practice of the Dental Assisting Programs to train students to practice as they will when graduated and work within the health care delivery system. In addition, faculty should serve as role models in their concern for and willingness to care for all infectious disease clients.

### ***Nondiscrimination***

- a. The College shall not discriminate in enrollment or employment against an individual infected with a Bloodborne Infectious Disease.
- b. No one shall be denied access to campus activities or facilities solely on the grounds that they suffer from a Bloodborne Infectious Disease.

### ***Confidentiality***

- a. The College shall comply with all pertinent statutes and regulations which protect the privacy and welfare of persons in the College community who suffer from a Bloodborne Infectious Disease as well as the welfare of others within the College community.
- b. The College will maintain procedural safeguards throughout the College with the objective of protecting the privacy of Bloodborne Infectious Disease victims.
- c. All confidential medical/dental information about an individual will be handled in compliance with legal requirements and professional ethical standards.



- d. The College will not disclose the identity of any student, staff, employee or patient who has a Bloodborne Infectious Disease.
- e. Student exemption from clinical assignments for health reasons are to be determined by program coordinators, student, student=s physician, and College administrators.

***Students Who Are Antibody Positive or Have AIDS***

HIV infection has been transmitted from health care workers to clients in only a few isolated cases. Present guidelines recommend that asymptomatic health care workers with HIV infection not be restricted from employment except as otherwise provided in applicable state or federal regulations.

Based on this information, students with HIV infection who are asymptomatic need not be restricted from clinical experience unless they have some other illness for which any health care worker would be restricted.

The student should be advised that HIV infection may cause immunosuppression and therefore increase the student=s susceptibility to infections acquired from client-student interaction. Precautions should be taken when working with any patient/client who has any contagious disease.

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Students who are HIV antibody positive should wear gloves when coming into direct contact with blood, mucosal surfaces, or exposed tissues of clients. These students should also be educated regarding the epidemiology and prevention of HIV infection, including the use of barrier precautions in appropriate situations, especially where aerosolization or splashes are likely to occur.

HIV infected students with exudative or weeping skin lesions will not be allowed direct client care contact. The determination of whether an infected student who is symptomatic should be excluded from providing direct care shall be made on a case-by-case basis by a team composed of appropriate College faculty and administrators and the student=s physician.

***Students with Chronic Infectious Diseases***

Students with identified chronic communicable diseases may attend normal school functions, including classes, whenever, through reasonable accommodation, the risk of transmission of the identified disease and/or the risk of further injury to the identified student is sufficiently remote in such a setting as to be outweighed by the detrimental effects resulting from the student=s exclusion from these normal school functions.

Placement decisions will be made using this standard in conjunction with current, available public health department guidelines, i.e., county, state, federal and the Center for Disease Control in Atlanta, Georgia, concerning the particular disease in question. Individual incidents will not be prejudged; rather, decisions will be made based upon the facts of the particular case. The determination of whether a student with a chronic communicable disease may attend college shall be made in accordance with procedures implemented by the College.

The College shall respect the right of privacy of any student who has a chronic communicable disease. The student=s medical condition shall be disclosed only to the extent necessary to minimize the health risks to the student and others.

The number of personnel aware of the student=s condition will be kept at the

minimum needed to assure proper care of the student and to detect situations in which the potential for transmission of the disease may increase. Persons deemed to have a direct need to know will be provided with the appropriate information; however, these persons shall not further disclose such information.

### ***Hepatitis B Vaccination and Post Exposure***

#### ***Evaluation and Follow-up***

#### ***Hepatitis B Vaccination***

The employer shall make available the Hepatitis B vaccine and vaccination series to all employees who have occupational exposure, and post-exposure evaluation and follow-up to all employees who have had an exposure.

The employer shall ensure that all medical evaluation and procedures including the Hepatitis B vaccine and vaccination series and post-exposure evaluation and follow-up are done in such fashion that the following occur:

1. At no cost of the employee.

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2. Performed by or under the supervision of a licensed physician or by the supervision of another licensed health care professional.

3. Provided according to the recommendations of the United State Public Health Service that are current at the time of vaccination or exposure incident.

4. If laboratory tests are necessary, they must be conducted by an accredited laboratory at no cost to the employee.

5. Hepatitis B vaccination shall be available after the Dental Hygiene faculty employee has received training as required by this standard.

