# Purpose:

To establish policies and procedures of infection prevention and dental instrument sterilization to prevent exposures to infectious diseases and cross contamination of infectious material to patients and dental health care workers.

# Policy:

It is the policy of the Dental Program to develop a comprehensive dental infection prevention and control program, with accompanying policies and procedures, based on evidenced-based guidelines, regulations, and standards.

# Procedure:

1. **Introduction:** 
   1. The Dental Program is committed to making infection prevention a priority and will observe the Center of Disease Control (CDC) guidance on infection prevention, safety and control in the dental setting.  The Chief Dentist is designated as the department infection prevention and control coordinator.
   2. The infection control program of the Dental Program is enmeshed in and encompassed by the comprehensive infection control and prevention program of (administered by the facility Infection Prevention Officer).  The facility Infection Prevention and Employee Health Programs maintain policies, programs, training and records above and beyond those specific to the Dental Program.  Facility-wide policies for Infection Control are available on Policy Stat.
   3. All dental staff must read this procedure document and receive orientation on clinical infection control and safety protocols before any clinical responsibility is delegated to them. Upon completion of orientation and review of protocols, individuals will be asked to sign a document stating that they have read and received adequate training on the review of the hazards of the workplace and infection control in the dental environment.
   4. Blood-borne diseases: Dental personnel will be given training to acquaint them with blood-borne diseases and their modes of transmission
2. **Personnel Health Elements of an Infection Control Program**
   1. General Recommendations
      1. Smoking, application of makeup or lip balm, handling contact lenses, personal hygiene, cell phone use, storage and/or consumption of food or beverages is specifically prohibited in all patient treatment and sterilization areas of the dental clinic.
      2. Personal items are not to be stored on dental counter tops or in dental cabinetry within the patient treatment or sterilization areas.
   2. Education and Training
      1. All Dental Health Care Personnel will receive dental program infection control and training on this policy:
         1. Upon initial employment;
         2. When new tasks or procedures are introduced or affect the employee's occupational exposure; and
         3. At least annually, with education and training specific to assigned employee duties.
      2. Infection control competencies will be administered to all dental personnel whose duties include instrument processing, environmental infection prevention, handling and disposal of dental sharps, dental unit waterline cleaning, and dental laboratory infection prevention.
      3. The Dental Program will maintain training records documenting each training session provided by the department for a three year time period.  The following information will be included in the records:
         1. The date of training
         2. A content outline or summary of training
         3. The trainer's name and qualifications
         4. The names of all persons attending the training
      4. Immunization Programs
         1. Immunizations: All dental clinic staff are urged to have appropriate immunizations before engaging in the treatment of patients. All dental staff are afforded the opportunity to be immunized against Hepatitis-B, the cost of which shall be borne by the clinic.  (see immunization policy?)
      5. Exposure Prevention and Post-exposure Management
         1. Please see:  The Employee Health Post Exposure Control Plan and Follow-up Policy
      6. Medical Conditions, Work-Related Illness and Work Restrictions
         1. Please see: Sick Leave Policy and Infection Prevention and Employee Health policies regarding employee medical conditions, work-related illnesses, work restrictions and sick leave.
         2. All Dental Healthcare Personnel should be aware of their health status and illnesses, and should be aware of their responsibility to prevent the transmission of contagious illnesses to other employees and patients and to seek appropriate preventive and curative care.
         3. Dental Program employees should notify their direct supervisor if they have a contagious illness (such as a severe cold, flu, gastrointestinal illness, etc), or symptoms that include, but are not limited to, any of the following: fever, vomiting, productive cough, or eye discharge.
         4. When possible and warranted, dental employees should remain home until no longer contagious or when approved by their physician to return to work.
         5. Any employee concerned about the risk of being infected with a contagious illness while in the workplace should convey this concern to his or her direct supervisor.
         6. If there is evidence that any employee at work may pose a risk to the health of others in the workplace, the employee may be reassigned to another area of the department where they may remain more isolated.  The employee may also be asked to take a medical leave of absence (sick leave), or, may be asked to provide medical certification from his/her physician regarding his or her ability to safely work without the risk of illness transmission to others.
      7. Records Maintenance, Data Management and Confidentiality:  The **Employee Health Department** maintains all Employee Health File records including work-related medical evaluations, screening tests, immunizations, exposures, and post-exposure management.  (confirm this is correct)
3. **Preventing Transmission of Bloodborne Pathogens**
   1. HBV Vaccination
      1. The HBV vaccination series is offered by the Employee Health Department to all DHCP with potential occupational exposure to blood or other potentially infectious material.
      2. The Employee Health Department maintains responsibility for providing all employees appropriate education regarding the risks of HBV transmission and the availability of the vaccine.  Employees who decline the vaccination should sign a declination form to be kept on file with the Employee Health Department.
   2. Preventing Exposures to Blood and OPIM
      1. General recommendations:
         1. Patient medical histories should be updated annually. Chairside Assistants should review pertinent information with doctor before patient treatment.  Patient charts should reflect that a history review has occurred prior to any administration of medication or invasive procedure.
         2. Use standard precautions (OSHA's bloodborne pathogen standard retains the term universal precautions) for all patient encounters.
         3. Consider sharp items (needles, scalers, burs, lab knives, wires) that are contaminated with blood and saliva as potentially infectious.
      2. Engineering and work-practice controls:
         1. The Dental Program will seek to identify, evaluate and select devices with engineered safety features (safer anesthetic syringes, retractable scalpels, etc).
         2. Place used disposable syringes and needles, scalpel blades and other sharp items in appropriate puncture-resistant containers located as close as feasible to the area in which the items are used.
         3. Do not recap used needles by using both hands or any other technique that involves directing the point of a needle toward any part of the body.  Do not bend, break or remove needles before disposal.
         4. Use either a one-handed scoop technique or a mechanical device designed for holding the needle cap when recapping needles (between multiple injections and before removing from a non-disposable aspirating syringe).
      3. Post-exposure management and prophylaxis:
         1. The Dental Program will adhere to the ***Employee Health Post-Exposure Control Plan.***
4. **Hand Hygiene**
   1. General Considerations
      1. Perform hand hygiene with either a non-antimicrobial or antimicrobial soap and water when hands are visibly dirty or contaminated with blood or other potentially infectious material.  If hands are not visibly soiled, an alcohol-based hand rub can also be used.  Follow the manufacturer's instructions.
      2. Indications for hand hygiene include:
         1. When hands are visibly soiled.
         2. After barehanded touching of inanimate objects likely to be contaminated by blood, saliva, or respiratory secretions.
         3. Before and after treating each patient.
         4. Before donning gloves.
         5. Immediately after removing gloves.
      3. For oral surgical procedures, perform hand hygiene before donning sterile surgeon's gloves.
   2. Special Considerations for Hand Hygiene and Glove Use
      1. Use hand lotions to prevent skin dryness associated with handwashing.
      2. Consider the compatibility of lotion and antiseptic products and the effects of petroleum or other oil emollients on the integrity of gloves during product selection and glove use.  Oil based hand creams should not be used prior to gloving as it may cause deterioration of the gloves.
      3. Keep fingernails short with smooth, filed edges to allow thorough cleaning and to prevent glove tears.
      4. Nail polish must be free of chips.
      5. Do not wear artificial fingernails or extenders for patient care.
      6. Do not wear hand or nail jewelry if it makes donning gloves more difficult or compromises the fit and integrity of the glove.
5. **Personal Protective Equipment (PPE)**

Employees **must** wear Personal Protective Equipment (PPE) during all patient contact procedures, and at any other time there is potential for contacting blood, saliva, or respiratory secretions (i.e. dental operatory cleanup, waste/trash collection, instrument processing).

