West Virginia University
School of Dentistry
Infection and Biohazard Control Policy
Revised 2020, Addendum
2020

INTRODUCTION

The purpose of the School of Dentistry's infection control program is to protect all faculty, staff, students, and patients from cross infection related to dental procedures.

An effective infection control policy will require the cooperation of students, faculty, and staff. This must be achieved through education, demonstration, monitoring, and evaluation. The enforcement of infection control in the preclinical, laboratory, and clinical areas is primarily that of the faculty.

Recommended infection control practices are applicable to all settings involved in providing dental care. These recommended practices should be observed in addition to the precautions and procedures for employee protection required by the Occupational Safety and Health Administration (OSHA) final rule on Occupational Exposure to Bloodborne Pathogens published in the Federal Register on December 6, 1991, and revised January 18, 2001.

A set of infection control strategies common to all health-care delivery settings should reduce the risk of transmission of infectious diseases caused by bloodborne pathogens such as the HBV (hepatitis-B virus) and the HIV (human immunodeficiency virus) (see addendum for COVID-19/Droplet transmission precautions). . Because all infected patients cannot be identified by medical history, physical examination, or laboratory tests, **Standard Precautions** must be observed routinely in all preclinical, clinical, laboratory, and equipment maintenance areas. This means that the same infection control policies and procedures must be used for all patients. Standard precautions, however, do not preclude the use of additional infection control procedures to protect a patient who is so severely medically compromised that additional precautions are needed to provide safe treatment (i.e., patients with active tuberculosis).

MEDICAL HISTORY

Infection control begins with an initial appraisal of the patient's overall physical and mental health, followed by a thorough medical history and review. The medical history should be updated at all subsequent visits. Specific questions should be asked regarding medications, current and recurrent illnesses, unintentional weight loss, lymphadenopathy, oral soft tissue lesions, other infections, history of hepatitis, and latex allergy. Medical consultation may be indicated when a history of active infection or systemic disease is elicited or suspected.

Not all patients with infectious diseases can be identified by the medical history, physical examination, or readily available laboratory tests. Therefore, each patient must be considered as potentially infectious, and the same infection control procedures and **standard precautions** should be observed for all patients. Additional screening questions will be included as required, based on the infectious disease and any special circumstances. See addendum for COVID-19 questionnaire screening/protocol)

IMMUNIZATIONS

The OSHA Bloodborne Pathogens Standard requires that employers make hepatitis-B vaccinations available without cost to their employees who may be exposed to blood or other infectious materials. Since 1987, the WVU School of Dentistry has provided this vaccination without cost to School employees and continues to strongly encourage all dental health care employees who might be exposed to blood or blood-contaminated substances in an occupational setting to be vaccinated.

All students must provide written documentation from a physician of immunity to tetanus, polio, measles, chickenpox and hepatitis-B, and results of an annual tuberculosis skin test. The WVU Health Sciences Center faculty, staff, and students are provided the PPD test annually from WVU Employee Health and the School of Dentistry. In addition, all dental health care providers are encouraged to get an annual flu vaccination. Hepatitis B vaccine and antibody testing for seroconversion is offered all faculty and staff; they, however, are offered a declination form if they so choose.

Although vaccines play an important role in the infection hazards in the dental environment that are not transmitted by blood. Microorganisms spread via nasopharyngeal secretions, e.g., represent a host of diseases that pose constant threats to the dental care worker. As new pathogens are identified, and vaccines are developed, it may be necessary for dental healthcare workers to obtain additional vaccinations. Any vaccination changes will be made in accordance with CDC and OSHA guidance, and WVU policy.

HANDS AND SKIN

Intact skin is recognized as infection control's best first-line-of-defense for dental care workers. Healthy, intact skin is an excellent barrier against microorganisms that represent infectious hazards in the dental care environment.

Dental care workers with weeping, eczematous lesions of the hands should not engage in patient care, or handle dental instruments, prostheses, or materials until the condition has healed.

Avoid dried, chapped, cracked hands caused by repeated washing by using a quality hand lotion daily. However, a non-petroleum based lotion must be used if the dental care provider wears latex gloves.

Keep nails cut short and hands well manicured.

Any splash or exposure of blood or other body fluid to non-intact skin or mucous membrane should be considered an occupational exposure, and appropriate follow-up should be immediately initiated in accordance with OSHA's Bloodborne Pathogens Standard, and WVU Health Sciences Center Management Policy on Exposure to Blood or Body Fluid.

HANDWASHING

Handwashing will normally remove microorganisms from the skin but may not remove them from around rings and under fingernails. Make certain handwashing is as effective as possible by keeping nails cut short and well manicured, and do not wear rings, fingernail polish, or acrylic fingernails.

Always wash your hands and wrists before donning treatment gloves, after glove removal, before leaving the operatory or laboratory, and after visiting the restroom. If hands are not visibly soiled, an ABHR (alcohol based hand rub) may be used if containing a minimum of 60% alcohol.

For most dental procedures, the following non-surgical handwashing technique is adequate:

1. Lather your hands and wrists well with liquid antimicrobial soap and water.
2. Rub hands vigorously together for at least 20 seconds so that all surfaces are scrubbed.
3. When hands are visibly soiled, rub the lather over them for longer than 20 seconds , or wash and rinse them two or three times.
4. Rinse under a stream of water.
5. Dry with a disposable paper towel.
6. If you use a hand-operated faucet, do not touch the handle with bare skin. Instead, use a clean paper towel to avoid contaminating the handle or your hands.
7. If hands are not visibly soiled, the alcohol hand rub (Sanityze) provided at each unit may be used. Dispense enough solution onto hands and rub together vigorously for at least 20 seconds. Use of alcohol hand rubs do not replace handwashing with soap and water. It is suggested that hands be washed prior to donning gloves and the hand rub used between changing gloves.

PERSONAL HYGIENE

1. Keep nails trimmed short and hands well manicured.
2. Facial hair must be covered by a pleated mask. . (See addendum for facial hair guidelines and use/wear of N95 respirators with droplet precautions)
3. Any hair that falls below the operator's cheeks when his/her head is facing down must be secured neatly back and up.
4. Wear disposable protective headgear during surgical procedures.

PERSONAL PROTECTIVE EQUIPMENT (PPE) AND ATTIRE

COVER GOWNS

1. Disposable fluid-resistant long-sleeve high-neck cover gowns must be worn at all times within the School's patient care areas by all faculty, residents, staff, and students during patient treatment.
2. Gowns must be secured around the collar and closed in the back. The long sleeves will be kept in place around the wrists, and gloves will either extend under or cover the sleeves.
3. Gowns must be changed daily, or more often if visibly soiled. Gowns must be removed immediately whenever they have been splashed or penetrated by blood or other potentially infectious material.
4. The gowns must not be worn outside the clinical/patient treatment areas. (See addendum regarding restricted wear during droplet precautions/COVID-19)
5. When removing the cover gown at the end of the day's use or treatment, fold the exposed surfaces inside while keeping gloves on, and immediately place it in a non-infectious, non-regulated disposable waste container.
6. If the cover gown is visibly/grossly contaminated, remove and fold exposed areas to the inside, and immediately disposable infectious/regulated waste container.

GLOVES

1. For the protection of dental care personnel and patients in dental-care settings, medical type gloves (latex, nitrile, or vinyl) must always be worn by dental care personnel when there is a potential for contacting blood, blood-contaminated saliva, or mucous membrane. Therefore, all dental care personnel will wear gloves while treating all patients and handling patient prostheses, tissue, and non-sterile instruments or surfaces.
2. Non-sterile gloves are acceptable for procedures involving contact with teeth and intact mucous membrane.
3. Sterile gloves must be worn for contact with primarily sterile body areas and for invasive dental

procedures.