6. The employer shall make this vaccination available within ten working days of initial assignment to all employees who have occupational exposure unless the employee has previously received the complete Hepatitis B vaccination series, antibody testing has revealed that the employee is immune, or the vaccine is contraindicated for medical reasons. The employee is responsible for providing previous immunity records.

7. Pre-screening for Hepatitis B immunity is not a prerequisite for receiving the Hepatitis B vaccine.

8. The employee may initially decline the Hepatitis B vaccination, but at a later date, if still covered under this bloodborne pathogen standard, decides to accept the vaccination, it will be made available at that time.

9. Any employee that declines the Hepatitis B vaccination offered by the employer must sign a declination statement. This declination form is included under the record-keeping portion of this exposure plan.

10. If routine booster dose(s) of the Hepatitis B vaccine is recommended by the United State Public Health Service at a future date, such booster dose(s) shall be made available in accordance with the provisions of this Bloodborne Pathogens Exposure Control Plan.

11. The employer will provide a copy of the AOSHA Standard to any professional evaluating the employee or administering the vaccine.

### ***Incident Plan and Report***

#### ***Student/Employee***

It is John A. Logan College Dental Assisting Program=s plan that if there is exposure to infectious agents--needle sticks, splash of blood or other body fluid to the eye or mouth, or contact of blood or body fluid with skin that has been cut, chapped, abraded, or afflicted with dermatitis the following course of action will be taken:

**At the time of the incident, it is the student=s responsibility to immediately notify**

**the supervising dentist/instructor of the class, laboratory or clinic.**

1. The supervising dentist/instructor will see to it that the student receives immediate medical attention and will inform the student that she/he will need to seek medical

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attention through a physician immediately. It is the student=s responsibility to provide his/her own health insurance to cover any and all recommended treatment. It is recommended that blood be collected from the exposed student and tested for the determination of Hepatitis B Virus (HBV) and Human Immunodeficiency Virus

(HIV) status.

2. It is also the coordinator=s responsibility to insure that the student files a John A. Logan College Incident Report. It will be important for the student to cooperate in order for this step to be completed. After the student has met with his/her physician, it is the student=s responsibility to follow through any treatment recommendations. A release form completed and signed by the student=s physician will be required stating that there is no risk for the student or others upon return to the program.

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**John A. Logan College  
Student/Employee Incident Report**

Student/Employee Information

Name Date

Address Social Security

City State Zip

Description of exposure

Consent for HIV and HBV

antibody testing obtained by Date

Sent to (laboratory) for testing Date

Post-exposure treatment

Procedure for testing HBV Initial test date 1 month post exposure

HIV Initial test date 6 weeks post exposure

12 weeks post exposure

6 months post exposure

Exposure reported to

Report completed by Date

**Source Patient Information**

Name Address

Informed of exposure by Date

Consent for HIV and HBV antibody testing obtained by  
Comments

*Dental Assisting Accreditation - Exhibit Y 32*

### **Communication of Hazards**

#### **Biohazard Symbol**

##### **Labels**

1. The required label is the biohazard symbol and the legend ABiohazard@ (shown above) which will be fluorescent orange or orange-red with lettering or symbols in a contrasting color.
2. Labels will be affixed or attached as closely as possible to the container, so that there is no possibility of loss. Alternatively, labels can be imprinted on the container or bag.
3. Red bags or red containers may be substituted for labels.
4. Regulated waste that has been decontaminated need not be labeled or placed in red bags. For example, autoclaved waste would not be labeled.
5. Biohazard labels are to be placed on containers of regulated waste, e.g., sharps containers. Laundry contaminated with blood or other potentially infectious materials must also be labeled or color coded.

##### **Training**

Training of students and faculty will be provided:

1. At the time of initial assignment to duties or while enrolled in the Dental Assisting Program.
2. At least annually or as soon as possible when there are changes in procedures or in assignments.
3. In a manner and language that can be understood by all faculty and students.
4. In an interactive style that encourages questions and answers.
5. By a person knowledgeable in the subject matter specified by the Standard.
6. During school or work hours.