PPE is desinged to protect the skin and the mucous membranes of the eyes, nose and mouth of DHCP from exposure to blood or Other Potentially Infectious Material (OPIM).  Use of PPE is dictated by the exposure risk posed by the procedure, not by the known or suspected serologic status of the patient.  Primary PPE used in healthcare settings includes gloves, face masks, protective eyewear, face shields, and protective clothing (e.g. long-sleeved gowns/jackets).  Shoe and head covers are less frequently used types of PPE, but should be considered if contamination is likely.

1. Masks, Protective Eyewear and Face Shields
   1. Surgical masks and eye protection with solid side shields or a face shield to protect mucous membranes of the eyes, nose, and mouth are **mandatory** during procedures likely to generate splashing or splattering of blood and other body fluids.
   2. Change masks between patients or during patient treatment if the mask becomes wet.
   3. Clean with soap and water, or if visibly soiled, clean and disinfect reusable facial protective equipment (clinicial and patient protective eyewear or face shields) between patients.
   4. Dental Clinic will follow CDC and IHS guidelines for use of N95 respirators during aerosol generating procedures.
2. Protective Clothing
   1. Wear protective clothing (disposable gown, laboratory coat or uniform) that covers personal clothing and skin (forearms) likely to be soiled with blood, saliva or OPIM.
      1. This protective clothing or gowns must have:
         1. full-length sleeves with elastic cuffs.
         2. a neck closure that covers all garment worn beneath the gown.
         3. lap coverage when the wearer is seated.
         4. fluid-resistant/impervious construction.
      2. Clothing must always be covered by a PPE gown or other PPE protective clothing during patient care, as described above.
   2. Change protective clothing if visibly soiled; change immediately or as soon as feasible if penetrated by blood or other potentially infectious fluids.
   3. Remove barrier protection, including gloves and gown before departing work area to prevent cross contamination of surfaces (dental patient care, instrument processing or laboratory areas).
3. Gloves (disposable, non-reusable)
   1. Gloves are mandatory for all patient contact procedures.
   2. Wear medical gloves when a potential exists for contacting blood, saliva, mucous membranes, or OPIM.
   3. Wear a new pair of gloves for each patient, remove them promptly after use and wash hands immediately to avoid transfer of microorganisms to other patients or environments.
   4. Remove gloves that are torn, cut or punctured as soon as feasible and wash hands before re-gloving.
   5. Do not wash surgeons or patient examination gloves before use or wash, disinfect or sterilize gloves for reuse.
   6. Ensure that appropriate gloves in the correct size are readily accessible.
   7. Use appropriate gloves (punture and chemical resistant heavy-duty utility gloves) when cleaning instruments and performing housekeeping tasks involving contact with blood or OPIM.  Heavy-duty utility gloves must be worn for instrument processing.
   8. Consult with glove manufacturers regarding the chemical compatibility of glove material and dental materials used.
   9. Additional use of finger cots under gloves, or double gloving, is recommended if any break in the skin of the provider's hands is present.
4. Sterile Surgeon's Gloves and Double Gloving During Oral Surgical Procedures
   1. Wear sterile surgeon's gloves when performing oral surgical procedures such as: Biopsy, apical surgery, surgical extractions of teeth (e.g., removal of erupted or non-erupted tooth requiring elevation of mucoperiosteal flad, removal of bone or section of tooth, and suturing if needed).
   2. No recommendation is offered regarding the effectiveness of wearing two pairs of gloves to prevent disease transmission during oral surgical procedures.  The majority of studies among HCP and DHCP have demonstrated a lower frequency of inner glove perforation and visible blood on the surgeon's hands when double gloves are worn; however, the effectiveness of wearing two pairs of gloves in preventing disease transmission has not been demonstrated (unresolved issue).
5. Head and Shoe Covers
   1. The use of head covers should be considered when exposure to blood and OPIM in the form of droplet, spray or spatter are anticipated. Head covers are recommended, but not required, for procedures involving sonic or ultrasonic scaling and surgical procedures using rotary or ultrasonic instrumentation.
   2. The use of shoe covers is optional, but should be considered when contamination of footwear is anticipated (e.g., surgical procedures where unusually heavy bleeding may be anticipated).
6. PPE Provided
   1. The Dental Program will provide disposable gowns, eye protection, faceshields, masks, gloves, hair covers and shoe covers needed to provide dental treatment.
7. Protection for Patients
   1. Patients will be provided safety glasses to be worn throughout dental treatment.
   2. A patient protective bib or drape will be used for all procedures where splatter or aerosols are likely.
8. All PPE is to be considered contaminated and is not to be worn into locker rooms, bathrooms, offices, breakrooms, or other areas where food or beverages are consumed, or outside of the dental clinic and dental clinic waiting area.

**F.  Respiratory Hygiene and Cough Etiquette**

1. Signs will be posted at the patient entrances to the dental clinic with instructions to patients and visitors with symptoms of respiratory infection to:
   1. Cover their mouths and noses when coughing or sneezing
   2. Use and dispose of tissues
   3. Perform hand hygiene after hands have been in contact with respiratory secretions
2. A respiratory hygiene station will be maintained in the dental waiting area and will include: masks, tissues, and a no-touch trash receptacle for disposal of tissues.
3. Anti-septic hand wash resources will also be maintained in the dental clinic waiting area.
4. Masks will be offered to coughing patients or other symptomatic individuals when they enter the dental setting.
5. DHCP will be educated on the importance of infection prevention measures to contain respiratory secretions and prevent the spread of respiratory pathogens and infections.
6. A reasonable request to reschedule patients with respiratory symptoms, such as coughing or sneezing, may be necessary to prevent the spread of infectious illnesses.

**G. Sharps Safety**

1. Sharp items (needles, scalpel blades, and other sharp instruments) must be considered as potentially infective and must be handled with extraordinary care to prevent unintentional injuries.
2. Disposable syringes and needles, scalpel blades, used and broken burs, and other sharp items must be placed into puncture-resistant containers located as close as practical to the area in which they are used. To prevent needle stick injuries, disposable needles shall not be recapped or purposely bent by hand. If it becomes necessary to recap needles, the cap should be held with an instrument or a recapping device.
3. A new sterile syringe/needle and a fresh solution must be used for each patient.
4. Recapping of a needle increases the risk of unintentional needle stick injury. There is no evidence to suggest that reusable aspirating-type syringes used in dentistry should be handled differently from other syringes. Needles of these devices should not be recapped, bent, or broken before disposal. If it does become necessary to recap the needle, a one-handed technique or mechanical capping device must be used to prevent needle stick injury.