4. Before treatment of each patient, dental care personnel should wash their hands and don new gloves; after treatment of each patient or before leaving the dental treatment area, the gloves should be removed, discarded, and the hands washed again.
5. If gloves are torn, cut, or punctured, remove them immediately and dispose of them.
6. **Surgical examination gloves should not be washed before use; nor should they be washed, disinfected, or sterilized for reuse.**
7. Deterioration of gloves may be caused by disinfecting agents, oils, certain oil-based lotions and should either be thoroughly inspected for damage or replaced prior to continuing treatment or the procedure.
8. Treatment gloves must be removed when leaving the clean field of the treatment area (e.g. handling patient charts/ radiographs, obtaining items from Central Processing).
9. General purpose heavy utility gloves must be worn when cleaning instruments, equipment, or contaminated surfaces, and must be decontaminated before re-used.

FACE MASKS, SHIELDS, EYEWEAR

1. Wear both a mask and protective glasses/goggles with side shields, or a chin-length face shield during all patient treatment and disinfection of the dental unit.
2. Wear a surgical mask or full-length shield with face mask in the dental treatment area and central sterilization room where aerosols are a problem, especially on the dirty side of the central sterilization area.
3. When a mask is used, it should be changed between patients or during patient treatment if it becomes wet or moist. A wet mask will not provide an effective barrier to microorganisms.
4. Remember: even the best surgical mask is perhaps 95% efficient, so use them properly. Be certain to properly adapt the metal nose piece in order to realize maximum protection, and keep the bottom of mask well secured under the chin.
5. Face shields or protective eyewear should be washed with an appropriate cleaning agent and disinfected between patients.

See addendum for PPE guidance with droplet precautions/COVID-19 *For specialty area procedures needing modifications, professional judgment should be utilized with knowledge of risk vs. benefits. Specialty providers should do so following any guidelines provided by their specialty organization.

EYE WASH STATIONS

1. If a splash occurs to the eyes during patient treatment or any occupational exposure to the eyes, go immediately to the nearest EYE WASH STATION and flush the eye(s) with clean, cool water for 10-15 minutes.
2. If the splash had the potential for being infectious, consider this an occupational exposure and follow the WVU HSC Management Policy on Exposure to Blood or Body Fluid.
3. Faucet activated eye wash stations that meet OSHA requirements are strategically placed in all clinical, laboratory, central sterilization, and equipment service areas.

SHARPS

Handle all sharp instruments and objects with care to avoid accidental injury and blood exposure. Dispose of all sharp items into hard plastic “sharps” containers which are located at each dental unit and in each laboratory. Examples of sharps include the following:

1. Needles
2. Scalpels
3. Explorers

4. Scalers
5. Rotating burs
6. Endodontic files
7. Rotating pumice and stone wheels
8. Laboratory knives
9. Orthodontic wire
10. Irrigating syringes

NEEDLES AND SYRINGES

1. A sterile syringe, a new disposable needle, and new anesthetic cartridge should be used for each patient.
2. Needles should be handled extremely carefully. Most dental occupational exposures are the result of needle sticks.
3. Since an individual patient may require multiple injections of anesthetic or other medications from a single syringe, a number of techniques can be used to minimize the likelihood of an injury.
   a. **Uncapped needles should not be left on dental trays** where they are more likely to cause injury.
   b. Recap the needle by laying the cap on the tray or placing the cap in a holder so that the needle can be guided into it.
   c. Recap the needle by using the one-hand "scoop" method, or using a needle barrier. NEVER USE BOTH HANDS TO RECAP NEEDLES!
4. Disposable needles should not be bent or broken after use. Before attempting to remove needles from non-disposable aspirating syringes, they should be recapped.
5. Needles should not be manually removed from disposable syringes or otherwise handled manually.
6. Discard disposable needles, syringes into puncture-resistant containers located as close as is practical to the area in which they have been used.

HANDPIECES AND COMPONENTS

1. A sterile handpiece must be used for each patient.
2. All handpieces (high, low speed, and sonic) are heat sterilized by the School of Dentistry Central Processing. Sterile handpieces are obtained from the "clean" area of Central Processing, and contaminated handpieces are returned to the "dirty" area for processing.

See addendum for cleaning and disinfecting procedures with droplet precautions/COVID-19

WATER LINES

1. Water at each dental unit is supplied by a 2 liter water bottle in which the water has been treated with an Adec tablet. Each morning, the water bottles are checked and replenished with fresh water in which 1 Adec tablet is added. Alternatively, some units contain Steri-straws which treat the water instead of the ICX tablets. Steri-straws are replaced annually.
2. In addition, these lines must be purged for a minimum of 20-30 seconds before and after use on each patient. This will aid in flushing out patient material that my have entered the air or water lines.
3. Safety Dept tests CFUs as well as pH, alkalinity, etc randomly, and quarterly to biannually

EVACUATION SYSTEM

1. After each patient use, the HVE (High Velocity Evacuation) system and saliva ejector should be flushed with at least 6 ounces (two 3 oz paper cups) of fresh water from a clean cup.
2. Flush the HVE system with a least one quart of water at the end of the day.
3. Clean the HVE system with an HVE cleaner at least once a week. Use the E-Vac solution available in the "wet" area of the large clinic.

ENVIRONMENTAL SURFACES

1. All environmental touch surfaces in the dental treatment area must be cleaned and disinfected before treatment of each patient.
2. The general procedures for environmental surface disinfection is to use CaviWipes for both precleaning and disinfection.

   First, clean all touch surfaces with a CaviWipe towelette. Use more than one, if necessary. Then, disinfect the surfaces by wiping them with a new towelette (more than one, if necessary) and allow the surface to remain wet for 5 minutes. After 5 minutes, the surface may be wiped dry to avoid transfer of any residual disinfectant to the patient or dental care worker.
3. Plastic barrier covers are used to aid in preventing surface contamination.

See addendum for cleaning and disinfecting procedures with droplet precautions/COVID-19

CLEANING, DISINFECTION, STERILIZATION

Cleaning is the basic first step of decontamination, wherein debris is physically removed in order to reduce the number of microorganisms present. Cleaning must always precede disinfection or sterilization.

Sterilization is a process that kills all microorganisms, including bacterial spores which are the most difficult microbe to kill.

Disinfection is a process that kills most disease causing microorganisms, but not necessarily all microorganisms.

There are three different levels of disinfection: low, intermediate, and high.

1. Low-level disinfection is the least effective disinfection process. It do not kill bacterial spores or the bacterium that caused tuberculosis.
2. Intermediate-level disinfection is a process that does kill the tuberculosis microorganisms. This is significant because it is almost as difficult to kill the TB organism as it is to kill spores.
3. High-level disinfection is a disinfection that kills some, but unfortunately not all, bacterial spores.

As with other medical and surgical instruments, dental instruments are classified into three Categories – critical, semicritical, or noncritical, depending on their risk of transmitting infection and the need to sterilize them between uses. Examples of the three:

Critical: surgical and other instruments used to penetrate soft tissue or bone. Must be heat sterilized after each use.

Semicritical: instruments such as mirrors and amalgam condensers that do not penetrate soft tissues or bone, but do contact oral tissues. Must be heat sterilized or sterilized in a high level disinfectant (gluteraldehyde).

Noncritical: instruments or medical/dental devices such as X-ray heads that come into contact only with intact skin. Because these noncritical surfaces have a low risk of transmitting infection, they should be cleaned and disinfected with an EPA registered chemical agent (ex., Cavicide or CaviWipes).

1. Before sterilization or disinfection, instruments should be cleaned thoroughly to remove bioburden.
2. All critical and semicritical dental instruments that are heat stable should be sterilized routinely between uses by steam under pressure (autoclaving), dry heat, or chemical vapor. Critical and semicritical instruments that will not be used immediately must be packaged before sterilization.
3. Proper functioning of sterilization cycles should be verified by conducting weekly biologic spore indicator testing. Heat-sensitive chemical indicators do not ensure adequacy of a sterilization cycle, but simply indicate that the pack/instrument has been processed through the heating cycle.
4. In all dental health care settings, indications for the use of liquid chemical germicides to sterilize instruments (cold sterilization) are limited. This procedure usually requires 10 hours of exposure to a fresh solution of a high level disinfectant.

