



**SACRAMENTO CITY COLLEGE**  
**LOS RIOS COMMUNITY COLLEGE DISTRICT**

**Dental Health**

# **Clinic Manual**

Rodda Hall South, RHS 135  
3835 Freeport Boulevard  
Sacramento, CA 95822

# TABLE OF CONTENTS

<b>Standard</b>	<b>Page</b>
<a href="#">Autoclave &amp; Statim</a>	25-26
<a href="#">Biological Monitoring</a>	27
<a href="#">Clinic Map</a>	34
<a href="#">Exposure Protocol: On campus</a>	15
<a href="#">Exposure Protocol: Off Campus</a>	16
SCC Exposure Forms	17-18
<a href="#">Handwashing</a>	9-11
<a href="#">Lesions &amp; Weeping Dermatitis</a>	12
<a href="#">HP Maintenance &amp; Assistina</a>	22-23
<a href="#">Operatory Preparation</a>	28
<a href="#">Operatory Breakdown</a>	29
<a href="#">Operatory Maintenance-Daily</a>	33
<a href="#">Personal Protective Equipment</a>	6
<ul style="list-style-type: none"> <li>● <a href="#">Doffing (removing) PPE</a></li> </ul>	8
<ul style="list-style-type: none"> <li>● <a href="#">Donning PPE</a></li> </ul>	8
<ul style="list-style-type: none"> <li>● <a href="#">Gloves</a></li> </ul>	13
<ul style="list-style-type: none"> <li>● <a href="#">SCC Clinical Attire</a> Requirements</li> </ul>	7
<a href="#">Sharps Safety</a>	14
<a href="#">Standard Precautions</a>	3
<a href="#">Sterilization &amp; Disinfection</a> Regulations	19-20
<a href="#">Sterilization Packaging</a>	24
<a href="#">Suction Maintenance</a>	32
<a href="#">Waterline Maintenance</a> (DUWL)	30-31
<a href="#">Ultrasonic Cleaner</a>	21

# Standard Precautions

TITLE 16. DENTAL BOARD OF CALIFORNIA DEPARTMENT OF CONSUMER AFFAIRS

## ARTICLE 1. GENERAL PROVISIONS § 1005. Minimum Standards for Infection Control

**"Standard precautions"** is a group of infection prevention practices that apply to all patients, regardless of suspected or confirmed infection status, in any setting in which healthcare is delivered. These include: hand hygiene, use of gloves, gown, mask, eye protection, or face shield, depending on the anticipated exposure: and safe injection practices. Standard precautions shall be used for care of all patients regardless of their diagnoses of or personal infectious status.

The Sacramento City College Dental Health Programs adhere to all OSHA, CDC, and DBC Infection Control standards and regulations

DBC	CDC	OSHA's BBP Standard
		

# Standard Precautions

TITLE 16. DENTAL BOARD OF CALIFORNIA DEPARTMENT OF CONSUMER AFFAIRS

## ARTICLE 1. GENERAL PROVISIONS § 1005. Minimum Standards for Infection Control Cont.

- (2) "**Critical items**" confer a high risk for infection if they are contaminated with any microorganism. These include all devices and other items used to penetrate soft tissue or bone.
- (3) "**Semi-critical items**" are instruments, devices and other instruments items that are not used to penetrate soft tissue or bone, but contact oral mucous membranes, non-intact skin or other potentially infectious materials (OPIM).
- (4) "**Non-critical items**" are instruments, equipment, and surfaces that come in contact with soil, debris, saliva, blood, OPIM and intact skin, but not oral mucous membranes.
- (5) "**Low-level disinfection**" is the least effective disinfection process,. It kills some bacteria, some viruses and fungi, but does not kill bacterial spores or mycobacterium tuberculosis var bovis, a laboratory test organism used to classify the strength of disinfectant chemicals.
- (6) "**Intermediate-level disinfection**" kills mycobacterium tuberculosis var bovis indicating that many human pathogens are also killed. This process does not necessarily kill spores.
- (7) "**High-level disinfection**" kills some, but not necessarily all bacterial spores. This process kills mycobacterium tuberculosis var bovis, bacteria, fungi, and viruses.
- (8) "**Germicide**" is a chemical agent that can be used to disinfect items and surfaces based on the level of contamination. All germicides must be used in accordance with intended use and label instructions.
- (9) "**Sterilization**" is a validated process used to render a product free of all forms of viable microorganisms.
- (10) "**Cleaning**" is the removal of visible soil (e.g., organic and inorganic material) debris and OPIM from objects and surfaces and shall be accomplished manually or mechanically using water with detergents or enzymatic products. Cleaning must precede any disinfection or sterilization process. Products used

to clean items or surfaces prior to disinfection procedures shall be used according to all label instructions.

(11) "**Personal Protective Equipment**" (PPE) is specialized clothing or equipment for protection against a hazard. PPE includes items such as gloves, masks, respiratory devices, protective eyewear and protective attire (shoes, gowns/lab coats) which are intended to prevent exposure to blood, body fluids, and OPIM. General work attire such as uniforms, scrubs, pants and shirts, are not considered to be PPE.

(12) "**Other Potentially Infectious Materials**" (OPIM) means any one of the following:

(A) **Human body fluids** such as saliva in dental procedures and any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids.

(B) Any **unfixed tissue or organ** (other than intact skin) from a human (living or dead).

(C) **Human Immunodeficiency Virus** (HIV) -containing cell or tissue cultures, organ culture and blood, or other tissues from experimental animals.

(13) "**Dental Healthcare Personnel**" (DHCP), are "all paid and non-paid personnel in the dental healthcare setting who might be occupationally exposed to infectious materials, including body substances and contaminated supplies, equipment, environmental surfaces, water, or air. DHCP includes dentists, dental hygienists, dental assistants, dental laboratory technicians (in-office and commercial), students and trainees, contractual personnel, and other persons not directly involved in patient care but potentially exposed to infectious agents (e.g., administrative, clerical, housekeeping, maintenance, or volunteer personnel)."