**H. Contact Dermatitis and Latex Sensitivity**

1. The Dental Program will educate DHCP regarding the signs, symptoms, and diagnoses of skin reactions associated with frequent hand hygiene and glove use.
2. All patients should be screened for latex allergy (take health history and refer for medical consultation when latex allergy is suspected).
3. The Dental Program will ensure a latex-safe environment for patients and DHCP with latex allergies.
4. Where possible, non-latex items will be purchased and utilized instead of latex- items.
5. The Dental Program will have latex-free products, or other alternatives, available at all times.

**I.  Sterilization and Disinfection of Patient Care Items**

1. Defintions: Infection Control Categories of Patient Care Instruments

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| **Infection Control Categories of Patient Care Instruments** | **Definition** | **Dental Instrument or Item examples** |
| Critical | Penetrates soft tissues, contacts bone, enters into or contacts the blood stream or other normally sterile tissue. | Surgical instruments, periodontal scalers, scalpel blades, surgical dental burs. |
| Semi Critical | Contacts mucous membranes or non-intact skin; will not penetrate soft tissue, contact bone, enter into or contact the bloodstream or other normally sterile tissue. | Dental mouth mirror, amalgam condenser, reusable dental impression trays, dental hand pieces. |
| Noncritical | Contacts intact skin. | Radiograph head/cone and blood pressure cuff. |

1. Levels of Sterilization and Disinfection:
   1. Sterilization (autoclave) — Used for heat-tolerant critical and semi-critical patient care items.
   2. High-level disinfection — Liquid immersion.
   3. Intermediate-level disinfection — Liquid contact.  EPA-registered hospital disinfectant with label claim of tuberculocidal activity (chlorine-containing products - 1:100 dilution (1/4 cup of 5.25 percent household chlorine bleach to one gallon of water).  Alternative products may be biocide or Lysol-IC for surfaces that may be damaged by bleach products.
   4. Low-level disinfection — Liquid contact.  EPA-registered disinfectant with no claim of tuberculocidal activity (soap and water, alcohol).
2. General Recommendations
   1. Use only FDA-cleared medical devices for sterilization and follow the manufacturer's instructions for correct use.
   2. Clean and heat-sterilize critical dental instruments before each use.
   3. Clean and heat-sterilize all non-heat-sensitive semi critical items before each use.
   4. Allow packages to dry in the sterilizer before they are handled to avoid contamination.
   5. Use of heat-stable semi critical alternatives is encouraged and will be utilized where appropriate.
   6. Reprocess heat-sensitive critical and semi-critical instruments by using FDA-cleared sterilant/high-level disinfectants or an FDA-cleared, low-temperature sterilization method (ethylene oxide). Follow the manufacturer's instructions for use of chemical sterilants/high-level disinfectants.
   7. Single-use disposable instruments are acceptable alternatives if they are used only once and disposed of correctly.
   8. If noncritical items (i.e., patient goggles, patient mirror) are visibly contaminated with blood, use an EPA-registered hospital disinfectant with a tuberculocidal claim (intermediate level).
   9. Clean, lubricate, and heat-sterilize all dental hand pieces, including slow speed prophylaxis hand pieces; as well as, hand piece motors and couplers, according to manufacturer's instructions for use.
   10. Arrange packages loosely in the autoclave chamber and do not overload the chamber. Open and/or disassemble any hinged or other complex instruments to permit exposure to sterilizing agents. Do not over pack paper-plastic pouches, allowing adequate space for steam penetration and drying.
   11. All DHCP will be informed of all OSHA guidelines for exposure to chemical agents used for disinfection and sterilization
3. Instrument Processing Area
   1. Pending remodel, the Dental Clinic instrument processing area will be physically and spatially divided into the following four distinct areas: 1) receiving, cleaning and decontamination; 2)preparation and packaging; 3)sterilization; and 4)storage.
      1. Do not process any instruments (including cleaning/disinfecting and packaging) outside of the dental instrument processing area.
      2. Do not store sterile or clean instruments in the same immediate area where contaminated instruments are held or cleaned.
4. Receiving, Cleaning and Decontamination Work Area
   1. Minimize handling of loose contaminated instruments during transport to the instrument processing area.  Use work-practice controls (carry instruments in a covered puncture-resistant contaner) to minimize exposure potential when transporting instruments to the instrument processing area.
   2. Clean all visible blood, debris, and other contamination (including dental amalgam) from dental instruments and devices before sterilization or disinfection procedures.
   3. Use automated cleaning equipment whenever possible (ultrasonic cleaner and instrument washer) to remove debris to improve cleaning effectiveness and decrease worker exposure to blood.
   4. Use work-practice controls that minimize contact with sharp instruments if manual cleaning is necessary (ex. long-handled brushes).
   5. Wear puncture and chemical-resistant/heavy-duty utility gloves for instrument cleaning and decontamination procedures.  This includes manual cleaning, use of the ultrasonic cleaner and washer, and rinsing instruments after ultrasonic cleaning.
   6. Wear appropriate PPE (mask, protective eyewear, and fluid-resistant gown) when splashing or spraying is anticipated during cleaning.
5. Preparation and Packaging
   1. Before sterilization of critical and semi critical instruments, inspect instruments for cleanliness, then wrap or place them in containers designed to maintain sterility during storage (cassettes and organizing trays). Replace or re-clean any instruments if debris and/or damage are found.
   2. Use an internal chemical indicator in each package. If the internal indicator cannot be seen from outside the package, also use an external indicator.
   3. Use a container system or wrapping compatible with the type of sterilization process used and that has received FDA clearance.
   4. Use self-adhesive labels or tape. Do not write on paper or cloth wrapping materials. Paper-plastic pouches may be labeled on the plastic portion or on the self-sealing tab (do not write on the paper side). Markers used for labeling should be indelible, non-bleeding, and non-toxic.
   5. Label packages with the following:
      1. Sterilizer identification number
      2. Operator's initials
      3. Load Number
      4. Sterilization date
      5. Expiration date (only if contents contain an expiration date)
6. Sterilization of Unwrapped Instruments
   1. Sterilization of unwrapped instruments should only be utilized when absolutely necessary. This practice will not be utilized routinely within our Dental Program.
   2. Clean and dry instruments before the sterilization cycle.
   3. Use mechanical and chemical indicators for each unwrapped sterilization cycle (place an internal chemical indicator among the instruments or items to be sterilized).
   4. Allow unwrapped instruments to dry and cool in the sterilizer before they are handled to avoid contamination and thermal injury.
   5. Semi critical instruments that will be used immediately or within a short time can be sterilized unwrapped on a tray or in a container system, provided that the instruments are handled aseptically during removal from the sterilizer and transport to the point of use.
   6. Critical instruments intended for immediate reuse can be sterilized unwrapped if the instruments are maintained sterile during removal from the sterilizer and transport to the point of use (transported in a sterile covered container).
   7. Do no store critical or semi critical instruments unwrapped.
7. Burs and Mounted Diamond Stones
   1. Burs and diamonds are to be discarded after use. Before use if not sterile, burs will be sterilized per manufacturer instruction.
8. Sterilization Monitoring
   1. Mechanical, chemical and biological indicator monitors will be used according to the manufacturer's instructions to ensure the effectiveness of the sterilization process.
   2. Monitor each load with mechanical (time, temperature and pressure) and chemical indicators.
   3. Place a chemical indicator on the inside of every package. If the internal indicator is not visible from the outside, also place an external chemical indicator on the package.
   4. Place items/packages correctly and loosely into the sterilizer so as not to impede penetration of the sterilant.
   5. Do not use instrument packs if mechanical or chemical indicators indicate inadequate processing.
   6. Monitor sterilizers at least weekly by using a biological indicator with a matching control (biological indicator and control from same lot number).
   7. The following protocol will be followed in the case of a positive spore test (failed biological indicator test):
      1. Immediately remove the sterilizer from service and notify the following individuals:
         1. Your Direct Supervisor
         2. The Chief of Dental Services.
         3. The Infection Control Coordinator
      2. Document the time & date of the sterilization cycle, a description of the load including the sterilizer and load number, results of physical monitoring, results of internal chemical indicators, and any other information that may help determine a valid failure vs. operator error.
      3. Review sterilization procedures (work practices and use of mechanical and chemical indicators) to determine the cause of the positive spore test or if operator error could be responsible
      4. If the cause of failure is identified and involves only one load or item; correct the cause of the failure, repackage the instruments from that load and reprocess the load.
      5. If the cause of failure is not immediately identified, the sterilizer must be removed from use and secured to prevent further use. The current load must be quarantined and all instruments since the last negative biological indicator test must be recalled.  All involved items must be repackaged and reprocessed.
      6. Retest the sterilizer by using biological, mechanical and chemical indicators after correcting any identified procedural problems.
      7. Do not use the sterilizer for instrument processing until three (3) consecutive biological indicator results are negative.
   8. The following are recommended if the repeat spore test is positive:
      1. The sterilizer should remain out of service until it has been inspected or repaired by the Bio-Medical Department and the exact reason for the positive test has been determined.
      2. Recall, to the extent possible, and reprocess all items processed since the last negative spore test.
      3. Before placing the sterilizer back in service, rechallenge the sterilizer with biological indicator test in three consecutive empty chamber sterilization cycles after the cause of the sterilizer failure has been determined and corrected.
   9. Sterilization records (mechanical, chemical and biological) will be maintained in accordance with state and local regulations and for a period of five (5) years from the date of the instrument load. The following information will be included in the sterilization records:
      1. Type of sterilizer
      2. The sterilization cycle used
      3. The load identification number
      4. The exposure parameters (ex. time, temperature, pressure)
      5. The operator's name or initials
      6. The results of the mechanical, chemical, and biological monitoring
9. Unloading the sterilizer and releasing the processed instrument loads
   1. The following protocol should be followed when the sterilizer cycle is complete:
      1. Verify the correct sterilization cycle has completed.
      2. Verify physical monitors (time and temperature) from the sterilization print-out by identifying the time and temperature of the entire sterilization phase.
      3. Initial the print-out.
      4. Record the total cycle (including drying and other phases) end time and whether the cycle passed or failed, and the dental assistant's name/initials on the sterilization log sheet.
      5. Do not release the sterilization instrument loads without also verifying the following:
         1. Successful external chemical indicators on each package
         2. Successful internal chemical indicators on each package
         3. Results of the biological indicator tests
      6. Examine all instrument packaging to ensure each package is dry and packaging has not been compromised.
10. Storage Area for Sterilized Items and Clean Dental Supplies
    1. Examine wrapped packages of sterilized instruments before opening to ensure barrier wrap has not been compromised (dropped, torn, yellowing, or wet).
    2. Re-clean, re-pack, and re-sterilize any instrument package that has been compromised
    3. Store sterile items and dental supplies in clean, dry and dust/lint free areas with limited access.  Covered or closed cabinets are recommended.  It sterile items are stored in patient treatment areas, they must be placed in covered or closed cabinets.
    4. Sterile instrument packages should not be stored near sinks, under sinks, window sills, or any area other than designated shelving, carts, or cabinets.  For event-related packaging, at a minimum, place the date of sterilization and, if multiple sterilizers are used in the facility, the sterilizer used on the outside of the packaging material to facilitate the retrieval of processed items in the event of a sterilization failure.

