

Clinical Training for School Dental Sealant Programs

Infection Prevention and Control
August 2023



CDC

Infection Prevention and Control (IPC) Guidance

- CDC Guidance for Healthcare Settings 5/8/23
 - Points to standard precautions and enhanced, if applicable

- Standard Precautions
 - Core Infection Prevention and Control Practices for Safe Healthcare Delivery in All Settings – 11/29/22



CDC PPE Standard Precautions

- “Standard Precautions are the basic practices that apply to all patient care, regardless of the patient’s suspected or confirmed infectious state, and apply to all settings where care is delivered. These practices protect healthcare personnel and prevent healthcare personnel or the environment from transmitting infections to other patients.”

CDC 11/29/22



Oregon Board of Dentistry

- Regulatory Agency
- 818-012-0040 Infection Control Guidelines In determining what constitutes unacceptable patient care with respect to infection control, the Board may consider current infection control guidelines such as those of the Centers for Disease Control and Prevention and the American Dental Association
- Two hours of infection control (Please note, if using OSHA your certificate must delineate the difference in hours between OSHA and infection control) every renewal cycle



CDC Guidance for Dental & SDSPs

- Create written infection control protocols and evaluation plan
- Stay healthy and learn be informed about workplace risks
- Hand hygiene
- Administrative controls
- Engineering controls
- Environmental infection control
- Personal protective equipment
- Sterilization of patient care items
- Dental unit waterlines



OR OSHA

- Components of a safe workplace (all workplaces)
 - Risk assessment for various roles (safety meeting)
 - List and description of required hazard control measures
 - Employee information and training
 - Exposure communication



Written Infection Control Program

OHA School Dental Sealant Program Infection Control Protocol and Plan Updated July 2023

Adhere to any regulatory and/or advisory entities for infection prevention and control (OHA, CDC, OSHA, OBD)

TAKE STEPS TO STAY HEALTHY:

- Stay up to date on all recommended vaccines.
- Perform hand hygiene; wash hands with soap and water for at least 20 secs. or use hand sanitizer for at least 20 secs
- Stay home if you are sick or not feeling well

AVOID CONTACT WITH BLOOD AND OTHER POTENTIALLY INFECTIOUS BODY SUBSTANCES (OPIM [saliva])

Oral health screenings PPE:

- Hygienist: gloves, level 2 or 3 procedural mask, face shield or protective



Healthcare Worker Vaccines

(May 2023)

Healthcare Workers ^

Vaccines you need

If you work directly with patients or handle material that could spread infection, you should get appropriate vaccines to reduce the chance that you will get or spread vaccine-preventable diseases. All healthcare workers should make sure they're up to date on these vaccines:

- [COVID-19 vaccine](#)
- [Chickenpox vaccine](#) (varicella)
- [Flu vaccine](#) (influenza)
- [Hepatitis B vaccine](#)
- [Meningococcal vaccine](#) – especially lab workers who work with *Neisseria Meningitidis*
- [MMR vaccine](#) (measles, mumps, and rubella)
- [Tdap](#) (tetanus, diphtheria, and whooping cough) or [Td](#) (tetanus and diphtheria)

You may need other vaccines, too

Healthcare workers should make sure they're up to date on any other vaccines routinely recommended for them based on age or other factors. Talk with your doctor to learn which vaccines are recommended for you. These may include:

- [HPV vaccine](#) (human papillomavirus) – recommended for adults ages 18 through 26 years and adults ages 27 through 45 years based on shared clinical decision-making
- [Shingles vaccine](#) (zoster) – recommended for all adults 50 years of age and older

Get personalized recommendations

[Take a short quiz and get a list of vaccines](#) you may need based on your lifestyle, travel habits, and other factors.

https://www.cdc.gov/vaccines/adults/rec-vac/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fvaccines%2Fadults%2Frec-vac%2Fhcw.html



Hand Hygiene

- Wearing gloves does not eliminate the need for hand washing
- Wash your hands often for 20 seconds with soap and water
- If soap and water are not available use an alcohol-based hand sanitizer (ABHS)
 - Use a generous amount of ABHS
 - Rub all areas of hands and fingers for 20 seconds
 - If hands become soiled wash them with soap and water before using ABHS



Administrative (Source) Controls

- Consider continuing non-aerosol generating procedures (AGP)
- One patient (student) at a time in the clinical area
- Set-up operator so that only the items needed for that procedure are accessible
- Distinguish between clinical service area and non-clinical service area (paperwork)
- 4-handed technique for elementary school grades
 - May use 2 handed technique with an OHA approved plan and approved isolation device for middle and high school grades



Administrative (Source) Controls

CDC “Set up operatories so that only the clean or sterile supplies and instruments needed for the dental procedure are readily accessible. All other supplies and instruments should be in covered storage, such as drawers and cabinets, and away from potential contamination. Any supplies and equipment that are exposed but not used during the procedure should be considered contaminated and should be disposed of or reprocessed properly after completion of the procedure.”