(b) All DHCP shall comply with infection control precautions and enforce the following minimum precautions to minimize the transmission of pathogens in health care settings mandated by the California Division of Occupational Safety and Health (CalDOSH).

(1) **Standard precautions shall be practiced in the care of all patients.**

(2) A written protocol shall be developed, maintained, and periodically updated for proper instrument processing, operatory cleanliness, and management of injuries. The protocol shall be made available to all DHCP at the dental office.

(3) A copy of this regulation shall be conspicuously posted in each dental office.

## Standard Precautions: Personal Protective Equipment

(4) All DHCP shall wear surgical facemasks in combination with either chin length plastic face shields or protective eyewear whenever there is potential for aerosol spray, splashing or spattering of the following: droplet nuclei, blood, chemical or germicidal agents or OPIM. Puncture-resistant utility gloves and other PPE shall be worn when handling hazardous chemicals. After each patient treatment masks shall be changed and disposed. After each patient, treatment, face shields and protective eyewear shall be cleaned, disinfected, or disposed.

(5) Gowns shall be worn for disinfection, sterilization, and housekeeping procedures involving the use of germicides or handling contaminated items. All DHCP shall wear reusable or disposable protective attire whenever there is a potential for aerosol spray, splashing or splattering of blood, OPIM, or chemicals and germicidal agent. Gowns must be changed daily or between patients if they should become moist or visibly soiled. All PPE used during patient care shall be removed when leaving laboratories or areas of patient care activities. Reusable gowns shall be laundered in accordance with Cal-DOSH Bloodborne Pathogens Standards. (Title 8, Cal. Code Regs., section 5193).



# Standard Precautions: Cal-OSHA & SCC Clinical Attire

*“Masks in combination with eye protection devices, such as goggles or glasses with solid side shields, or chin-length face shields, shall be worn whenever splashes, spray, spatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated”- Cal-OSHA BBP Standard*

<b>Facemask</b>	<ul style="list-style-type: none"> <li>• Must fit snug to the face</li> <li>• Must be replaced if visibly soiled or damp</li> <li>• Must never be pulled beneath the chin</li> </ul>
<b>Goggles</b>	<ul style="list-style-type: none"> <li>• Worn during all procedures in the dental clinic</li> <li>• Worn during disinfecting and sterilizing the dental rooms and items</li> <li>• Must be cleaned with anti-microbial soap and water after each patient</li> <li>• Patients must wear protective eyewear during treatment</li> </ul>
<b>Face shield</b>	<ul style="list-style-type: none"> <li>• May be used if the DCHP wears prescription glasses</li> <li>• Must be chin length</li> <li>• Does not replace the use of a surgical mask</li> <li>• Must be cleaned with anti-microbial soap and water after each patient</li> </ul>
<b>Gowns</b>	<ul style="list-style-type: none"> <li>• Gowns must have cuffs that cover the wrists and go up to the neck area</li> <li>• Protective clothing shall not be worn outside of the work area</li> <li>• If a garment(s) is penetrated by blood or other potentially infectious materials, the garment(s) shall be removed immediately or as soon as feasible.</li> </ul>
<b>Gloves</b>	<ul style="list-style-type: none"> <li>• Refer to <a href="#">“Gloves”</a> on pg. 8</li> </ul>
<b>Surgical Caps</b>	<ul style="list-style-type: none"> <li>• Required by SCC to eliminate transferring patient debris outside of the clinical area</li> </ul>

**All PPE must be removed prior to leaving the treatment area**

## Procedural Steps: Donning of PPE



## Procedural Steps: Doffing of PPE



**Hands must be washed and dried prior to donning new examination gloves  
PPE must be removed in a manner as to not contaminate hands**



# Standard Precautions: Hand Hygiene

(6) All DHCP shall wash contaminated or visibly soiled hands with soap and water and put on new gloves before treating each patient. If hands are not visibly soiled or contaminated an alcohol-based hand rub may be used as an alternative to soap and water. **Hands shall be thoroughly dried before donning gloves in order to prevent promotion of bacterial growth and washed again immediately after glove removal.** CDC Guidelines shall be followed for work restrictions.

## CDC: Clinical Safety: Hand Hygiene for Healthcare Workers

### Know when to clean your hands ^

- Immediately before touching a patient.
- Before performing an aseptic task such as placing an indwelling device or handling invasive medical devices.
- Before moving from work on a soiled body site to a clean body site on the same patient.
- After touching a patient or patient's surroundings.
- After contact with blood, body fluids, or contaminated surfaces.
- Immediately after glove removal.

Source: CDC. (2024, June 11). *Clinical Safety: Hand Hygiene for Healthcare Workers*. Clean Hands. <https://www.cdc.gov/clean-hands/hcp/clinical-safety/index.html>



## When to use an alcohol-based hand sanitizer (ABHS):

Unless hands are visibly soiled, ABHS is preferred over soap and water in most clinical situations because it [\[1\]](#) [\[2\]](#):

- Is more effective at killing germs on hands than soap.
- Is easier to use when providing care, especially when moving from soiled to clean activities on the same patient or when moving between care of patients in shared rooms.
- Results in improved skin condition with less irritation and dryness than soap and water.
- Improves hand hygiene adherence.

## When to wash with soap and water

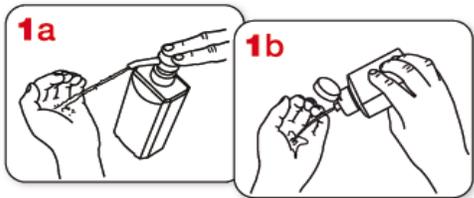
- When hands are visibly soiled.
- Before eating.
- After using the restroom.
- During the care of patients with suspected or confirmed infection during outbreaks of *C. difficile* and norovirus.