   This sterilization process should be followed by aseptic rinsing with sterile water, drying, and, if the instrument is not used immediately, placement in a sterile container. It must be remembered, however, there is no practical way to verify the sterility of instruments treated in this manner.

CENTRAL STERILIZATION AND DISPENSING

The School of Dentistry maintains and operates a Central Sterilization and Dispensing facility within the School proper, wherein all sterilization and dispensing of treatment packs, cassettes, instruments, handpieces, materials, etc. is accomplished and provided from one restricted area. This facility is considered the center of the School's infection control program and guarantees the uniformity and continuity of sterility so vitally important to the control and elimination of cross-contamination or spread of bloodborne infectious diseases.

Central Sterilization and Dispensing's infection control policies and protocol are thorough and all-encompassing, and are on file in that department.

INFECTION CONTROL IN RADIOLOGY

Preparation of the X-Ray Room and Unit

At the beginning of the day and before the first patient in the afternoon, clean and disinfect with an EPA registered surface disinfectant (ex. CaviWipes) all environmental surfaces that will be touched during exposure of radiographs. **Clean the dental chair after each patient's use**.

Before Seating Each Patient When Exposing Intraoral Radiographs Using PSP Plates

1. With clean hands donned in clean gloves, place a paper towel on the counter top and open the plastic bag containing the pre-packaged PSP plates.
2. Empty the PSP plates onto the paper towel and set the empty plastic bag aside for collection of the contaminated exposed PSP plates.
3. Place plastic barrier covers on the exposure control switch and exposure timer selection buttons, and a plastic bag over the tube head.
4. Place a new plastic barrier cover on the headrest.

Before Seating Each Patient When Exposing Intraoral Radiographs Using Digital Sensors

1. With clean hands donned in clean gloves, place the provided plastic barriers over the digital sensor(s) to be used.
2. Place plastic barrier covers on the exposure control switch, exposure timer selection buttons, laptop keyboard, laptop mouse, and a plastic bag over the tube head.
3. Place a new plastic barrier cover on the headrest.

Exposing Intraoral Radiographs Using PSP Plates (Contained in Envelopes)

1. Don powder-free exam gloves.
2. After each PSP plate is exposed, open the PSP plate envelope over the original bag, allowing the PSP plate to drop inside without contacting contaminated gloves/surfaces. Discard the empty PSP plate envelopes as they are emptied.
3. At the conclusion of exposing the radiograph(s), remove and discard the contaminated gloves from your hands and use the provided alcohol hand rub (Sanityze).
4. Don hands with a clean pair of powder-free exam gloves and transport the bag containing the PSP plates to the scanning room.
5. Place a paper towel on the counter adjacent to the PSP scanning tower.
6. Gently invert the plastic bag, allowing the PSP plates to "drop" onto the paper towel and discard the plastic bag.
7. Remove and discard the contaminated gloves from your hands and use the provided alcohol hand rub (Sanityze).
8. With ungloved hands, utilize the computer and scanning tower to process the exposed PSP plates.
9. After you have completed processing your PSP plates, return to the radiographic operatory, don a new pair of exam gloves, collect the image receptor holding devices, and return them to the image receptor cold sterilization cart.
10. Remove and discard the contaminated exam gloves and utilize the alcohol hand rub (Sanityze).
11. Proceed to the protocol for cleaning and disinfecting the radiographic operatory.

Exposing Intraoral Radiographs Using Digital Sensors

1. Don powder-free exam gloves.
2. Use the plastic barrier covered laptop keyboard and mouse to navigate the patient's chart and MiPACS software.

3. At the conclusion of the radiographic exam, remove and discard the contaminated gloves from your hands and use the provided alcohol hand rub (Sanityze).
4. Escort your patient to the waiting room.
5. Return to the operatory and don a new pair of exam gloves, collect the image receptor holding devices, and return them to the image receptor cold sterilization cart.
6. Remove and discard the contaminated gloves from your hands and use the provided alcohol hand rub (Sanityze).
7. Return to the operatory and proceed to the protocol for cleaning and disinfecting the radiographic operatory.

Exposing Digital Panoramic Images

1. Clean and disinfect with an EPA registered disinfectant (ex. CaviWipes) the chin cup, temple support rods, and handles of the unit before and after positioning each patient.
2. Wash and dry hands.
3. Place plastic barriers over the bite-block, on the laptop keyboard and mouse, exposure setting control panel, and the exposure button.
4. Use the plastic barrier covered laptop keyboard and mouse to navigate the patient's chart and MiPACS software.
5. Position the patient and expose the radiograph(s).
6. Remove and discard the contaminated gloves from your hands and use the provided alcohol hand rub (Sanityze) and escort the patient to the waiting room.

7. Return to the operatory and proceed with the protocol for cleaning and disinfecting the radiographic operatory.

Exposing Tomographic Films

1. **Wash and dry contaminated ear rod tips and sterilize** by soaking in a fresh high level disinfectant for the appropriate time (10 hours for Cidex Plus). Store in a clean bag until ready for use.
2. **Before and after each patient**, clean and disinfect ear rods, supports, and the chin cup with an EPA registered surface disinfectant (ex. CaviWipes).
3. **Wash and dry hands**.
4. Place plastic barriers over the bite-block, on the laptop keyboard and mouse, exposure setting control panel, and the exposure button.
4. Position the patient and expose the film radiograph.
5. Don overgloves, remove the ear rod tips and place them in appropriate pre-sterilization collection container.
7. Remove and discard the contaminated gloves from your hands and use the provided alcohol hand rub (Sanityze).
8. Return to the operatory and proceed to the protocol for cleaning and disinfecting the radiographic operatory.

Radiographic Operatory Cleansing and Disinfection Protocol

1. Don a clean pair of exam gloves.
2. If not worn already, don face shield or glasses with side shields, and mask
3. Remove all plastic barrier devices
3 Discard all plastic barrier devices in the non-hazardous waste container.
4. Remove and discard the contaminated exam gloves.
5. Don a clean pair of exam gloves.
6. Clean and disinfect all contaminated surfaces using an EPA registered disinfectant (CaviWipes).
    a. With one disinfecting wipe, wipe all contaminated surfaces.

b. With a second disinfecting wipe, wipe all cleansed surfaces, ensuring that all of the cleansed surfaces appear "wet", and allow to air dry for 5 minutes.

c. If, at the conclusion of 5 minutes, the surfaces remain wet and another provider is waiting to use the radiographic operatory, surfaces may be dried with a clean paper towel.

WEST VIRGINIA UNIVERSITY SCHOOL OF DENTISTRY
PROTOCOL FOR DISINFECTING IMPRESSIONS AND DENTAL PROSTHESES

All dental health care providers (faculty, students, and staff) must clean and disinfect dental impressions and prostheses before sending these items to a dental laboratory or working with them in a laboratory. Likewise, dental appliances must be disinfected before they are returned to the patient.

1. Upon removal from the mouth, clean the impression or dental prosthesis by rinsing under running water. Dental prostheses may need to be brushed with a new (unused) toothbrush.

2. Shake excess water from the impression/prosthesis.

3. Generously **spray** all surfaces of the impression/prosthesis with an acceptable surface disinfectant (ex. Cavicide).

4. Immediately, place impression/prosthesis in a zippered plastic bag or plastic headrest cover that is sealed with tape.

5. Leave the impression/prosthesis in the sealed bag for **at least 5 minutes** before removing to handle. **Note: The dental laboratory technician will not accept these items unless they are in a disinfectant in a sealed plastic bag.**

6. After the appropriate disinfection time, with **clean gloved hands**, remove the impression/prosthesis from the plastic bag, and rinse thoroughly under running water before handling it in the laboratory or returning it to the patient.

WEST VIRGINIA UNIVERSITY SCHOOL OF DENTISTRY
PROTOCOL FOR STERILIZATION/DISINFECTION OF LABORATORY ITEMS UTILIZED FOR MANIPULATION OF DENTAL MATERIALS AND PROSTHESES

1. **Metal impression trays, burs, rag wheels, and disks, metal spatulas, and glass mixing slabs** that directly or indirectly contact oral tissues **must be heat sterilized.**
   a. **Clean** by washing or rinsing the item.
   b. **Dry** item.
   c. **Bag** and **label for steam or dry heat sterilization by Central Processing**.