Engineering Controls

- Properly maintain ventilation systems
- Limit use of on-demand HVAC (set to lower temperatures)
- Consider use of portable HEPA filtration units
- Follow disinfectants manufacturers' directions
- AGPs
 - Cover carpeted area with plastic, tarp or cleanable mats
 - Use modified or appropriate compressor or air purifier for the area
 - DNTLWorks compressors – May use program's existing equipment repair service to modify/install filters



Environmental Infection Control

- Use EPA approved (list N) cleaning and disinfection agent:
 - <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2-covid-19>
- CDC: “Routine cleaning and disinfection procedures (e.g., using cleaners and water to clean surfaces **before** applying an Environmental Protection Agency (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.”



OHA SDSP Infection Control

Disinfection plus barriers on:

- Overhead light switch
- Capsule applicator
- Triturator switch (unless flush with triturator)

Additional Barriers for AGPs

- Compressor unit (holders for air-water syringe, etc.)
- Air-water syringe
- Suction handles
- Cure light
- Sealant and etch syringes



PPE: CDC Donning and Doffing

- Guidelines
- Slides
- Posters
- <https://www.cdc.gov/hai/prevent/ppe.html>

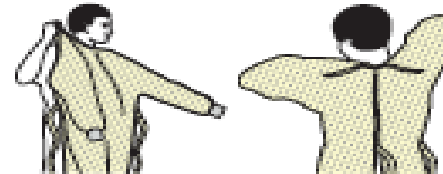


SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

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



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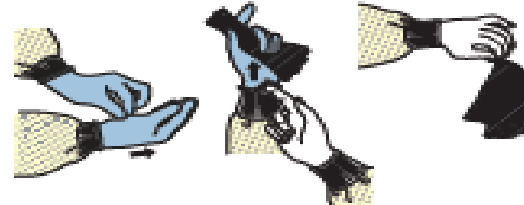
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HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 1

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 and/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

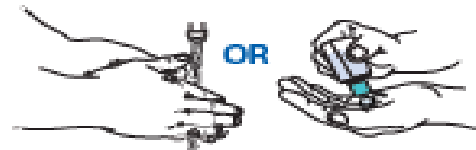


4. MASK OR RESPIRATOR

- 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



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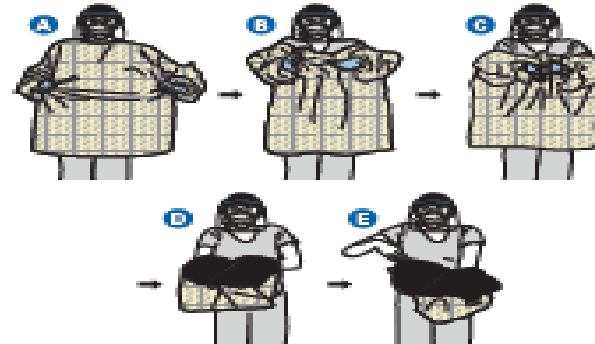
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HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 2

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.

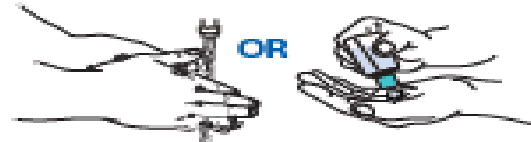


3. MASK OR RESPIRATOR

- 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



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- PPE MINIMUM REQUIREMENTS

- Eye protection (goggles, face shield, solid side shields)
- Face mask (e.g., surgical/procedure mask) - medical grade
- Gloves
- Gown - medical grade, conforms to U.S. or international standards, or NIOSH specification
- No re-use of equipment designed for single use
- Gown and gloves should be changed after each patient/student and eye protection should be disinfected. Perform hand hygiene.