Source: CDC. (2024, June 11). *Clinical Safety: Hand Hygiene for Healthcare Workers*. Clean Hands. <https://www.cdc.gov/clean-hands/hcp/clinical-safety/index.html>

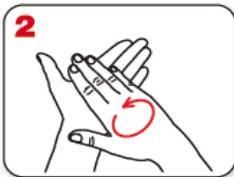


# How to handrub?

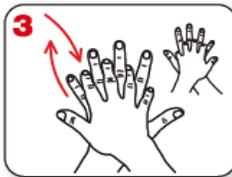
WITH ALCOHOL-BASED FORMULATION



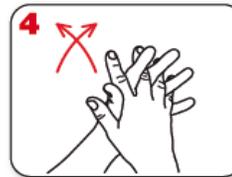
Apply a palmful of the product in a cupped hand and cover all surfaces.



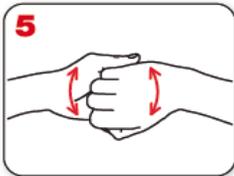
Rub hands palm to palm



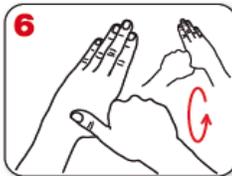
right palm over left dorsum with interlaced fingers and vice versa



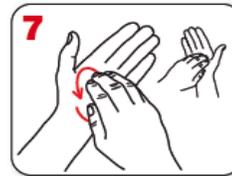
palm to palm with fingers interlaced



backs of fingers to opposing palms with fingers interlocked



rotational rubbing of left thumb clasped in right palm and vice versa



rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa



rinse hands with water



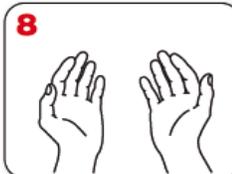
dry thoroughly with a single use towel



use towel to turn off faucet



20-30 sec



...once dry, your hands are safe.



40-60 sec



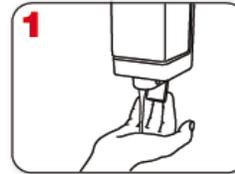
...and your hands are safe.

# How to handwash?

WITH SOAP AND WATER



Wet hands with water



apply enough soap to cover all hand surfaces.



WHO acknowledges the Hôpitaux Universitaires de Genève (HUG), in particular the members of the Infection Control Programme, for their active participation in developing this material.



October 2006, version 1.

## Standard Precautions: **Lesions & Weeping Dermatitis**

(7) All DHCP who have **exudative lesions or weeping dermatitis** of the hand shall refrain from all direct patient care and from handling patient care equipment until the condition resolves.



**Skin conditions that exist on areas of the face need to be properly covered during all aspects of patient treatment**

# Standard Precautions: **Gloves**

- (8) **Medical exam gloves** shall be worn whenever there is contact with mucous membranes, blood, OPIM., or germicidal agents and during all pre-clinical, clinical, post-clinical, and laboratory procedures.
- When cleaning sharp instruments, needles, and devices, DHCP shall wear heavy-duty **utility gloves** to prevent puncture wounds.
- Gloves must be discarded when torn or punctured, upon completion of treatment, and before leaving laboratories or areas of patient care activities.

**All DHCP shall perform hand hygiene procedures before donning gloves and after removing and discarding gloves. Gloves shall not be washed before or after use.**

<b>Exam Gloves</b>	<b>Utility Gloves</b>
Used for all aspects of patient treatment, with the exception of taking vitals and health history  Disposed of after every patient	Used when disinfecting the operatory, handling germicides, contaminated instruments, and sharps  Disposed of if cracked, torn, or ripped
	

# Standard Precautions: Needle and Sharps Safety

(9) Needles shall be recapped only by using the scoop technique or a protective device. Needles shall not be bent or broken for the purpose of disposal. Disposable needles, syringes, scalpel blades, or other sharp items and instruments shall be placed into sharps containers for disposal as **close as possible to the point of use** according to all applicable local, state, and federal regulations.

**Treat all exposures as medical emergencies.**

**Prevention is Key.**

- Recapping or needle removal must be accomplished through the use of a mechanical device or a one-handed technique.
- Recapping should never be done without the use of a needle-guard in place
- DCHP should eliminate the number of times recapping takes place
- Caution must always be used when handling a sharps instrument or item
- When injecting into a tight posterior area, always use a sterile needle. (one that has not already been used in a previous location on that patient)
- Disposal of the contaminated sharps into a sharp's container must take place as soon as possible.
- Wear utility gloves while processing contaminated instruments
- Obtain Hepatitis vaccine and stay current on your titer



# Exposure Protocol (On Campus)

**When student is injured on site, expenses are NOT covered by SCC**

## **Protocol**

1. Immediately clean the wound
  - a. Soap & water
  - b. No squeezing
2. Report incident to instructor immediately
3. Notify Program Director
4. Fill out the following forms with student:
  - a. **Standard Non-Employee Accident/ Incident Report Form (GS31)**
  - b. **Sharps Injury Log Form**
  - c. **Sharps and Exposure Incident Report Form** (on back of Log Form)
  - d. **Supervisor's Report of Employee Injury**
  - e. Attached copy of student's **Agreement to Participate and Waiver/Assumption of Risk** (in students file)
  - f. Make copies
  - g. Send original to the Dean *within 24 hours*
5. Student should be advised to see the School Nurse (916-558-2367)
  - a. Students are allowed to decline
  - b. Student Health and Wellness Center  
3835 Freeport Boulevard, Sacramento, CA 95822
    - i. Behind the Student Services Building, next to Cosmetology
6. Source patient testing expenses are not be covered