2. **Items which cannot be heat sterilized** (some rubber and plastic) must be sterilized by **immersing in glutaraldehyde for 10 hours**.
   a. These items **must then be rinsed thoroughly** under running water and dried before use.
   b. **Store** in a **clean bag**.

3. **Rubber mixing bowls may be disinfected with a surface disinfectant (ex. CaviWipes).**
   a. Wash bowl, rinse, and dry it.
   b. Wipe with a CaviWipe, and allow surface to remain wet for at least 5 minutes.
   c. Dry and store in a clean plastic bag

4. **Protocol for care, use and maintenance of rag wheels and the dental lathes.**
   a. **Obtain sterile rag wheel** and package of fresh pumice **from Central Processing**.
   b. **Line pan with aluminum foil** available in clinical lab.
   c. **Use fresh pumice and a sterile rag wheel for each patient's disinfected prosthesis**.
   d. **When finished** with rag wheel, **remove used pumice by removing foil lining** from the pan and **throw pumice and foil away** in waste can.
   e. **Clean** the **rag wheel** by thoroughly rinsing with running water and dry by blotting with paper towels.
   f. **Wrap and label rag wheel for autoclaving, and leave with Central Processing for sterilization**.

5. **Polishing prosthesis with abrasive sticks or bars**.
   a. Make sure that prosthesis is properly disinfected before polishing.
   b. Line pan with aluminum foil and discard foil after use.

****Note:** **Change patient care gloves when adjusting or polishing patient prostheses in the laboratory. Change gloves again before handling disinfected prostheses that are to be returned to the patient in the clinic.**

INFECTION CONTROL AND SAFETY GUIDELINES
FOR WVU SCHOOL OF DENTISTRY

PATIENT TREATMENT AREAS

1. All personal protective equipment (masks, glasses with side shields, gloves, and cover gowns) must be worn by the dental operator, assistant, faculty shadowers, and observers during any intra-oral patient treatment. Patients also must wear goggles.
2. Cross contamination must be avoided while treating patients or handling contaminated material.
3. All objects that touch mucous membranes must be clean. Those objects that penetrate mucous membranes must be sterile.
4. Gloves must be changed between patients, or sooner if torn or if their texture changes.
5. Units must be properly cleaned and disinfected before and after treatment of each patient.
6. The operator's and assistant's hair must be contained so that it does not fall forward in front of their faces.
7. Impressions must be rinsed and properly disinfected before taken to the lab.
8. Application of make-up or lip balm is prohibited.
9. Contact lenses should not be handled.
10. All food and drink is prohibited.
11. Cover gowns should be worn only in patient treatment areas, while escorting patients between treatment areas, or while going between treatment areas. **Gowns may not be worn in reception areas, restrooms, or other non-clinical areas**. (See addendum for Droplet precautions/COVID-19 and restricted wear areas.)
12. All sharps must be disposed of into sharps (needles, irrigation tips, ortho wire, and other sharp objects) containers.
13. All regulated infectious waste (blood soaked, or tissue) must be disposed of into infectious waste containers, **not in sharps or regular trash containers**.
14. All water lines at a dental unit must be purged for 2 minutes prior to their first use of the day and for 30 seconds between each patient during a day.
15. Student coats, backpacks, or any other personal belongings may not be stored at the entrance to the patient treatment areas or outside of dental unit drawers in the treatment areas.
16. Items used for patient treatment (napkins, anesthetic carpules, masks, etc.) may **not** be stored in the unit cabinet under the sink.
17. Additional guidelines may be required in some treatment areas (ex: Oral Surgery).
18. If necessary for an individual to accompany a patient during treatment, that individual must wear personal protective equipment and **may not** assist operators in providing patient care.

PRE-CLINICAL AND CLINICAL LABORATORIES

1. All must wear eye protection when any laboratory procedures are being performed.
2. Hair must be contained so that it does not fall forward in front of face.
3. All food and drink is prohibited.
4. Contact lenses should not be handled.
5. Application of make-up or lip balm is prohibited.
6. Cross contamination must be avoided while handling objects that have previously been in a patient's oral cavity.
7. Impressions and/or appliances must be rinsed and properly disinfected before they are transferred to the laboratory and before returned to the patient.

8. Coats, backpacks, or other personal belongings must be kept either in the open area under the student's work station, or in the personal assigned locker out of the laboratory. Storage of these items in other areas of the laboratory is prohibited as per directive from the Vice President's Office of the Health Sciences Center.

OSHA/INFECTION CONTROL VIOLATIONS
DISCIPLINARY PROCESS FOR STUDENTS

FIRST VIOLATION:

A letter will be sent to the violator/s delineating the infraction. A 7-9 page OSHA and Infection Control paper will be due to the Associate Dean for Clinical Education and Patient Care within 14 days of the notification. For each day past the due date, one day of clinic privileges will be suspended.

SECOND VIOLATION:

Clinic privileges will be suspended for five (5) days. The Associate Dean for Clinical Education and Patient Care will meet with the individual. A letter of warning is generated as a result of this meeting.

THIRD VIOLATION:

Clinic privileges will be suspended for ten (10) days. The violator must attend an OSHA/Infection Control/Risk Management Course and write a paper due to the Associate Dean for Clinical Education and Patient Care within 14 days of the notification. For each day past the due date, one day of clinic privileges will be suspended. A second letter of warning is generated as a result.

FOURTH VIOLATION:

A meeting with the Dean of the School of Dentistry, which will result in disciplinary action up to and including dismissal.

INFECTION CONTROL DISCIPLINARY PROCESS
FACULTY AND STAFF

FIRST VIOLATION:
A representative from the Office of Clinic Administration will meet with the individual. A letter will be sent to the violator delineating the infraction. The individual will be required to retake the SOD Infection Control course. A record of the incident will become a part of the personnel file via counseling and/or letter of warning as consistent with the guidelines of employer (WVU/WVUH).

SECOND VIOLATION:
A letter of warning is generated as a result of this meeting. The individual will participate in infection control inspections for a period of time defined by the Office of Clinic Administration.

THIRD VIOLATION:
A letter of warning is generated as a result of this session. The individual will be subject to suspension without pay and/or revocation of clinic privileges for a period of time recommended by the Office of Clinic Administration.

FOURTH VIOLATION:
A recommendation for dismissal will be submitted to the individual's employer.

WVU HSC MANAGEMENT POLICY ON EXPOSURE TO BLOOD OR BODY FLUID

An exposure incident is defined as follows:

- Skin pierced, cut, or scratched by a sharp object contaminated with blood or other potentially infectious body fluid
- Spills or splashes of blood or other potentially infectious material onto non-intact skin (cuts, hangnails, abrasions, chapped skin) or onto any mucous membrane.

When an exposure occurs, stop the dental procedure and wash wound immediately with soap and water. If eyes are exposed to blood or contaminated body fluids, flush with water at an eyewash station for 15 minutes. Notify School of Dentistry(SOD) supervisor of incident and proceed with the following.

WEEKDAY EXPOSURES (6:30am – 6:00pm)

- **Immediately report** the incident to Employee Health, 2B04, Ruby Memorial Hospital, **304-598-4160** (pick no option).
- Explain the incident to the patient and request authorization to test his/her blood for HIV, Hepatitis B, and Hepatitis C.
- If the **patient refuses** to sign the lab consent forms, document it in the patient's chart, dismiss the patient, and then go to Employee Health, Ruby Hospital, 2nd Floor.
- If the **patient agrees** to sign the lab consent forms, download and print the exposure packet forms titled "Authorization for Testing and Release Form" and "WVU Hospitals Test Order Form" available at http://intranet.hsc.wvu.edu/sod/clinical-affairs/oshainfection-and-biohazard-control/exposure-packet/.
- Have the **patient sign the "Authorization for Testing and Release Form"**.
- Take the **patient, "Authorization for Testing and Release Form", and the "WVU Hospitals Test Order Form"** immediately to the laboratory on the first floor of the Physicians' Office Center (POC) for appropriate tests. If the patient does not have a hospital number, he/she can be registered at the POC Lab.
- The **employee/student** must report to Employee Health, Ruby, 2nd Floor (6:30am-4:30pm**)** or the next business day if after 4:30pm.