**J.  Environmental Infection Control**

1. General Recommendations
   1. During patient treatment, all procedures should be performed in a manner that minimizes the formation of droplets, spatter, and aerosols.  This can be accomplished by using high-volume evacuation and proper patient positioning.
   2. Dental personnel should limit the field of contamination by avoiding contact with objects such as charts, telephones, and cabinets during treatment.
   3. The manufacturers' instructions will be followed for correct use of cleaning and EPA-registered hospital disinfecting products.
   4. Do not use liquid chemical sterilants/high-level disinfectants for disinfection of environmental surfaces (clinical contact or housekeeping).
   5. Do not use bleach as a primary hospital-grade environmental surface disinfectant in the dental clinic. It lacks detergent properties and may be corrosive to some surfaces.
   6. Avoid the use of spray bottles that generate mists or aerosols (e.g., use a dispenser that generates streams or droplets or hold a towel behind the "spray" of disinfectant to minimize the spray).
   7. Use PPE, as appropriate, when cleaning and disinfecting environmental surfaces. Such equipment should include gloves (puncture- and chemical-resistant utility), protective clothing (gown, jacket or lab coat) and protective eyewear/face shield and mask.
2. Clinical Contact Surfaces
   1. Use surface barriers to protect clinical contact surfaces, particularly those that are difficult to clean (switches on dental chairs) and change surface barriers between patients. This would also include: dental material syringes, dental curing lights, computer monitors, keyboards, and computer mice.
      1. Clean and disinfect surfaces between patients only when the integrity of physical barriers has been compromised or when the surface is visibly soiled.
      2. Clean and disinfect surfaces that have been covered with barriers at the end of each clinical day
   2. Clean and disinfect clinical contact surfaces that are not barrier-protected, by using an EPA-registered hospital disinfectant with a low- (HIV and HBV label claims) to intermediate-level (tuberculocidal claim) activity after each patient. Use an intermediate-level disinfectant if visibly contaminated with blood.
   3. Cleaning and disinfection are recommended for all clinical contact surfaces at the end of the daily work activity.
3. Operatory Surfaces
   1. The Department of Environmental Services (EVS) will provide cleaning and disinfection of dental housekeeping surfaces such as floors, walls, sinks, etc.
   2. Do not store or place any items near the sinks to prevent splashing of water and potentially infectious material on nearby items and to aid the EVS department in properly cleaning the sinks and adjacent areas.
   3. In the event that the EVS Department is not immediately available to clean visibly dirty or soiled housekeeping surfaces, the area can be cleaned and disinfected by dental staff using detergent and water or an EPA-registered hospital disinfectant/detergent.  The area should be cleaned or wiped in the direction of clean to dirty.
4. Tray Setup
   1. When possible, use tray setups so entering drawers and cabinets can be minimized. Think ahead when preparing for procedures. When cabinet drawers must be entered during a procedure to secure an instrument or supplies it must be accomplished with a sterile forcep or barrier to prevent contamination of the contents of the drawer.
5. Cotton Products
   1. Sterile gauze are available pre-packaged and cotton rolls will be placed on a procedure tray for individual patient use. Store opened packages of gauze, cotton rolls and cotton pellets in covered containers. Use clean forceps for dispensing supplies for immediate use.
6. Spills of Blood, OPIM and Chemicals
   1. Should any blood, infectious fluids or materials be spilled on the floor or any work surface, the spilled material should be wiped up using an absorbent material in gloved hands, and dispensed of in the appropriate waste container.
   2. After blood or OPIM wiped up, decontaminate surface with an EPA-registered hospital disinfectant with low- (HBV and HIV label claims) to intermediate-level (tuberculocidal claim) activity, depending on size of spill and surface porosity.  A solution of 1:10 household bleach and water can also be used.  Allow the area to remain wet for 30 seconds before wiping dry.
   3. Clinics should also maintain a mercury spill kit in the event that dental mercury should spill.
   4. Contact Environmental Services for chemical spills to ensure appropriate clean up protocol followed.
7. Carpet and Cloth Furnishings
   1. Carpet and cloth-upholstered furnishings will be avoided in dental treatment areas, the dental laboratory, and instrument processing areas.
8. Regulated Medical Waste
   1. General Recommendations
      1. The Dental Program will dispose of regulated medical waste following federal, state and local regulations.
      2. All DHCP who handle and dispose of regulated medical waste are trained in appropriate handling and disposal methods and informed of the possible health and safety hazards.
   2. Management of Regulated Medical Waste in Dental Health Care Facilities
      1. Use a color-coded or labeled container that prevents leakage (biohazard bag) to contain non-sharp regulated medical waste.
      2. Limit materials which are red bagged to gauze and cotton balls soaked with blood, saliva and bloodstained paper goods, teeth or excised soft tissue.
      3. Place sharp items (needles, scalpel blades, broken metal instruments and burs) in an appropriate sharps container (puncture resistant, color-coded and leak-proof). Close container immediately before removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport or shipping.
      4. All contaminated waste is collected from each container marked "bio-hazardous materials" at the end of each day. The task is performed by the Environmental Services Department. When sharps containers become full, Environmental Services is notified and removes the containers.

**K.  Dental Waterlines, Biofilm, and Water Quality**

1. General Recommendations
   1. The CDC and ADA have recommended that dental treatment water quality should meet the EPA regulatory standards for safe drinking water (i.e., <500 CFU/mL of heterotrophic water bacteria) for routine (non-surgical) dental treatment output water.
   2. The Dental Program has established a goal to meet the A-DEC manufacturer dental water quality recommendation of ≤ 200 CFU/ml as an action level for waterline quality monitoring.
   3. The A-DEC dental unit instructions for use will be followed for appropriate methods and equipment to maintain the recommended quality of dental water.
   4. Discharge water and air for a minimum of 20 to 30 seconds after each patient, from any devise connected to the dental water system that enters the patient's mouth (hand pieces, ultrasonic scalers and air/water syringes).
2. Maintaining Dental Unit Water Quality
   1. Manufacturer instructions will be followed for daily waterline maintenance.  A-DEC's recommendation for waterline maintenance is based on continuous use of a waterline treatment tablet in conjunction with regular dental unit water monitoring and shock treatment.
   2. Instructions for using the water treatment tablets
      1. Empty any remaining water left in the bottle.
      2. Drop the tablet into an empty dental unit water bottle (up to 750 mls). Avoid touching the tablet with the skin.
      3. Fill the bottle with water, then install it on the dental unit.
      4. Wait two minutes for the tablet to fully dissolve before using the system.
      5. A new tablet should be used any time a dental unit self-contained water bottle system is filled or refilled.
      6. Both the delivery system and dental assistant self-contained water bottles should be filled in this manner.
   3. Weekly, flush the high-volume evacuation system with an acceptable disinfectant solution (currently use Liquid Ultra), as water lines in the delivery units are susceptible to the accumulation of biofilm.
   4. Instructions for using Liquid Ultra on Weekly Basis
      1. Tuesday end of day
         1. Combine: Add one bottle Liquid Ultra™ Solution 1 and one bottle Liquid Ultra Solution 2 into an empty external dental unit water bottle and stir. Once mixed together, solution must be used within 24 hours.
         2. Run: Run Liquid Ultra Solution mixture through the system into a sink or container until the pink solution appears at the end of each air/water syringe and handpiece lines. Depending on the number of lines in the unit, there may be residual solution in the bottle. Always remove the handpiece (it may be advisable to remove coupler depending on the type of coupler. Contact manufacturer for specific recommendations.)
         3. Wait: Allow the Liquid Ultra Solution mixture to remain in the lines overnight. Place the ends of water lines into a sink or container in case any pink mixture drips overnight.
            1. Do not allow the Liquid Ultra™ Solution mixture to remain in the lines for more than 24 hours.
      2. Wednesday morning
         1. Flush any remaining Liquid Ultra Solution mixture from the bottle, through either the air/water syringe or handpiece lines, into a sink or container until the external water bottle is empty.
         2. Remove and rinse the external water bottle with water and then fill with water.
         3. Flush each line (air/water syringe and handpiece lines) into a sink or container until the water runs clear and the bottle is empty.
3. Monitoring Dental Unit Water Quality
   1. The Dental Program will routinely monitor and test the dental unit waterlines to ensure water quality meets the EPA regulatory standards of ≤ 500 CFU/ml. The Dental Program has established a goal to meet the A-DEC dental unit waterline quality recommendation of ≤ 200 CFU/ml as an action level for waterline monitoring purposes.
      1. Waterline quality will be monitored for all dental units on a quarterly basis.
      2. Waterline quality will be monitored by performing a test that provides a quantitative measurement of heterotrophic bacteria. The water test kit manufacturer procedural instructions will be followed. A representative water sample from all lines in the dental unit (i.e., air water syringe, hand pieces and ultrasonic scaler), will be obtained.
      3. Test results will be reviewed and documented. Documentation will be maintained for a period of 3 years from the date of testing.
      4. The following protocol will be followed for any test results that are greater than the action level of ≤ 200 CFU/ml, but ≤ 500 CFU/ml (as established by the EPA for safe drinking water):
         1. Work practices will be reviewed to determine if waterline maintenance protocols and waterline testing procedures have been followed.
         2. Past monitoring records for that dental unit will be reviewed.
         3. Any identified procedural problems will be corrected.
         4. The waterline will then be "shocked," a new water treatment tablet will be placed the self-container water bottle systems, and the waterlines in that operatory will be retested.
         5. If the test still remains above the action level of < 200 CFU/ml, the Dental Program will submit a request to have the Bio-Medical Department inspect the operatory waterline to determine possible causes for the elevated CFU/mL levels.  Once any issues have been identified and corrected, the operatory waterlines will again receive a "shock," treatment and the waterline will once again be retested.
      5. The following protocol will be followed for any test results that are greater than the EPA regulatory standard of ≤500 CFU/ml for safe drinking water:
         1. The dental unit will be placed "out of service," to ensure patient safety.
         2. The Dental Chief and Infection Prevention Coordinator will be notified
         3. Work practices will be reviewed to determine if waterline maintenance protocols and waterline testing procedures have been followed.
         4. Past monitoring records for that dental unit will be reviewed.
         5. Any identified procedural problems will be corrected.
         6. The waterline will then be shocked, retreated, and retested.