# Exposure Protocol (Off Campus)

1. Immediately clean the wound
  - a. Soap & water
  - b. No squeezing
2. Student should report incident to instructor immediately
3. Notify Program Director
4. Fill out the following forms with student:
  - a. **Standard Non-Employee Accident/ Incident Report Form (GS31)**
  - b. **Sharps Injury Log Form**
  - c. **Sharps and Exposure Incident Report Form** (on back of Log Form)
  - d. **Supervisor's Report of Employee Injury**
  - e. Attached copy of student's **Agreement to Participate and Waiver/Assumption of Risk** (in students file)
  - f. Make copies
    - i. Send original to the Dean *within 24 hours*
    - ii. Place copy in student's file
5. Have student call **Company Nurse** (888-375-9780)
  - a. Student will be asked questions about the incident
    - i. First to the operator
      1. Company: Sacramento City College
      2. Address: 3835 Freeport Blvd, Sacramento, 95818
      3. Supervisor: Dean of Allied Health
        - a. Paulette Lopez
    - ii. A nurse will then contact student with further information
  - b. A workman's compensation claim will be created for the student
    - i. Student does not need to show proof of insurance for testing
  - c. Student will be sent to an occupational clinic for *initial* testing
    - i. Testing should occur **ASAP**, or *within 4 hours* of the incident
    - ii. Any additional follow-up visits must be approved through
      1. York Insurance Service Group (916-960-0928)  
PO Box 619058, Roseville, CA 95661-9058
    - iii. No further follow up is done by us
      1. It is now a workman's comp. claim and is the student's responsibility
6. Program Director will need to speak to the student regarding PEP Procedure
7. If student is put on restriction due to injury:
  - a. call Debbie Turner (Risk Management Manager)
    - i. 916-568-3054

# SHARPS INJURY LOG FORM

## Los Rios Community College District

Please complete this log if a "Sharps Injury" exists as defined by the following conditions:

(a) an object, such as a needle, dental instrument, scalpe, broken glass, etc., penetrates the skin or mucous membrane of an employee and (b) this object was or is reasonably anticipated to have been contaminated with human blood, body fluids, or any other substance that is known or reasonably likely to contain or be infected with HIV, Hepatitis-B, or Hepatitis-C.

Injured Employee (Last, First)		Date of Birth	Campus	
Department		Supervisor (Last, First)		Phone/E-Mail
1. Date & Time of Injury		2. Location of incident		3. Body part injured
4. Job Classification of injured employee			5. Procedure being performed at time of injury	
6. Describe how the incident occurred				
7. Sharps Information:				Identify Sharp involved (if known) Type: _____ Brand: _____ Model: _____ (e.g., 18g needle/ABC Medical/ "no stick" syringe)
a. Did the device being used have engineered sharps injury protection? (if yes, go on to question b & c below) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know				
b. Was the protective mechanism activated? <input type="checkbox"/> Yes <input type="checkbox"/> Yes-partially <input type="checkbox"/> No				
c. Did the exposure incident occur: <input type="checkbox"/> Before activation <input type="checkbox"/> During activation <input type="checkbox"/> After activation				
8. If the sharp had no engineered sharps injury protection, injured employee's opinion as to whether and how such a mechanism could have prevented the injury.				
9. Injured employee's opinion as to whether there are any other engineering, administrative or work practice controls that could have prevented the injury.				

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

Supervisor Comments/Follow-up (place additional comments on back)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

# Sharps and Exposure Incident Report

Employee's Name: \_\_\_\_\_ Department: \_\_\_\_\_ Campus: \_\_\_\_\_

Incident Date: \_\_\_\_\_ Time: \_\_\_\_\_ Location: \_\_\_\_\_

Description of Injury: (e.g., part of body injured and nature of injury, punctured right index finger)
What was the exposure incident and how did it occur? (e.g., capping the needle with two hands, slipped, punctured finger)
Contributing Factors (e.g., carelessness, protective mechanism was not activated)
List Personal Protective Equipment Being Used: (e.g., type of gloves, safety glasses, apron)
How could the incident have been avoided? (e.g., was not watching the sharp, could have taken more time)
Witnesses Names and Phone #'s:

Employee's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Post-Exposure Follow-up - Supervisor to Complete

Supervisors Name: \_\_\_\_\_ Department: \_\_\_\_\_

Supervisor Comments (additional information on incident):

**If an employee is involved in an incident where it is reasonably anticipated the employee came in contact with human blood, body fluids, or any other substance that is known or reasonable likely to contain or be infected with HIV, Hepatitis B or C then continue with this form. The above incident can include being stuck by a needle, providing first aid, cleaning equipment, etc.**

Identify the Source Individual (if appropriate): (Name and phone number) \_\_\_\_\_

Send the injured person to our Industrial Medical Clinic for IMMEDIATE care: \_\_\_\_\_

Send the Source individual to our Industrial Medical Clinic for blood test: \_\_\_\_\_

Send the following documents to the treating physician:	Completed
A copy of this report	_____
A description of the exposed employee's duties	_____
Hepatitis B vaccination status plus all medical records relevant to the appropriate treatment of the employee (Contact Human Resources for this information 568-3112)	_____
If an employee has selected a pre-designated doctor, the key is to get immediate treatment by going to our industrial medical clinic or their designated doctor's office. If they go to their designated doctor's office, in addition to the other items listed, YOU MUST provide the employee with a copy of the Bloodborne Pathogen Standard (located in the Bloodborne Pathogens Exposure Control Plan or at <a href="http://www.dir.ca.gov/Title8/5193.html">www.dir.ca.gov/Title8/5193.html</a> ).	_____
After returning from the clinic have the employee complete the Sharps Log.	_____

# Standard Precautions: **Sterilization and Disinfection**

(10) **Critical** items and devices shall be discarded or pre-cleaned, packaged or wrapped and sterilized after each use. Methods of sterilization shall include steam under pressure (autoclaving), or chemical (formaldehyde) vapor, and dry heat. If a critical item is heat-sensitive, it shall, at minimum, be processed with high-level disinfection in the form of package or being wrapped before sterilization if they are not to be used immediately after being sterilized. These instruments, items, and devices, shall remain sealed and stored in a manner so as to prevent contamination.

(11) **Semi-critical** items shall be pre-cleaned, packaged or wrapped and sterilized after each use. Methods of sterilization include steam under pressure, chemical vapor and dry heat. If a semi-critical item is heat sensitive, it shall, at minimum, be processed with high level disinfection in the form of package or being wrapped before sterilization. These packages or containers shall remain sealed and shall be stored in a manner so as to prevent contamination.