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In addition, the training program will include the specific following components:

- a. An accessible text of this standard and an explanation of its contents.
- b. A general explanation of the epidemiology and symptoms of bloodborne diseases.
- c. An explanation of the modes of transmission of bloodborne pathogens.
- d. An explanation and copy of the exposure control plan.
- e. An explanation of how to recognize activities that may involve exposure to blood and other potentially infectious materials.
- f. An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate:
  - C engineering controls
  - C work practices
  - C personal protective equipment (PPE)
- g. Information on the types, proper use, location, removal, handling decontamination and disposal of personal protective equipment.
- h. An explanation of the basis for selection of personal protective equipment.
- i. Information on the Hepatitis B vaccine and its availability to employees.

- j. An explanation of the procedures to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.
- k. Information on the appropriate actions to take and person to contact in emergency involving blood or other potentially infectious materials.
- l. Information on the post-exposure evaluation and follow-up protocol following an exposure incident.
- m. An explanation of the biohazard labeling protocol.

***Recognition of Tasks and Activities That May Involve Exposure***

Tasks that involve contact with blood or other potentially infectious materials and mucous membrane may result in exposure to bloodborne pathogens. Items contaminated with blood or other potentially infectious materials, such as soiled instruments, laundry, and equipment, can also result in occupational exposure.

***Types, Proper Use, Location, Removal, Handling, Decontamination, and/or Disposal of PPE***

Various kinds of gloves can be used in dentistry: vinyl, latex, rubber or nitrile, and plastic film. Latex or vinyl gloves are used for most treatment procedures. When extensive surgical procedures are anticipated, sterile latex or vinyl gloves are required. Nonsterile latex or vinyl treatment gloves are adequate for most procedures. Rubber utility or nitrile puncture resistant gloves are used for housekeeping procedures such as cleaning instruments prior to sterilization or surface disinfection. Plastic film gloves may be used temporarily over a latex treatment glove when it is necessary to prevent contaminating of an object such as drawer handle or chart. Gloves must be changed between patients, whether they are worn for treatment or examination. They should not be washed for reuse. Disinfecting agents may cause deterioration of glove material, and minute tears or punctures in gloves may occur during treatment, resulting in contamination of hands. If tears or punctures do appear, gloves must be removed and replaced. Hands should then be washed before regloving. Utility gloves can be washed and reused. They should be replaced when they become cracked or worn.

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Protective eye wear must be worn when projectiles and splashes, spray, or splatter of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated. Protective eye wear may include conventional glasses with solid side shields, safety glasses, or goggles. As an alternative to protective eye wear, a face shield may be worn.

***Some information included in this plan, was made available to us for use with permission from other accredited Dental Assisting Programs. A special thanks goes out to them!***

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***Basic Life Support Policy***

This policy is for faculty, students and staff who are involved in direct provision of patient care.

1. When is certification needed?

Certification in Basic Life Support must be provided before a faculty member can

start employment or a student is assigned to an externship site.

2. Continuous Certification

Certification must continue and be in effect as long as faculty is employed and students are enrolled in the externship classes.

3. Verification

The lab supervisor will maintain a file on Basic Life Support certifications for faculty, students and staff. A photocopy of the certificate must be on file at the start of faculty/staff employment and/or before a student is assigned to begin procedures on patients.

The lab supervisor will notify faculty, staff and students two months before their recertification is due. A notice will also be given to the Coordinator for Dental Hygiene regarding those persons in need of recertification.

4. Compliance

Faculty, staff and students not in compliance with this policy will not be scheduled

in clinic until proof of certification is verified by the Program Coordinator.

5. Exemptions

If a faculty member, staff or student is physically or medically unable to perform Basic Life Support, they may be exempted from this policy by submitting a signed statement from their physician requesting an exemption. Exemptions may be short

term due to a temporary injury or condition, or long term based on a permanent physical or medical disability.

01-24-07-1b

**John A. Logan College**

**Carterville, Illinois 62918 Campus/Classroom Accident/Illness Report**

Student Staff Public Date

Time AM PM

Location

Name of Person Affected Home/Cell phone

Address

City State Zip

Affected Person's Supervisor/Instructor

Nature of Accident/Illness (give a full and complete report)

Signature of Affected Person

Ambulance Called Time AM PM

Ambulance Destination Departure Time AM PM

Incident Witness Name Home/Cell Phone

Witness Address

City State Zip \_\_\_\_\_

Describe first aid administered and by whom

Comments (if any)

Report completed by Date

Time AM PM

06-15-06-1c