vii.If the test still remains above ≤ 500 CFU/ml, the dental unit will remain "out of service," and the facility bio-medical team will be requested to inspect the dental unit waterlines.

* 1. Boil-Water Advisories
     1. The following apply while a boil-water advisory is in effect:
        1. Do not deliver water from the public water system to the patient through the dental operative unit, ultrasonic scaler or other dental equipment that uses the public water system.
        2. Do not use water from the public water system for dental treatment, patient rinsing or handwashing.
        3. Use distilled water in the A-Dec self-contained water systems along with water treatment tablets for dental treatment.
        4. For handwashing, use antimicrobial-containing products that do not require water for use (alcohol-based hand rubs). If hands are visibly contaminated, use bottled water, if available, and soap for handwashing or an antiseptic towelette.
     2. The following apply when the boil-water advisory is canceled:
        1. Follow guidance given by the local water utility regarding adequate flushing of waterlines. If no guidance is provided, flush dental waterlines and faucets for five minutes before using for patient care.
        2. Disinfect dental waterlines as recommended by the dental unit manufacturer.
  2. Dental Vacuum-Line Cleaning
     1. The Dental Program will select and utilize American Dental Association-approved dental unit vacuum-line cleaners.
     2. Do not use bleach or other chlorine-containing cleaners to flush wastewater lines as this can cause a significant release of mercury ions from dental amalgam.
     3. Follow manufacturer's instructions for proper mixing and amounts to use for vacuum-line cleaning.
     4. Dental unit vacuum-lines (suction-lines) should be cleaned at the end of each day by evacuating a detergent or water-based detergent-disinfectant through the system.
     5. Dental unit vacuum-lines should also be cleaned immediately after the completion of oral surgical or other procedures where significant amounts of bio-burden have been suctioned.