(12) **Non-critical surfaces** and patient care items shall be cleaned and disinfected with an United States Environmental Protection Agency (EPA)-registered hospital disinfectant (low-level disinfectant) labeled effective against HBV and HIV. When the item is visibly contaminated with blood or OPIM, an EPA-registered hospital disinfectant with a tuberculocidal claim (intermediate-level disinfectant) shall be used.

(13) All high-speed dental **handpieces**, low-speed hand pieces, rotary components, and dental unit attachments such as reusable air/water syringe tips and ultrasonic scaler tips, shall be packaged and heat-sterilized in a manner consistent with the same sterilization practices as a semi-critical instrument or item.

(14) **Single use disposable items** such as prophylaxis angles, prophylaxis cups and brushes, tips for high-speed evacuators, saliva ejectors, air/water syringe tips, and gloves shall be used for one patient only and discarded.

## **Facilities:**

(17) If non-critical items or surfaces likely to be contaminated are manufactured in a manner preventing cleaning and disinfection, they shall be protected with disposable impervious barriers. Disposable barriers shall be changed when visibly soiled or damaged and between patients. Products used to clean items or surfaces prior to disinfection procedures shall be clearly labeled and follow all material safety data sheet (MSDS) handling and storage instructions.

(18) Clean and disinfect all clinical contact surfaces that are not protected by impervious barriers using a California Environmental Protection Agency (Cal-EPA) registered, hospital grade low- to intermediate-level disinfectant after each patient. The low-level disinfectants used shall be labeled effective against HBV and HIV. Use disinfectants in accordance with the manufacturer's instructions. Clean all housekeeping surfaces (e.g. floors, walls, sinks) with a detergent and water or a Cal-EPA registered, hospital grade disinfectant.

(20) Contaminated solid waste shall be disposed of according to applicable local, state, and federal environmental standards.

**Lab Areas:**

(21) Splash shields and equipment guards shall be used on dental laboratory lathes. Fresh pumice and a sterilized, or new rag-wheel shall be used for each patient. Devices used to polish, trim, or adjust contaminated intraoral devices shall be disinfected or sterilized and stored in a manner so as to prevent contamination.

(22) All intraoral items such as impressions, bite registrations, prosthetic and orthodontic appliances shall be cleaned and disinfected with an intermediate-level disinfectant before manipulation in the laboratory and before placement in the patient's mouth. Such items shall be thoroughly rinsed prior to placement in the patient's mouth.

# Instrument Processing: **Ultrasonic**

Instruments must be free of debris and organic matter to be properly sterilized. An ultrasonic cleaner, along with enzymatic solution will be used to preclean instruments prior to being sterilized.



## **Beginning of the Day:**

- “Drain” level placed back into “closed” position
- Ultrasonic cleaner filled with water
- Enzymatic solution according to manufacturer's instructions.
- Clean towels laid out

## **Instrument Processing:**

- Proper PPE, including utility gloves must be worn
- Instruments are added in either a cassette or plastic cassette container
  - Loose instruments should never be added into the ultrasonic
  - Instruments must be free of debris, blood, or cement to ensure removal and cleaning
- Instruments must be fully submerged
- Instruments are processed for 10-15 minutes
- Once completed, instruments must be rinsed in the ultrasonic cleaner basket, removed, dried, and then packaged.

## **End of Day:**

- Ultrasonic water drained
  - If murky, water and solution must be changed prior to the end of the day
- Towels discarded or laundered
- Inside components wiped with intermediate level disinfectant wipes
- Lid left off to allow internal components to dry

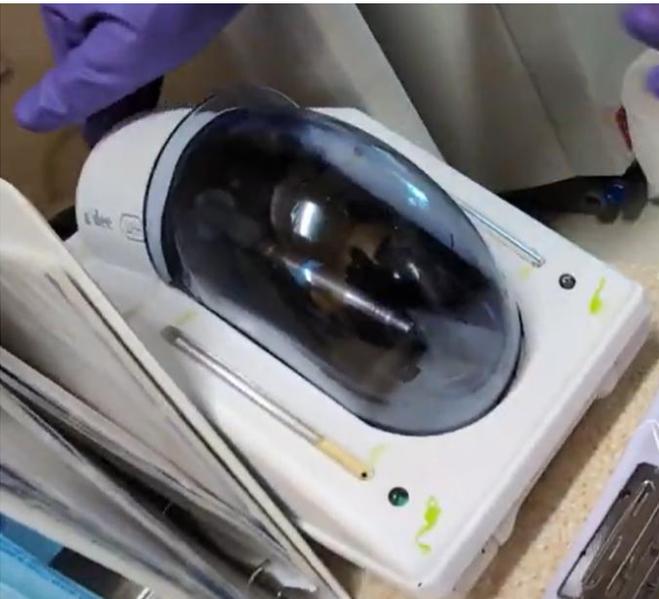
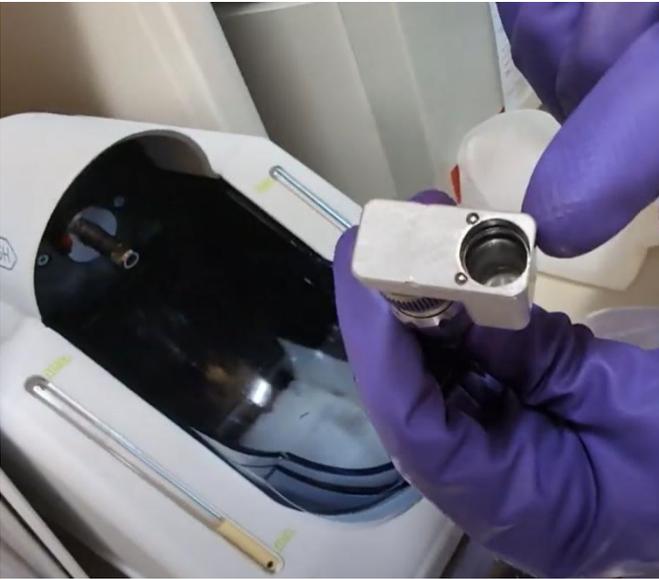
# Instrument Processing: **Handpiece Processing: Assistina**