PPE: Gowns

- CDC: OSHA requires sleeves to cover the providers forearms and wrists
- CDC recommends disposable gowns but launderable gowns are acceptable
- Change gowns between each student receiving a dental service (not screenings)
- Remove gowns (All PPE) before leaving the clinical area - into the classroom or other areas of a school



PPE: Surgical Masks

ASTM levels of masks

- ~~Level 1 - Low barrier and low likelihood of splash or splatter. Suitable for exams/screenings and operator cleaning~~
- Level 2 - Moderate barrier and used for moderately generated splash or splatter. Appropriate for prophylaxis, sealants and most restorative procedures
- Level 3 - High barrier and likelihood of heavy amounts of splash or splatter. Use with ultrasonic scaling and periodontal surgery



PPE: Masks

- Masks must be FDA cleared or NIOSH approved (avoid counterfeit masks)
- Wear level 2 or 3 surgical mask for non AGPs and AGPs
- Consider use of N95 for AGPs during times of increased county hospitalizations



PPE: Eyewear

- Protective eyewear or goggles must have solid side shields or fit well to the face
 - Consider snug fitting (with forehead bumper) goggles or face shield when performing AGPs during times of high county hospitalization rates
- Personal eyewear is not protective eyewear
- Eyewear that has gaps at the forehead or behind the eyes may not offer protection
- Personal eyewear or loupes can be worn under a face shield



Protective Eyewear and Loupes

Site Visit Observations

- When donning or adjusting loupes or eyewear, do so before final hand hygiene and donning gloves
- Avoid touching eyewear or shields during patient treatment
- Disinfect eyewear, loupes and light shields, that sit outside of a face shield, between patients according to CDC, EPA and manufacturers directions
- Do not use a cleaner with alcohol concentration greater than 70%



Loupes

“ Orascoptic recommends CaviCide™, which is the solution used to impregnate CaviWipes™, to disinfect your eyewear. CaviCide has an EPA-registered label claim against Human Coronavirus. Metrex, the company which manufactures CaviCide, has recently performed an efficacy study on CaviWipes against the SARS-associated Human Coronavirus in a third-party test lab. According to the study report, the study results passed the Viricidal Hard Surface Efficacy Test by exceeding a 3-log/99.9% reduction of the virus. However, this study result has not yet been reviewed or approved by the US EPA.”



Standard Precautions: Sharps Safety

- Consider sharp items, such as scalers, as potentially infectious
 - Dispose of cannulas at home or in the dental office
- Place used sharp items in a puncture resistant container as close to patient care area as possible



Standard Precautions: Sterilization and Disinfection of Patient Care Devices

- Assign a responsible party to monitor the program
- Follow manufacturers' recommendations
- Disinfect or sterilize reusable equipment between each patient
- Wear PPE
- Use mechanical, chemical and biological monitoring



CDC Classifications

- **Critical:** items used to penetrate soft tissue or bone
 - Requires heat sterilization

- **Semi-critical:** touches mucous membranes or non-intact skin (reusable mirror)
 - Requires heat sterilization



CDC Classifications

- **Non-critical:** contact only intact skin
 - Cleaning and disinfection
 - If difficult to clean, then cleaning/disinfection/barriers
 - Suction handles
 - Air-water syringe buttons
 - Light handles, switches



Sterilization: Recommendations & Requirements

CDC and the American Dental Association (ADA):

1. Weekly spore testing, every week that patients are treated
2. Indicator strips or indicator tape every time the sterilizer is used
3. Monitor sterilization gauges, pressure, temperature and exposure time



Sterilization Recommendations and Requirements

Oregon Board of Dentistry requirements:

818-012-0040, (4) *“Heat sterilizing devices shall be tested for proper function by means of a biological monitoring system that indicates microorganisms kill each calendar week in which scheduled patients are treated. Testing results shall be retained by the licensee for the current calendar year and the two preceding calendar years.”*



Prestige Medical Sterilizers

- Instruments can be sterilized in sterilization pouches
- Use pouches specifically designated for steam sterilization
- Do not overload the sterilizer
- Place about 6 (if full pouches) loosely packed pouches in the sterilizer
- Label and date the pouches once they have dried



Waterlines

- Follow the equipment (portable or stationary) manufacturer's recommendations for testing protocol, intervals and documentation
- Official CDC HEALTH ADVISORY: October 2022
 - Outbreaks of Nontuberculous Mycobacteria Infections Highlight Importance of Maintaining and Monitoring Dental Waterlines



DNTLworks Waterline Maintenance Recommendations

- Use an approved waterline cleaner or additive.
- Purge the water out of the system at the end of every day and leave the cap off until next use.
- Clean the evacuation system out at the end of every day.
- Drain the air tank purge line on the back of unit at the end of every day.

Bob Kennedy, DNTLworks, July, 2019



Infection Prevention and Control Resources

- CDC
 - https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html#anchor_1604360679150
 - https://www.cdc.gov/infectioncontrol/guidelines/core-practices/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fhicpac%2Frecommendations%2Fcore-practices.html



Infection Prevention and Control Resources

- OSAP: If Saliva Were Red (2023)
 - <https://www.youtube.com/watch?v=IDBTgiGvIS8>



CDC App



- Use with iPhone, iPad or iPod touch
- Create checklists for each site at each review
- Yes/no and comment section
- Houses guideline and summary documents



Questions ?