**L.  Special Considerations**

1. Dental Hand pieces and Other Devices Attached to Air and Waterlines
   1. Clean and heat-sterilize all dental hand pieces and other intraoral instruments or attachments that can or must **(per manufacturer instructions)** be removed from the air and waterlines of dental units between patients (\*this includes electric motors, air-driven high and slow speed motors, slow speed prophy motors, ultrasonic hand pieces and scalers, etc.).
   2. Following patient treatment, remove all blood and visible debris with an approved disinfectant.  
      Flush handpiece by running for 20-30 seconds (60 seconds after a long weekend) discharging water into a sink or container.
   3. Follow the manufacturer's instructions for cleaning, lubrication and sterilization of hand pieces and other intraoral instruments.
   4. Do not surface-disinfect (e.g., use intermediate-level disinfectant) hand pieces and other intraoral instruments that can be removed from the air and waterlines of dental units unless specified by the manufacturer IFU.
   5. Do not advise patients to close their lips tightly around the tip of the saliva ejector to evacuate oral fluids as this may cause "backflow," and lead to cross-contamination between dental patients.
2. Dental Radiology
   1. Use PPE (protective eyewear, mask and gown) when taking patient radiographs.
   2. Use surface barriers to protect clinical contact surfaces (e.g., x-ray tube head, control panels) and change surface barriers between patients.
      1. Clean and disinfect surfaces between patients when the integrity of the barrier has been compromised or when visibly soiled.
      2. Clean and disinfect environmental surfaces that have been covered with barriers at the end of each clinical day.
   3. Heat-tolerant or disposable intraoral devices will be used whenever possible (film-holding and positioning devices). Heat tolerant devices will be cleaned and heat-sterilized between patients. Any semi-critical heat-sensitive devices used will be disinfected using appropriate disinfectants according to manufacturer's instructions.
   4. The following apply for our digital radiography sensors:
      1. Use FDA-cleared barriers.
      2. Clean and disinfect according to current manufacturer recommendations using an EPA-registered hospital disinfectant with intermediate-level (tuberculocidal claim) activity,between patients. The following protocol should be followed:
         1. Remove and discard all protective hygienic barriers and/or sheaths from the Sensor prior to removing disposable gloves.
         2. Place the Sensor on a tray covered by a disposable liner, or in a receptacle that can be thoroughly disinfected.
         3. Remove and discard gloves.
         4. Wash hands and put on a new pair of disposable gloves.
         5. Disconnect the Sensor from the Remote Module
         6. If the Sensor or cable are visibly soiled (e.g., with blood or saliva), each should be cleaned with a soapy cloth or paper towel, and then dried with a clean lint-free cloth or paper towel.
         7. Thoroughly wipe the Sensor and Sensor cable (if applicable) with the disinfectng product recommended above.  Do not expose the contacts of the sensor/remote module connection to liquid.
         8. Repeat step g.  When the Sensor has been wiped two times, continue with the following steps.  It is very important to follow these next two steps!
         9. Remove potential chemical build-up from the Sensor by wiping it with a sterile sponge saturated with de-ionized water.
         10. Use a sterile dry sponge to dry the Sensor and Sensor cable, as needed.
         11. Place the Sensor in a clean environment, ready for next use. Do not hang Sensor by the cable to avoid stress on the cable-Sensor connection.
         12. Reconnect the Sensor waiting to take an image.
         13. Remove and discard gloves
      3. Follow manufacturer written IFU for cleaning and disinfecting computer equipment. Use surface barriers if the equipment (i.e., computer keyboard, mouse) is likely to be contacted or contaminated during patient-care activities.
3. Eye Wash Stations
   1. An emergency eyewash station shall be clearly designated in all clinics.  These stations shall be located in either or both the dental laboratory and the sterilization area/room.These facilities shall be clearly marked with an appropriate sign.
   2. They are to be used in the event of a chemical splash or to effect the removal of a foreign body from the eyes.
   3. In the event of a chemical splash, water should be flushed into the eyes for a full 15 minutes, even if perceptible burning no longer occurs.
   4. The injury must be reported to the employee's supervisor.
4. Safe Injection Practices
   1. In accordance with CDC *Summary of Infection Prevention Practices in Dental Setting: Basic Expectations for Safe Care*–March 2016, use of parenteral medications among dental providers most often occurs when administering local anesthetic utilizing a re-usable syringe, and single-use needle and anesthetic cartridge. The needle and cartridge is used for one patient only and the dental syringe is cleaned and heat sterilized between patients. The safe practices described below primarily apply to dental anesthetics:
      1. Prepare injections using an aseptic technique in a clean area.
      2. Disinfect the rubber septum on all anesthetic carpules and medication vials with alcohol before piercing. (need to verify)
      3. Do not administer medication from a syringe to multiple patients, even if the needle on the syringe is changed.
      4. Do not combine the leftover contents of single-use vials for later use.
      5. Multidose vials will not be utilized for anesthetic.
5. Single-Use (Disposable) Devices
   1. Use single-use devices for one patient only and dispose of them appropriately.
6. Pre-procedural Mouth Rinses
   1. The use of pre-procedural antimicrobial mouth rinses is optional, but should be considered to reduce the level of oral microorganisms in aerosols and spatter generated during routine dental procedures. Although studies have demonstrated that a pre-procedural antimicrobial rinse (chlorhexidine gluconate, essential oils or povidone-iodine) can reduce the level of oral microorganisms in aerosols and spatter generated during routine dental procedures and can decrease the number of microorganisms introduced in the patient's bloodstream during invasive dental procedures, the scientific evidence is inconclusive that using these rinses prevents clinical infections among DHCP or patients (unresolved issue).
7. Oral Surgical Procedures
   1. The following apply when performing oral surgical procedures such as: Biopsy, apical surgery, surgical extractions of teeth (e.g., removal of erupted or non-erupted tooth requiring elevation of mucoperiosteal flad, removal of bone or section of tooth, and suturing if needed).:
      1. Perform surgical hand antisepsis by using an antimicrobial product (antimicrobial soap and water or soap and water followed by alcohol-based hand scrub with persistent activity) before donning sterile surgeon's gloves.
      2. Use sterile surgeon's gloves.
      3. Use sterile saline or sterile water as a coolant/irrigatant when performing oral surgical procedures. Use devices specifically designed for delivering sterile irrigating fluids (bulb syringe, single-use disposable products and sterilizable tubing).
      4. Use sterile irrigating solutions for one patient and dispose of them appropriately. Do not date or save for later use, even on the same patient.
8. Handling of Biopsy Specimens
   1. During transport, place biopsy specimens in a sturdy, leak-proof container labeled with the biohazard symbol.
   2. If a biopsy specimen container is visibly contaminated, clean and disinfect the outside of a container or place it in an impervious bag labeled with the biohazard symbol.
9. Handling of Extracted Teeth
   1. Dispose of extracted teeth as regulated medical waste unless returned to the patient.
   2. Do not dispose of extracted teeth containing amalgam in regulated medical waste intended for incineration.  *(need to reference or create Mercury Hygiene and Amalgam Waste Management Policy)*
   3. The following apply when using extracted teeth in educational settings or sending to outside facilities such as a dental or medical laboratory:
      1. Clean and place extracted teeth in a leak-proof container, labeled with a biohazard symbol and maintain hydration if transporting to educational institutions or an outside dental laboratory.
      2. Place amalgam-free teeth in a heat-resistant glass container.
      3. Fill the container no more than half-way with deionized or distilled water or saline and loosely cover.
      4. Process through a steam sterlizer at 121ºC (250ºF) for 40 minutes using a fluid or liquid cycle.  At the end of the cycle, remove the container slowly without shaking to avoid the boiling over of the fluid.
      5. If using extracted teeth containing amalgam, immerse in 10% formalin for two weeks before use in an educational setting.
10. Dental Laboratory
    1. Infection prevention measures are important in the lab to minimize the potential for infection and cross contamination. Follow hand-hygiene recommendations as described in Section D.
    2. Use PPE when handling contaminated laboratory items or items received in the laboratory until they have been decontaminated. Use appropriate PPE (e.g., mask, protective eyewear) for protection from projectile and particulate hazards when lathes and other rotary instruments are used.