- Handpieces must heat sterilized after each use
- Highspeed handpieces must have water flush through the lines for 20 seconds at the end of the procedure.
- The external components must be wiped off
- **DO NOT** submerge handpieces in water or the ultrasonic cleaner as it will ruin the internal components
- Handpieces can be attached to the **Assistina** for internal cleaning and lubrication
  - Per manufacturer's instructions
- Temperatures for sterilizing handpiece should not exceed 275F degrees

## **How to Use the Assistina:**

1. Wipe the outside of the handpiece to remove debris
2. Press the red button to release the connection inside the Assistina
3. Connect the handpiece and put back onto the machine
4. Close the lid
5. Press the silver button to start the cleaning process
6. Once complete, open the lid and remove the handpiece the same way you attached it.
7. Place handpiece in sterilization pouch



# Instrument Processing: Packaging

Instruments may be placed in FDA approved sterilization pouches or wraps.  
These are single use items and must be discarded once opened.

Chemical indicators are used to ensure that the instruments have been processed.

- **Internal chemical indicators**
  - EVERY package
- **External chemical indicators**
  - **Recommended by CDC**
  - Used when internal indicators are not visible

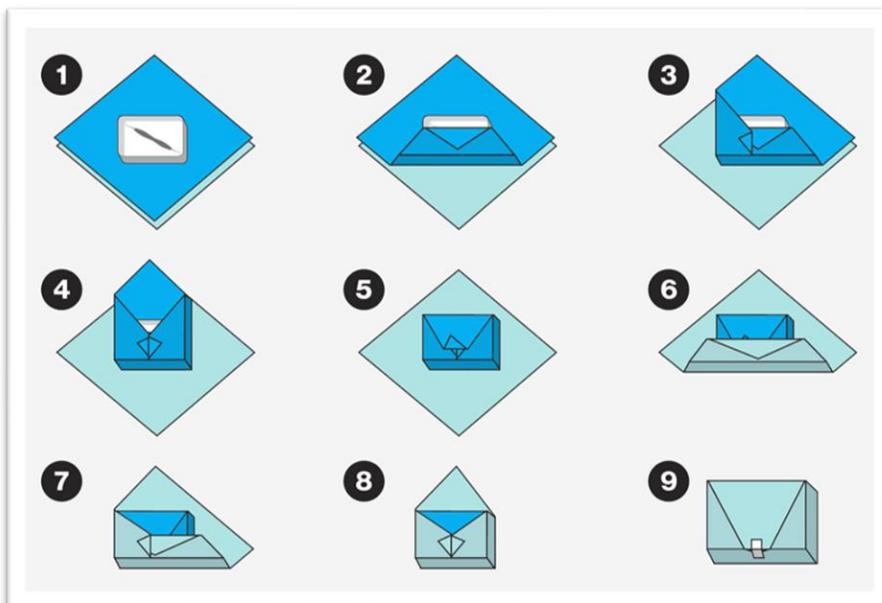


## Pouches:

- Place instruments in pouch
  - Hinged instruments must be opened
- Remove the barrier, exposing the adhesive
- Fold precisely along the perforated edges
- Be sure not to leave a gap in the packaging to ensure that items are properly sealed.

## Packs:

- Place internal indicator inside packaging
- Wrap tightly, ensuring no gaps
- Seal with indicator tape



# Instrument Processing: Autoclave

An **Autoclave Sterilizer** uses distilled water to create steam under pressure that penetrates both inside the sterilization bags and outside to kill all microorganisms.

The sterility and effectiveness of this process is proven using **daily** and **weekly** biological monitoring. Steam sterilizers have 4 cycles: Heating up , Sterilizing, Depressurization, and Drying

There are 6 autoclave machines:

- **Clinic**
  - 3 Steam Autoclave
  - 1 Statim
- **Radiology lab**
  - Steam Autoclave
- **RHS Rm 111**
  - Steam Autoclave



## Prior to use:

- Ensure that there is **distilled** water in the chamber
  - Autoclaves: Water mark must be above the Red indicator
  - Statim: Water chamber is located on the top of the unit

## Loading the sterilizers:

- **PPE must be worn**
- Packages must be inspected, if compromised, they must be rewrapped
- Loosely load the cassettes and instruments into the sterilizers
  - Overcrowding will inhibit the steam to penetrate the instruments thus interfering with the sterilization process.
- Loading bags: Place plastic side down on the trays
- Loading statim: Instruments and bags are placed vertically, like “toast”
- Close the door (without gloves)
- Select correct setting (unbagged, wrapped, pouches)
- If sterilizers are in use, place the packages into the proper storage basket on counter.



## Unloading the sterilizers:

- Let the drying cycle complete
  - Wet packaging could compromise the sterility of the instruments
- Ensure that processing has taken place, evaluate the chemical indicators on the pouches or on the autoclave tape
  - Pink= **unprocessed**
  - Dark brown/black= processed



- There are mittens that can be used if instruments are still hot
  - Never run instruments under cold water to cool them down as this will stress out the metal
- Date stamp instruments
- Mark them with the letter pertaining to the sterilizer they came out of
  - This ensures that if a sterilizer has an issue, we know which instruments were processed in them
- If packaging has been compromised, it must be repackaged and sterilized again
- Instruments should be placed in the correct cubby or drawer.
- Extra condensation in the statim must be wiped away prior to loading more instruments





# Operatory Preparation

- Wipe all surfaces with disinfecting wipes
- Place appropriate barriers on unit and equipment
- Turn on unit
  - Wall switch
  - Switch on dental unit
- Flush waterlines for 2 mins at the beginning of the day
  - 20 seconds between patients
  - Done without A/W tip
- Fill water bottle halfway with distilled water
- Place trash bag liner in garbage
- Gather all equipment and items for treatment
  - Evaluate the processing indicators to ensure items have been processed
  - Do not open items until patient is seated
- Gather PPE