AFTER HOURS EXPOSURES (After 6:00pm weekdays, or during weekends and holidays):

- **Immediately report** the incident to Clinical Laboratories in Ruby Memorial Hospital, **304-598-4232**.
- Explain the incident to the patient and request authorization to test his/her blood for HIV, Hepatitis B, and Hepatitis C.
- If the **patient refuses** to sign the lab consent forms, document it in the patient's chart, dismiss the patient, and then have **supervising faculty notify ED charge nurse at 304-598-4172.**
- The **employee/student** must report to Employee Health, Ruby, 2nd Floor, the next business day (between 6:30am-4:30pm).
- If the **patient agrees** to sign the lab consent forms, download and print the exposure packet forms titled "Authorization for Testing and Release Form" and "WVU Hospitals Test Order Form" available at http://intranet.hsc.wvu.edu/sod/clinical-affairs/oshainfection-and-biohazard-control/exposure-packet/.
- Escort the patient to Clinical Labs, Specimen Processing Window, 3rd Floor Ruby Memorial Hospital. (If the patient does not have a hospital number, take him/her to register at the Admissions Desk, second floor of Ruby, before going to the lab.)
- Inform the lab there has been a bloodborne pathogen exposure in the SOD and to page a phlebotomist to draw blood from the source patient.
- The lab will call the supervising SOD faculty with the patient's lab results. If the **patient's HIV result is positive, the employee/student must immediately report to the Emergency Department of Ruby Hospital.**

* WVU Employee Health will direct all follow-up on exposure incidents. All laboratory testing expenses will be paid by WVU. The employee/student must complete an Incident Report obtained from the office of Donna Haid, Director of Clinical Education and Patient Care at the WVU SOD.

Addendum for matters relating to COVID-19 & Interim Policy Additions

https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Finfection-control%2Fcontrol-recommendations.html

PREFACE: UNDERSTAND TRANSMISSION BASED PRECAUTIONS, DEFINITIONS OF UNIVERSAL, STANDARD, CONTACT, DROPLET, AIRBORNE PRECAUTIONS

OSHA requires, at a minimum, dental offices to follow the concept of universal precautions to control occupational exposure to bloodborne pathogens (BBPs), while the Centers for Disease Control and Prevention (CDC) recommends the adherence to standard precautions.
The term universal precautions refers to the concept that all blood and bloody body fluids should be treated as infectious because patients with bloodborne infections can be asymptomatic or unaware they are infected. In 1996, the CDC expanded the concept and changed the term to standard precautions, which integrated and expanded the elements of universal precautions to include contact with all body fluids (except sweat), regardless of whether blood is present. In dentistry, standard precautions would include controlling exposure to saliva as well as blood, since those are the only two bodily fluids potentially encountered during dental treatments.
Since OSHA has always considered saliva as “other potentially infectious material” (OPIM) in dental infection control, no operational difference exists in clinical dental practice between universal precautions and standard precautions. Standard precautions must be used in the care of all patients, regardless of their infection status.
Transmission-Based Precautions are the second tier of basic infection control and are to be used in addition to Standard Precautions for patients who may be infected or colonized with certain infectious agents for which additional precautions are needed to prevent infection transmission.

Contact Precautions

Use Contact Precautions for patients with known or suspected infections that represent an increased risk for contact transmission.·

· Use personal protective equipment (PPE) appropriately, including gloves and gown. Wear a gown and gloves for all interactions that may involve contact with the patient or the patient’s environment. Donning PPE upon room entry and properly discarding before exiting the patient room is done to contain pathogens.

· Use disposable or dedicated patient-care equipment (e.g., blood pressure cuffs). If common use of equipment for multiple patients is unavoidable, clean and disinfect such equipment before use on another patient.

· Prioritize cleaning and disinfection of the rooms of patients on contact precautions ensuring rooms are frequently cleaned and disinfected (e.g., at least daily or prior to use by another patient if outpatient setting) focusing on frequently-touched surfaces and equipment in the immediate vicinity of the patient.

Droplet Precautions (COVID-19 is droplet transmission infection)

Use Droplet Precautions for patients known or suspected to be infected with pathogens transmitted by respiratory droplets that are generated by a patient who is coughing, sneezing, or talking.

· Source control: put a mask on the patient.

· Ensure appropriate patient placement in a single room if possible. In ambulatory settings, place patients who require Droplet Precautions in an exam room or cubicle as soon as possible and instruct patients to follow Respiratory Hygiene/Cough Etiquette recommendations.

· Use personal protective equipment (PPE) appropriately. Don mask upon entry into the patient room or patient space.

· Limit movement of patients and HCPs in and out of treatment rooms/areas, instruct patient to wear a mask and follow Respiratory Hygiene/Cough Etiquette.

Airborne Precautions

Use Airborne Precautions for patients known or suspected to be infected with pathogens transmitted by the airborne route (e.g., tuberculosis, measles, chickenpox, disseminated herpes zoster).

· Source control: put a mask on the patient.

· Ensure appropriate patient placement in an airborne infection isolation room (AIIR) constructed according to the Guideline for Isolation Precautions. In settings where Airborne Precautions cannot be implemented due to limited engineering resources, masking the patient and placing the patient in a private room with the door closed will reduce the likelihood of airborne transmission until the patient is either transferred to a facility with an AIIR or returned home.

· Use personal protective equipment (PPE) appropriately, including a fit-tested NIOSH-approved N95 or higher level respirator for healthcare personnel.

· Limit transport and movement outside of the room to medically-necessary purposes. If transport or movement outside an AIIR is necessary, instruct patients to wear a surgical mask, if possible, and observe Respiratory Hygiene/Cough Etiquette.

· Immunize susceptible persons as soon as possible following unprotected contact with vaccine-preventable infections (e.g., measles, varicella or smallpox).

Background

· SARS-CoV-2, the virus that causes COVID-19, is thought to be spread primarily through respiratory droplets. Airborne transmission from person-to-person over long distances is unlikely. However, the contribution of aerosols, or droplet nuclei, to close proximity transmission is currently uncertain. The virus has been shown to survive in aerosols for hours and on surfaces for days. There are also indications that patients may be able to spread the virus while pre-symptomatic or asymptomatic.

· 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 contains large particle droplets of water, saliva, blood, microorganisms, and other debris. This spatter travels only a short distance and settles out quickly, landing on the floor, nearby operatory surfaces, DHCP, or the patient. The spray also might contain certain aerosols. Surgical masks protect mucous membranes of the mouth and nose from droplet spatter, but they do not provide complete protection against inhalation of airborne infectious agents.

· There are currently no data available to assess the risk of SARS-CoV-2 transmission during dental practice or to determine whether DHCP are adequately protected when providing dental treatment using Standard Precautions. The Occupational Safety and Health Administration's Guidance on Preparing Workplaces for COVID-19 places DHCP in the very high exposure risk category, as their jobs are those with high potential for exposure to known or suspected sources of the virus that causes COVID-19 during specific procedures.

· When practicing in the absence of Airborne Precautions, the risk of SARS-CoV-2 transmission during aerosol generating dental procedures cannot be eliminated. Caring for patients requiring Airborne Precautions is not possible in most dental settings as they are not designed for or equipped to provide this standard of care. For example, most dental settings do not have airborne infection isolation rooms or single-patient rooms, do not have a respiratory protection program, and do not routinely stock N95 respirators.

INTERIM POLICIES

Universal Source Control

Everyone entering the healthcare facility/ dental clinic (e.g., healthcare personnel, patients, visitors), regardless of symptoms shall wear a mask or other type of covering of the mouth and nose. This action is recommended to help prevent transmission (asymptomatic and pre-symptomatic) from infected individuals who may or may not have symptoms of COVID-19.