    3. Items delivered to the dental laboratory must be free of bioburden, cleaned and disinfected. Remove any bioburden (e.g., calculus, adhesive, blood, tissue, retraction cord, cotton), clean, disinfect and rinse all dental prostheses and prosthodontic materials (e.g., impressions, bite registrations, occlusal rims) using an EPA-registered hospital disinfectant having at least an intermediate-level (i.e., tuberculocidal) activity.
    4. Consult instructions for use regarding compatibility of disinfectants and impression materials, prostheses and appliances. Consider the stability of specific materials (e.g., impression materials) when disinfectants are used and biocompatibility of disinfectants with prostheses and appliances.
       1. Polyether and Vinyl Polysiloxane impressions should be sprayed with a hospital grade disinfectant, such as Cavicide, and allowed to remain wet for 2-3 minutes only, and then rinsed with water before sending to laboratory.
       2. Vinyl Polysiloxane impressions should be sprayed with a hospital grade disinfectant, such as Cavicide, and allowed to remain wet for 2-3 minutes only, and then rinsed with water before sending to laboratory.  
          Alginate impressions be sprayed with a hospital grade disinfectant, such as Cavicide, and allowed to remain wet for 2-3 minutes only, then rinsed with water, then poured immediately.
    5. Include specific information on the dental lab form, regarding disinfection techniques (e.g., solution used and duration), when laboratory cases are sent to the lab and when cases are returned to the provider.
    6. When items leave the laboratory, disinfectant solutions must be completely removed in order to prevent the risk of adverse tissue responses. Never store, ship, or transport items in disinfectant solutions.
    7. Any laboratory cases (impressions, models, prosthetic devices, etc.) and any contaminated equipment being shipped for processing or repair must be decontaminated before packaging with a disinfectant solution appropriate for the item being shipped**.**
    8. When using ultrasonic cleaners, place the item (e.g., denture, temporary restoration) in a sealed, disposable plastic bag or container recommended by the manufacturer (i.e., glass beaker) filled with cleaning solution. Place the bag or container into the ultrasonic machine and process. Following removal from the ultrasonic cleaner, dispose of the cleaning solution,disinfect and rinse the item before returning to the patient.
    9. If rotary instruments or laboratory items (e.g., burs, polishing points, rag wheels, laboratory knives) are used on contaminated or potentially contaminated appliances, prosthesis, or other materials, they should be cleaned, disinfected, and heat-sterilized (for items that can be sterilized) between cases.  Review and follow the instructions for use for cleaning, disinfection, and sterilization procedures.  \*Chairside finishing and polishing burs should be used in place of the laboratory rag wheels whenever possible.  Laboratory rag wheels should be heat sterilized in-between uses.
    10. Use fresh pumice and clean polishing materials for each patient.
    11. Clean and disinfect case pans and articulators when visibly soiled and after each case is completed using an EPA-registered hospital disinfectant having at least an intermediate-level (i.e., tubercolocidal) activity.
    12. At a minimum, clean and disinfect countertops and lab benches when visibly soiled and at the end of daily work activities using an EPA-registered hospital disinfectant having at least an intermediate-level (i.e., tuberculocidal) activity.
    13. When working with contaminated prostheses and appliances (e.g., items that were try-ins, worn by patients or otherwise contaminated):
        1. Heat sterilize any rag wheels, polishing points, burs, lab knives, etc.
        2. Clean and surface disinfect lathes between each case using an EPA-registered hospital disinfectant having at least intermediate-level (i.e., tuberculocidal) activity.
        3. In between each case, clean and disinfect countertops and lab benches (if used, soiled, and/or contaminated) using an EPA registered hospital disinfectant having at least an intermediate-level (i.e., tuberculocidal) activity.
        4. Return items used in the mouth (e.g., metal impression trays, face-bow forks) to instrument processing for cleaning and heat sterilization.
    14. Consumption of food and/or drinks in the dental laboratory is prohibited.
11. Laser/Electrosurgery Plumes/Surgical Smoke
    1. No formal recommendation was offered in the *CDC Summary of Infection Prevention Practices in Dental Settings: Basic Expectations for Safe Care–March 2016* regarding practices to reduce DHCP exposure to laser plumes/surgical smoke when using lasers in dental practice. The effect of the exposure (disease transmission or adverse respiratory effects) on DHCP from dental applications of lasers has not been adequately evaluated (unresolved issue). Practices to reduce HCP exposure to laser plumes/surgical smoke have been suggested, including:
       1. Follow manufacturer's written IFU regarding use and safety precautions.
       2. Use standard precautions (including possible use of higher-filtration surgical masks and possibly full face shields).
       3. Wear appropriate PPE according to laser manufacturer instructions.
       4. Wear protective laser eyewear.
       5. Where possible, utilize central room suction units with in-line filters to collect particulate matter from minimal plumes and dedicated mechanical smoke exhaust systems with a high-efficiency filter to remove substantial amounts of laser-plume particles.
12. Mycobacterium tuberculosis
    1. General Recommendations
       1. All Dental Program DHCP will receive training regarding the recognition of signs, symptoms and transmission of TB.
       2. All DHCP will receive annual Tuberculin Skin Testing (PPD) per policy.
       3. Every patient will be assessed for a history of TB, as well as, symptoms indicative of TB and will be documented on the medical history form.
       4. A baseline TST will be conducted, preferably by using a two-step test, for all DHCP who might have contact with persons with suspected or confirmed active TB, regardless of the risk classification of the setting.
       5. The Dental Program will adhere to our hospital TB infection-control plan, including: 1)managing a patient with suspected or active TB, and 2)managing DHCP with TB disease.
       6. In cases of suspected employee exposure to TB< DHCP should notify their direct supervisor and then immediately follow the **CITE POLICY**
    2. The following apply for patients known or suspected to have active TB:
       1. Evaluate the patient away from other patients and DHCP. When not being evaluated, the patient should wear a surgical mask or be instructed to cover mouth and nose when coughing or sneezing.
       2. Defer elective dental treatment until the patient is non-infectious.
       3. Patients requiring urgent dental treatment will be managed within appropriate facility treatment areas, or will be transferred to other identified facilities, with TB engineering controls and a respiratory protection program.
13. Creutzfeldt-Jakob Disease (CJD) and Other Prion Diseases
    1. No recommendation is offered regarding use of special precautions in addition to standard precautions when treating known Creutzfeldt-Jakob Disease (CJD) or vCJD patients. Potential infectivity of oral tissues in CJD or vCJD patients is an unresolved issue. Scientific data indicate the risk, if any, of sporadic CJD transmission during dental and oral surgical procedures is low to nil. The CDC's 2003 guidelines mention that "CJD was not associated with dental procedures (e.g., root canals or extractions), with convincing evidence of prion detection in blood, saliva, or oral tissues, or with DHCP becoming occupationally infected with CJD." Until additional information exists regarding the transmissibility of CJD or vCJD during dental procedures, special precautions in addition to standard precautions might be indicated when treating known CJD or vCJD patients. However, a list of such precautions is provided for consideration without recommendation (Unresolved issue).
       1. Use single-use disposable items and equipment whenever possible.
       2. Consider items difficult to clean (e.g., endodontic files, broaches, and carbide and diamond burs) as single-use disposables and discard after one use.
       3. To minimize drying of tissues and body fluids on a device, keep the instrument moist until cleaned and decontaminated.
       4. Clean instruments thoroughly and steam-autoclave at 134°C for 18 minutes. This is the least stringent of sterilization methods offered by the World Health Organization.  Defer to instrument Instructions For Use (IFU) if available.
       5. Do not use flash sterilization for processing instruments or devices
14. COVID-19
    1. The practice of dentistry involves the use of rotary dental and surgical instruments, such as handpieces or ultrasonic scalers and air-water syringes. These instruments create a visible spray that can contain particle droplets of water, saliva, blood, microorganisms, and other debris. Surgical masks protect mucous membranes of the mouth and nose from droplet spatter, but they do not provide complete protection against inhalation of infectious agents. There are currently no data available to assess the risk of SARS-CoV-2 transmission during dental practice.
       1. I do not want to lock us into anything, but here are the CDC recommendations:
          1. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html>