# Operatory Clean Up

- Don new PPE- including **Utility Gloves**
- Dispose of regulated, hazardous waste appropriately
  - Sharps - sharps container (in room)
  - Unused anesthetic- pharmaceutical waste (in sterilization)
  - Saturated, bloody items- biohazard container (in sterilization)
- Dispose of general waste
- Remove handpiece and wipe exterior
- Place contaminated instruments in cassette and lock
- Remove barriers aseptically
  - If contaminated during the removal process, they must be disinfected with an intermediate level disinfectant
- Disinfect Op
  - All countertops
  - Patient chair areas not covered
  - Operator and assistant's stool
  - Drawer handles and light handles
  - All hoses and tubing
  - Cavitron handle and tubing
  - Sink and faucets
  - Any other surfaces touched during the procedure

# Daily Operatory Shut Down

- Dental waterlines purged dry
- Water bottles removed and placed upside down on counter
- Evacuator lines flushed with cleaning solution to decontaminate and maintain the lines.
- Unit, chair, and operator stools are wiped clean, including all bases
- Treatment chair raised up off the floor

# DBC Regulations & Maintenance: DUWL

- (16) Irrigation: Sterile coolants/irrigants shall be used for surgical procedures involving soft tissue or bone. Sterile coolants/irrigants must be delivered using a sterile delivery system.
- (19) **Dental unit water lines** shall be anti-retractable. At the beginning of each workday, dental unit lines and devices shall be purged with air, or flushed with water for at least two (2) minutes prior to attaching handpieces, scalers, air water syringe tips, or other devices. The dental unit lines and devices shall be flushed between each patient for a minimum of twenty (20) seconds.

## Daily Maintenance

- Flush lines for 2 mins at the beginning of the day, 20 seconds between each patient
- Refill with distilled water only- halfway to preserve water for all the ops
- At the end of the day, water must be purged completely from the lines
- Water bottles must be placed upside down on the counter to dry

## If tablets are used

- Follow manufacturers' instructions
- Be sure the tablet matches the volume of the water bottle
- When refilling the bottle, the water bottle must be emptied and then refilled prior to adding another tablet
  - Adding another tablet when adding additional water can disrupt the ratio of solution per water.

## Monthly Maintenance

- Shocking DUWLs with a high-level disinfecting solution must be done monthly to minimize the microbial growth in the waterlines.
- Due to the high toxicity of these chemicals, they cannot be in the waterlines during patient care.
- Monthly maintenance schedule is as follows:
  - **Fall Semester:** end of the FIRST Wednesday clinics
  - **Spring Semester:** end of FIRST Monday clinics
  - **Summer Semester:** end of the FIRST day of clinic
- Follow manufacturer's instructions
- Place a sign on unit that states:  
**“Caution do NOT use this unit. Waterline disinfection procedures in progress.”**

## Dental Unit Water

For all other procedures, dental practices should treat and test the water from dental units to ensure it meets the EPA standard for potable water ( $\leq 500$  CFU/mL). **The following methods are acceptable and beneficial for maintaining dental water quality:**

### Compliance means:

- Use of Chemical Treatments
- Use of Shock Treatments
- Use of Independent Water Reservoirs (Water Bottles)
- Flushing Waterlines

### Agency Reference:

**ADA, CDC, FDA, & ADS:** Follow dental unit manufacturer recommendations.<sup>1-4</sup>

**CDC:** Removal of biofilm requires a shock treatment.<sup>2</sup>

**CDC:** "methods demonstrated to be effective include self-contained water systems combined with chemical treatment..."<sup>2</sup>

**CDC:** Flush water/air lines between patients for 20-30 seconds at a minimum.<sup>2</sup>

**ADS:** "Flush at the beginning and end of each day for 2 minutes."<sup>4</sup>

## Verification of Compliance

Treating dental water is important, but alone does not protect your practice from dental board discipline or legal liability. Practices should keep documentation and records of SOPs, staff trainings, and waterline test results proving their protocol has been effective.

### Compliance means:

- Regular Testing
- Standard Operating Procedures & Staff Trainings

### Agency Reference:

**ADA, CDC, FDA:** Follow dental unit and treatment manufacturer recommendations to determine frequency of regular monitoring.<sup>1-3</sup>

**ADS:** If no manufacturer recommendation is made, test monthly until consecutive passing months, then quarterly.<sup>4</sup>

**ADS:** Request laboratory test using R2A Agar or Filtration methods; if using in-office testing methods, test more frequently.<sup>4</sup>

**CDC:** DHCP should be trained regarding water quality, biofilm formation, water treatment methods, and appropriate maintenance protocols.<sup>2</sup>

## Dental Unit Manufacturers

Waterline Recommendations	DCI	A-dec	Midmark	Belmont	Dentalez	Other*
Shocking	Weekly	Initially, Then After Failed Test	When Test Reveals $>200$ CFU/mL	After Failed Test	Initially, Then as Needed	Initially, Quarterly, and After Failed Test
Treatment	Follow ADA & CDC Guidelines	Daily Tablet	Straw or Daily Tablet	EPA Registered Product	EPA Registered Product	Daily
Test Frequency	Follow ADA & CDC Guidelines	Monthly, Then Quarterly	Monthly, Then Adjust	Monthly, Then Quarterly	Monthly, Then Quarterly	Monthly, Then Quarterly

\*If you cannot find your dental unit manufacturer's guidelines, we recommend following the ADA and CDC recommendations.

## Treatment Product Manufacturers

Waterline IFU's / Recommendations	ProEdge BluTube/BluTab	A-dec ICX	Solmetex Sterisil Straw/Citrisil	Hu-Freidy DentaPure
Shocking	Initially, Then Quarterly	Initially, Then After Failed Test	Monthly	Initially, Then After Failed Test
Treatment	Daily	Daily	Daily	Daily
Testing Frequency	Monthly, Then Quarterly	Monthly, Then Quarterly	Monthly	Monthly, Then Quarterly

ProEdge and ADS recommend quarterly testing at a minimum.

# Suction Maintenance

**At the end of each clinical session day, the suction systems are maintained.**

Important to follow manufacturer's instructions to ensure proper ratio. PPE must be worn.