- All persons will have screening for fever and symptoms of COVID-19 before they enter the healthcare facility. A screening questionnaire and temperature will be completed for all persons entering.

- Persons (patients or employees) will be denied access if there is any suspicion of transmissibility, and referred for testing as appropriate per the screening protocols (questionnaire answers, temperature, etc) in place.

- The SoD may refer patients for testing, and deny access pending results of testing and/or clearance from their medical provider

- Any patients who have completed COVID-19 testing, or referred for testing prior to dental treatment must provide the date/s of the tests and test results from their medical provider/testing agency to be added to their axium/ WVU School of Dentistry chart. Any patient who does not provide satisfactory results may be denied access to care

If emergency dental care is medically necessary for a patient who has, or is suspected of having COVID-19, Airborne Precautions (an isolation room with negative pressure relative to the surrounding area and use of an N95 filtering disposable respirator for persons entering the room) should be followed. Dental treatment should be provided in a hospital or other facility that can treat the patient using the appropriate precautions.

People with COVID-19 who have completed home isolation clearance can receive emergency dental care. This is decided using two strategies: a non-test-based strategy, and a test-based-strategy:

- Non-test-based-strategy: At least 3 days (72 hours) have passed since recovery (resolution of fever without the use of fever-reducing medications and improvement in respiratory symptoms such as cough or shortness of breath) and at least 7 days have passed since symptoms first occurred.
- Test-based-strategy:
  Persons who have COVID-19 who have symptoms: Resolution of fever without the use of fever-reducing medications and improvement in respiratory symptoms (e.g., cough, shortness of breath) and negative results of an FDA Emergency Use Authorized molecular assay for COVID-19 from at least two consecutive nasopharyngeal swab specimens collected ≥24 hours apart5 (total of two negative specimens).

Persons with laboratory-confirmed COVID-19 who have not had any symptoms: At least 7 days have passed since the date of the first positive COVID-19 diagnostic test and have had no subsequent illness.

Patients and Caregivers

For caregivers and patients, a cloth face covering is appropriate. If a caregiver or patient arrives to the dental clinic without a cloth face covering, a facemask will be given for them to wear as long as supplies are available. Patients and necessary accompanying caregivers must wear the mask/protective covering upon entry into the facility, as well as AFTER care to the outside of the facility.
Patients only will be permitted access, with the exception of caregivers necessary for minors, disabled patients, translators, etc. Only one caregiver may accompany the patient.

Healthcare Personnel

As community transmission intensifies contact tracing for exposures in a healthcare setting is necessary as a universal source control for HCP and screening for fever and symptoms initially, and then if any symptoms occur and/or health or travel circumstances change.. Cloth face coverings are not considered PPE because their capability to protect healthcare personnel (HCP) is unknown. Facemasks, if available, should be reserved for HCP.

As part of source control efforts, HCP should wear a facemask at all times while they are in the healthcare facility. When available, facemasks are generally preferred over cloth face coverings for HCP as facemasks offer both source control and protection for the wearer against exposure to splashes and sprays of infectious material from others. **If there are anticipated shortages of facemasks, facemasks should be prioritized for HCP and then for patients with symptoms of COVID-19 (as supply allows). Cloth face coverings should NOT be worn instead of a respirator or facemask if more than source control is required.**
Some HCP whose job duties do not require PPE (e.g., clerical personnel) might continue to wear their cloth face covering for source control while in the healthcare facility. Other HCP (e.g., clinic providers) might wear their cloth face covering for part of the day when not engaged in direct patient care activities, only switching to a respirator or facemask when this level of PPE is required. To avoid risking self-contamination, HCP should consider continuing to wear their respirator or facemask (extended use) instead of intermittently switching back to their cloth face covering.
Because cloth face coverings can become saturated with respiratory secretions, care should be taken to prevent self-contamination. They should be changed if they become soiled, damp, or hard to breathe through, laundered regularly (e.g., daily and when soiled), and, hand hygiene should be performed immediately before and after any contact with the cloth face covering.

Upon Arrival and During the Visit

- Points of entry to the facility will be limited and monitored
- Patients and caregivers entering the facility, regardless of symptoms, must put on a cloth face covering or facemask before entering the building and complete screening for fever and symptoms of COVID-19.
- After screening is approved, patients and caregivers shall proceed to their waiting area; Patients and caregivers shall continue to wear the masks while in the waiting areas, as

well as to and from the treatment areas. Supplies for respiratory hygiene and cough etiquette shall be provided, including alcohol-based hand rub (ABHR) with 60-95% alcohol, **Before Patient Arrival**

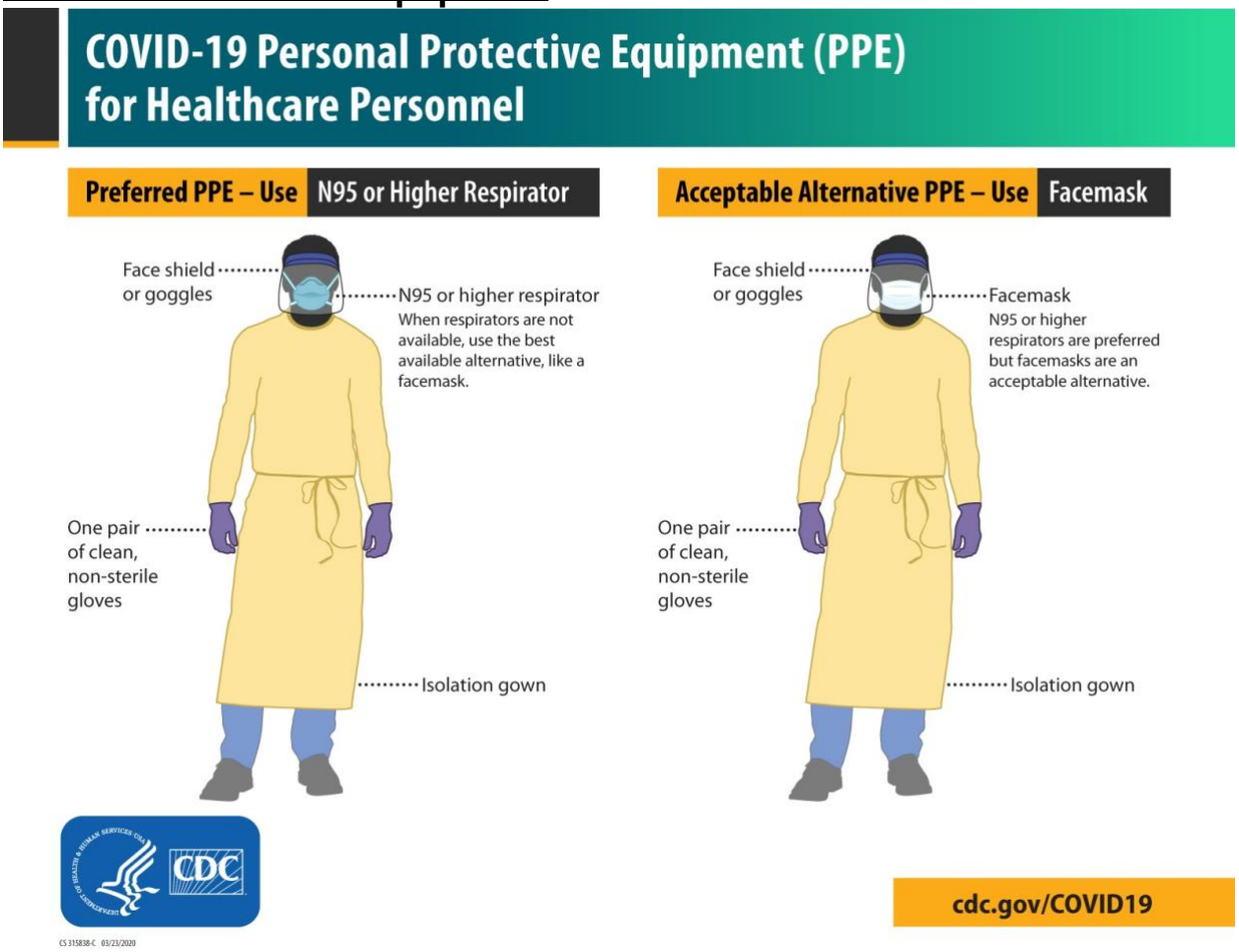
- When scheduling appointments for routine procedure patients or providers shall call ahead and discuss the need to reschedule their appointment if they develop fever or symptoms of COVID-19 on the day they are scheduled to be seen. Patients will be advised that they should put on their own cloth face covering, regardless of symptoms, before entering the facility.
- tissues, and no-touch receptacles for disposal, at entrances, waiting rooms, and patient check-ins.
- Providers who will be taking vitals and assessing patients shall wear a respirator (or facemask if respirators are not available), eye protection, and gloves for the primary evaluation of all patients presenting for care until COVID-19 is deemed unlikely.
- Providers should have a supply of facemasks or cloth face coverings; these should be provided to all patients who are not wearing their own cloth face covering at check-in, assuming a sufficient supply exists.
- Patients suspected of infection after triage shall not be treated, and referred for testing.