**M.  Infection Control Program Evaluation**

1. The Dental Infection Prevention and Control Program will utilize valid means to measure the effectiveness of the program.  The following methods will be used for this purpose: DHCP competency assessments, instrument processing monitoring, scheduled and unscheduled inspections and waterline monitoring.
   1. Instrument Processing (Sterilization) Monitoring.  The Dental Program will monitor instrument processing (sterilization) as described in Section I.
      1. The autoclave logbook and biological indicator logbook will be reviewed on a quarterly basis and will be reported to the Chief of Dental Services, as well as, the Infection Prevention Committee.
   2. Inspections.
      1. The Dental Program will conduct and document routine scheduled or unscheduled inspections of:
         1. Dental treatment rooms
         2. Dental laboratory
         3. Instrument processing areas
      2. The inspection documentation will be maintained by WHO?
   3. Waterline Monitoring
      1. The Dental Program will implement a waterline-monitoring program as described in Section K.
      2. Water-line monitoring will occur on a quarterly basis, or sooner, if situations arise that dictate earlier monitoring.
      3. Procedures and protocols for elevated levels of CFU/mL will followed as outlined in Section K.3.
2. When appropriate, deference to – wide polices will be made.  
   Updates to the Dental Department Infection Control Plan should reference current authoritative sources.  
   As part of our Quality Assurance program, a compliance checklist on elements of our departmental infection control plan will be completed and submitted to the Infection Control Committee.

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| **Reference/Regulation** | Computerized Dental Department Policy and Procedure Manual |