Procedure is as follows:

- Fill designated bucket with water.
- Add enzymatic solution packets.
- Submerge both HVE and Saliva Ejector hoses for the directed time or volume amount.
- Disinfect hoses with an intermediate level disinfectant and put back onto bracket table.
- Repeat until each op is completed

**Once a semester, the suction traps are replaced, sooner if needed.**

PPE must be worn.

Procedure is as follows:

- Compressor is turned off
- The lid of the dental unit filter is removed
- Suction trap is removed
  - The trap can be tossed in general waste unless there are amalgam scraps in the filter, to which it then must be recycled according to State and Federal regulations set forth by the EPA.
- The internal compartment and lid must be wiped clean
- New filter must be added

Maintenance schedule is as follows:

- **Fall Semester:** DAST (Beebe)
- **Spring Semester:** DAST (Beebe)

RS 110 Model Trimmers

- **Summer Semester:** (Maggie)
  - Off-site vender used for this



# Operatory Maintenance-Daily

Stocking each operatory should be maintained daily, or as needed.

The following are examples of the items often needing to be dispersed throughout the clinic

- **Top Drawer:**

- Saliva Ejectors
- HVE tips
- Air/ Water tips
- Cotton tip applicators
- Bite blocks
- Dry Angles
- Prophy Paste
- Floss

- **Second Drawer**

- Trash can liners

- **Third Drawer**

- Bibs
- Bib clips (disposable)
- 2x2s
- Cotton rolls
- Plastic cups for holding disclosing agent

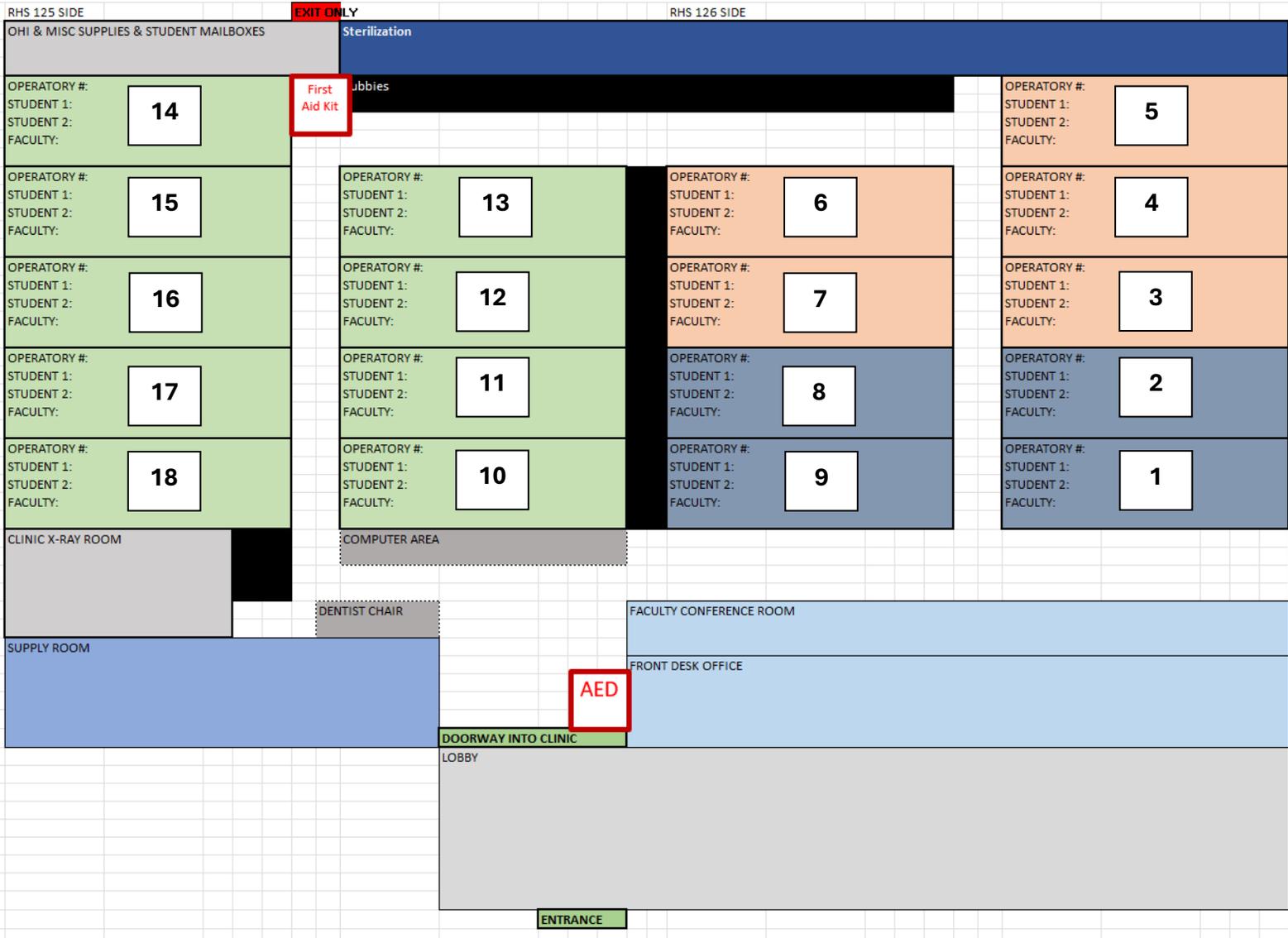
Local anesthetic should not be kept in drawers

- **Other operatory items:**

- Plastic Cups
- Paper Towels
- Tissue Boxes
- Disinfecting Wipes
- Sharps Container
- Ammonia Inhalant
  - Taped onto the wall



# Clinic Map



- **AED** is located near the doorway to the clinic
- **First Aid Kit** is located near Op. #14
- **Eye Wash Station** in Op. #18
- **Fire Extinguisher** in the sterilization
- **Accident Management Binder** in the cabinet about the Dr's desk
- **Maintenance Binders** is located on the clean side of the sterilization
- **SDS Binder** in the cabinet about the Dr's desk