Adhere to Standard and Transmission-Based Precautions

Standard Precautions assume that every person is potentially infected or colonized with a pathogen that could be transmitted in the healthcare setting. Elements of Standard Precautions that apply to patients with respiratory infections, including COVID-19, are summarized below. Attention should be paid to training and proper donning (putting on), doffing (taking off), and disposal of any PPE. This document does not emphasize all aspects of Standard Precautions (e.g., injection safety) that are required for all patient care; the full description is provided in the Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings.

- **Hand Hygiene**
  - HCP should perform hand hygiene before and after all patient contact, contact with potentially infectious material, and before putting on and after removing PPE, including gloves. Hand hygiene after removing PPE is particularly important to remove any pathogens that might have been transferred to bare hands during the removal process.
  - HCP should perform hand hygiene by using ABHR (ALCOHOL BASED HAND RUB) with 60-95% alcohol or washing hands with soap and water for at least 20 seconds. If hands are visibly soiled, use soap and water before returning to ABHR.

- **Personal Protective Equipment**



Alternative use of surgical mask instead of the preferred N95 is acceptable ONLY if there are N95 shortages and the procedure is non-aerosol generating.

Any reusable PPE must be properly cleaned, decontaminated, and maintained after and between uses.

PPE , especially masks should be worn until OUTSIDE of the treatment area, and doffed in the dedicated doffing areas. Discard disposable PPE. Decontaminate and or/place masks in decontamination receptacles if acceptable for reuse.

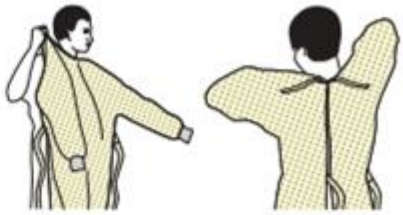
Follow extended use/reuse guidelines (provided in training module)

SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator

3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit

4. GLOVES

- Extend to cover wrist of isolation gown

USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene

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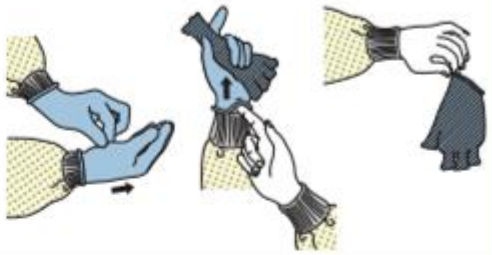
HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 1

There are a variety of ways to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. Here is one example. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

1. GLOVES

- Outside of gloves are contaminated!
- If your hands get contaminated during glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Using a gloved hand, grasp the palm area of the other gloved hand and peel off first glove
- Hold removed glove in gloved hand
- Slide fingers of ungloved hand under remaining glove at wrist and peel off second glove over first glove
- Discard gloves in a waste container



2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band or ear pieces
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container

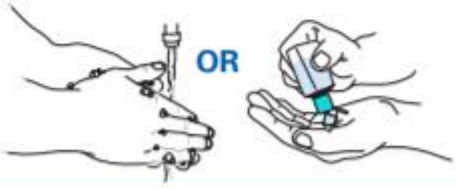
3. GOWN

- Gown front and sleeves are contaminated!
- If your hands get contaminated during gown removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Unfasten gown ties, taking care that sleeves don't contact your body when reaching for ties
- Pull gown away from neck and shoulders, touching inside of gown only
- Turn gown inside out
- Fold or roll into a bundle and discard in a waste container

4. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container

5. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE



PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE

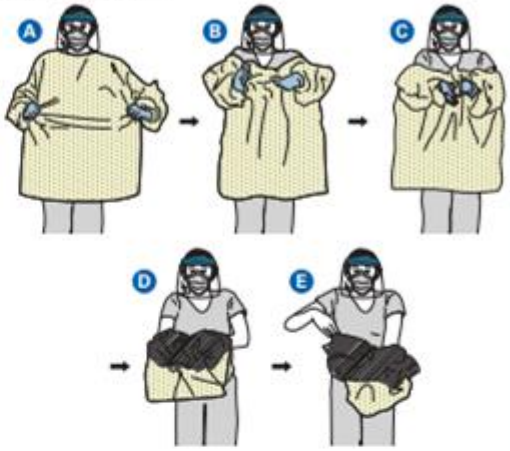
CDC

HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 2

Here is another way to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

1. GOWN AND GLOVES

- Gown front and sleeves and the outside of gloves are contaminated!
- If your hands get contaminated during gown or glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp the gown in the front and pull away from your body so that the ties break, touching outside of gown only with gloved hands
- While removing the gown, fold or roll the gown inside-out into a bundle
- As you are removing the gown, peel off your gloves at the same time, only touching the inside of the gloves and gown with your bare hands. Place the gown and gloves into a waste container



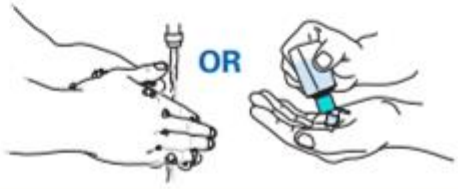
2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band and without touching the front of the goggles or face shield
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container

3. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container

4. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE



PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE

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Use the highest level of personal protective equipment (PPE) available:
SYNOPSIS:

If available, wear gloves, a gown, eye protection (i.e., goggles or a disposable/reusable face shield that covers the front and sides of the face), and an N954 or higher-level respirator during emergency dental care for patients without COVID-19 (for aerosol generating procedures/ AGPs, surgical mask for non AGPs)

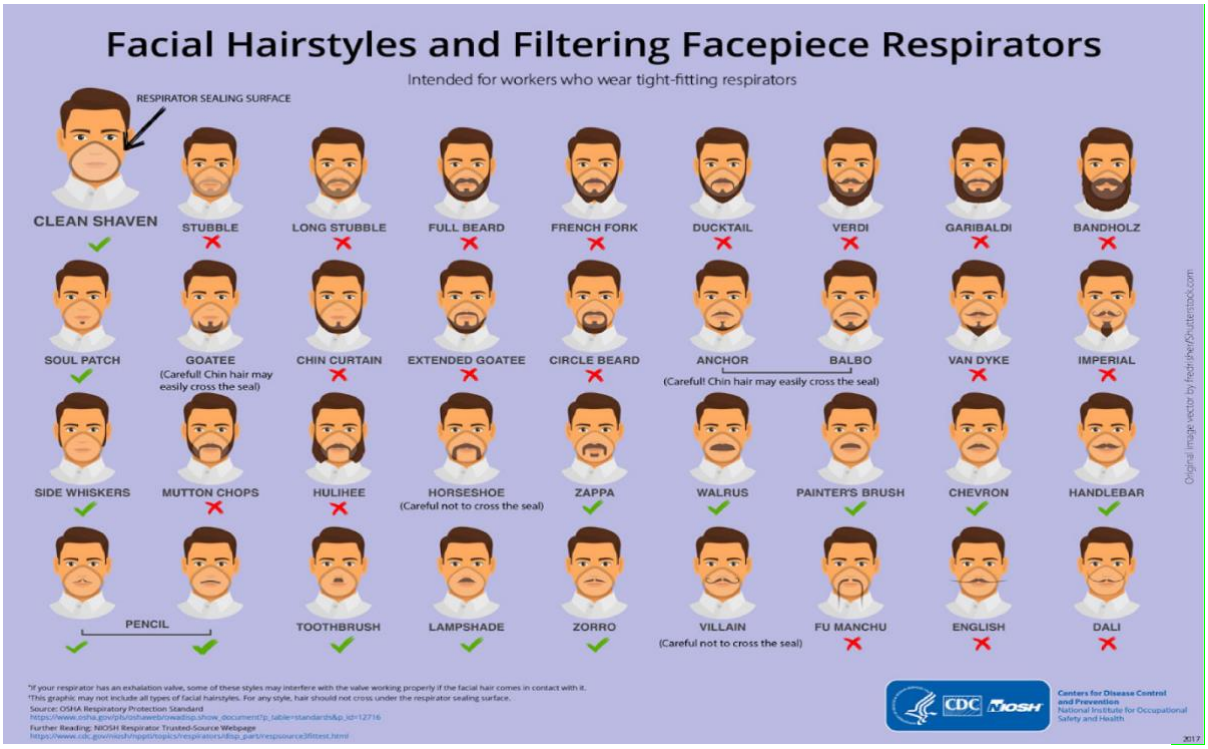
- Disposable respirators should be removed and discarded after exiting the patient's room or care area.
- Reusable eye protection must be cleaned and disinfected according to manufacturer's reprocessing instructions prior to re-use. Disposable eye protection should be discarded after use.
- Change gown if it becomes soiled. Remove and discard the gown in a dedicated container for waste or linen before leaving the patient room or care area. Disposable gowns should be discarded after use.
- If a respirator is not available, use a combination of a surgical mask and a full-face shield.

MASKS

Respirator or Facemask *(Cloth face coverings are NOT PPE and should not be worn for the care of patients with known or suspected COVID-19 or other situations where a respirator or facemask is warranted)*

- For AGPs, Put on an N95 respirator (or higher level respirator) or facemask (if a respirator is not available) before entry into the patient room or care area, if not already wearing one as part of extended use or reuse strategies to optimize PPE supply. Higher level respirators include other disposable filtering facepiece respirators, PAPRs, or elastomeric respirators.
- N95 respirators or respirators that offer a higher level of protection shall be used instead of a facemask when performing or present for an aerosol generating procedure. Disposable respirators and facemasks shall be removed and discarded after exiting the patient's room or care area and closing the door unless implementing extended use or reuse. Perform hand hygiene after removing the respirator or facemask.
- Alternative use of surgical mask instead of the preferred N95 is acceptable ONLY if there are N95 shortages and/or the procedure is non-aerosol generating.
    - If reusable respirators are used, they must be cleaned and disinfected according to manufacturer's reprocessing instructions prior to re-use. Follow instructions for use and reuse according to the WVU SoD training module
- NOTE: While the CDC and NIOSH do not recommend decontamination and reuse of respirators for standard care, it is currently an accepted practice in times of crisis when shortages exist.
- NOTE: N95 respirators require Fit testing to ensure protection; however the ADA and CDC have approved use/wear of N95 respirators in a time of crisis when Fit testing for all HCPs needing to wear them is not feasible

- Individuals with facial hair must refer to the diagram below and modify facial hair as necessary to comply with accepted facial hair styles when wearing a respirator.



EYE PROTECTION

- Put on eye protection (i.e., goggles or a disposable face shield that covers the front and sides of the face) upon entry to the patient room or care area, if not already wearing as part of extended use or reuse strategies to optimize PPE supply. Personal eyeglasses and contact lenses are NOT considered adequate eye protection.
- Reusable eye protection (e.g., goggles) must be cleaned and disinfected according to manufacturer's reprocessing instructions prior to re-use. Disposable eye protection should be discarded after use unless following protocols for extended use or reuse.

GLOVES

- Put on clean, non-sterile gloves upon entry into the patient room or care area.
  - Change gloves if they become torn or heavily contaminated.
- Remove and discard gloves when leaving the patient room or care area, and immediately perform hand hygiene.

GOWNS

- Put on a clean isolation gown upon entry into the patient room or area. Change the gown if it becomes soiled. Remove and discard the gown
- If there are shortages of gowns, they should be prioritized for:
  - aerosol generating procedures

- care activities where splashes and sprays are anticipated
- high-contact patient care activities that provide opportunities
- for transfer of pathogens to the hands and clothing of HCP.

GENERAL ATTIRE RECOMMENDATIONS: For clinical exposure, consider wearing scrubs if available. Wear of ties in clinic is discouraged. (Even though a cover gown must be worn.)

NO PERSONS SHALL WEAR PPE THROUGH NON-TREATMENT AREAS (INCLUDING HALLWAYS AND WAITING ROOMS) AFTER USE IN A TREATMENT AREA

Patient Placement

- Limit transport and movement outside of the treatment area to essential purposes. Only persons providing care for patient shall be in treatment rooms, and minimize traffic in and out of the treatment area/s as much as possible.

Take Precautions When Performing Aerosol Generating Procedures (AGPs)

Procedures should be performed cautiously and avoided if possible, this includes but is not limited to sonic and/or ultrasonic instrumentation, and use of handpieces. If performed, the following should occur:

- HCP in the room should wear an N95 or higher-level respirator, eye protection, gloves, and a gown.
- All AGPs require an assistant using HVE. Splatter generating procedures such as necessary selective polishing must also have HVE operating adjacent to the head/cup during operation in the oral cavity.
- Rubber dam isolation shall be used for ALL procedures which can be completed with one
- All patients shall complete a pre-procedural rinse of povidone-iodine solution or hydrogen peroxide solution prior to procedures if available.
- The number of HCP present during the procedure should be limited to only those essential for patient care and procedure support. (only those essential for the patient's physical or emotional well-being and care e.g., care partners are permitted.) Caregivers should not be present for the procedure as much as possible.
- (AGPs should ideally take place in an AIIR- but is not feasible at this time)
- Clean and disinfect procedure room surfaces promptly as described in the section on environmental infection control below.

Environmental Infection Control

- Cleaning and disinfection procedures shall be followed consistently and correctly. Note: Cavicide which impregnates Caviwipes is effective against SARS-Cov-2/ COVID-19 virus, when following manufacturers directions.

- Routine cleaning and disinfection procedures (e.g., using cleaners and water to pre-clean surfaces prior to applying an EPA-registered, hospital-grade disinfectant to frequently touched surfaces or objects for appropriate contact times as indicated on the product's label) are appropriate for SARS-CoV-2 in healthcare settings, including those patient-care areas in which aerosol generating procedures are performed.

- Clean and disinfect the room and equipment according to the Guidelines for Infection Control in Dental Health-Care Settings—2003
- Clean, disinfect, or discard the surface, supplies, or equipment located within 6 feet of symptomatic patients.
    - Use products with EPA-approved emerging viral pathogens claims—refer to List on the EPA website for EPA-registered disinfectants that have qualified under EPA's emerging viral pathogens program from use against SARS-CoV-2.
      To view the list of EPA-registered disinfectant products, visit https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2

- **Dental Unit Waterlines** must be purged for a minimum of 20-30- seconds before and after use on each patient (flushes material that may have entered the lines)

- After each patient use, the High Velocity Evacuation (HVE) system and saliva ejector should be flushed with at least 6 ounces of freshwater
    - Flush the HVE system with at least one quart of water at the end of the day
    - Clean the HVE system with an HVE cleaner at least once a week
        - Use the E-Vac solution available in the C row of large clinic

Potential Exposure Guidance

Follow WVUH Protocol/Policy Regarding Exposure