COLLEGE OF DENTURISTS OF ONTARIO

Infection Prevention and Control In the Practice of Denturism Guidelines

COLLEGE OF DENTURISTS OF ONTARIO

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1. Introduction

The College of Denturists of Ontario (CDO) is pleased to provide Registered Denturists with this guidance document that outlines best practices in the implementation of infection prevention and control (IPAC) within the context of the practice of Denturism.

These guidelines consolidate recommendations for IPAC published by Public Health Ontario (PHO), the Public Health Agency of Canada (PHAC), the Provincial Infectious Disease Advisory Committee (PIDAC), the Canadian Standards Association Group (CSA Group), other health professions, regulatory bodies and associations.

The development of this document occurred with the participation of members of the profession, Public Health Ontario, and other stakeholders. The College also worked with the other Oral Health regulatory bodies in establishing, as far as possible, common elements. In establishing these guidelines, the College has made every attempt to ensure that the information contain herein is aligned with that provided by Public Health Ontario and the Public Health Advisory of Canada.

The CDO recognizes that practice standards for IPAC are continually evolving. This document presents IPAC best practices at the time of publication and will be amended as new information becomes available. Amendments will be incorporated into the document and tabulated at the end of the document for reference purposes. Denturists will be informed of amendments to this document as they occur and the most up-to-date version of this document will be provided on the College's website.

1.1 Duty of Care

IPAC requires the attention and participation of all oral health care workers involved in the delivery of denturism care and service. This commitment by Registered Denturists and all individuals working in the practice environment will assist in the prevention of infection transmission among and between patients and care providers.

This duty of care can be met by:

- Ensuring all legislative requirements are met
- Ensuring written policies and protocols related to IPAC, workplace health and safety, hazardous waste management, and human rights obligations for the practice facility are in place
- Ensuring that equipment, supplies and technology that support best practices in IPAC are available, fully operational, up-to-date and routinely monitored for efficacy
- Establishing and maintaining preventative maintenance schedules and recordkeeping

- Ensuring that staff are adequately trained in IPAC practices
- Ensuring that current scientifically accepted IPAC practices are in place

1.2 Duty of Compliance

Registered Denturists must always serve in the public interest. They have a legal responsibility to adhere to the requirements of current legislation and to use the information contained in this guideline and other information provided by relevant stakeholders (PHO, PHAC, PIDAC, CSA Group) to ensure that their own clinic IPAC practices or those IPAC practices in any clinic in which they work, meet the expectations and best practices described in these sources.

1.3 Role of Public Health Units

In accordance with the *Infection Prevention and Control Practices Complaints Protocol, 2018* (or as current), Public Health Units (PHUs) are required to investigate complaints, referrals, or reportable diseases. This applies to all health care settings.

PHUs may investigate complaints at facilities during announced or unannounced inspections. Following an inspection, facilities are provided with recommendations or required remediations that are based on IPAC best practices and current legislation.

If an IPAC lapse is identified[1], a PHU may issue an order that could include closure of the facility or partial restrictions on specific services that a facility can provide. The PHU may also post the IPAC lapse in accordance with the public disclosure requirements of the Ontario Ministry of Health. When a complaint is received, the investigating PHU will work jointly with the CDO during the investigation.

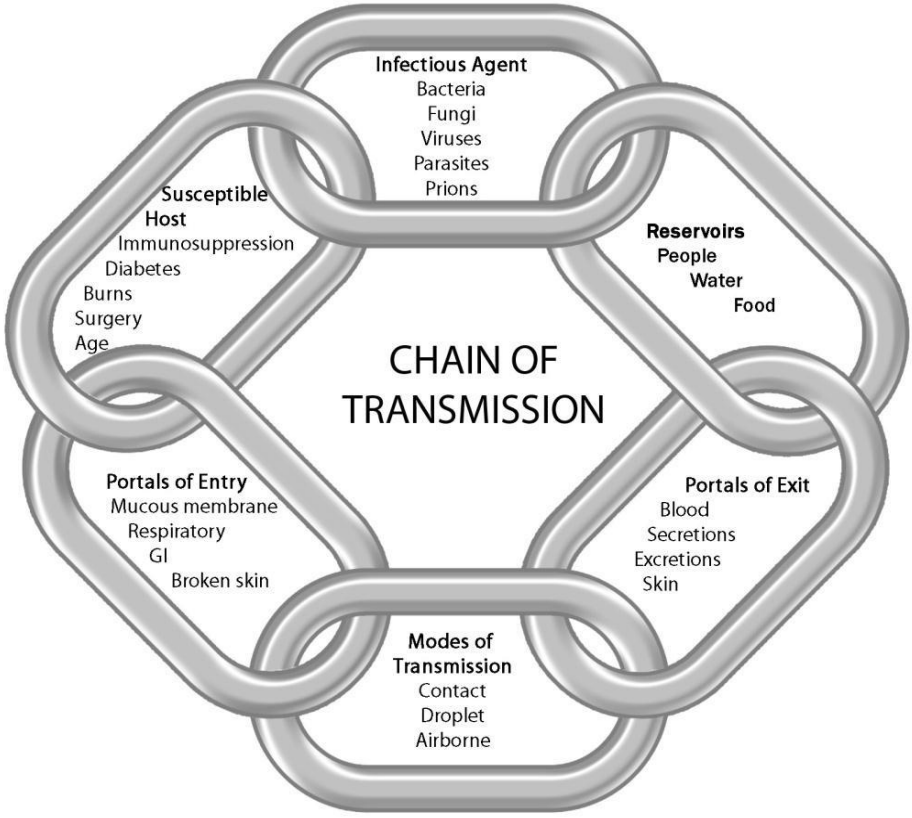
[1]An IPAC lapse is defined as a failure to follow IPAC practices resulting in a risk of transmission of infectious diseases to clients, attendees, or staff through exposure to blood, body fluids, secretions, excretions, mucous membranes, non-intact skin, or contaminated equipment and soiled items.

1.4 Transmission of Microorganisms & Chain of Transmission

There are six components in the Chain of Transmission. Each of these six components need to be present for an infectious agent to spread and cause an infection. Knowledge of the components of this chain of transmission is essential in understanding the approaches to IPAC.

The six components in the Chain of Transmission are:

- **Infectious Agent** – the pathogen or germ that causes the disease
- **Reservoir** – places in the environment where the pathogen lives (people, animals, insects, medical/dental equipment, soil and water)
- **Portal of Exit** – the way the infectious agent leaves the reservoir (blood, secretions, excretions, skin)
- **Mode of Transmission** – the way the infectious agents are transferred (direct or indirect contact, droplet, airborne)
- **Portal of Entry** – the way an infectious agent can enter a new host (through broken skin, respiratory, mucous membranes, gastrointestinal tract)
- **Susceptible Host** – can be any individual at risk. Some individuals are more vulnerable to infection that others (individuals who are immunocompromised)



Source: The Chain of Transmission, Routine Practices and Additional Precautions In All Health Care Settings, 3rd Edition, November 2012, Public Health Ontario, PIDAC

Generally, in oral healthcare, there are three main modes of transmission of disease-causing microorganisms:

- Direct transmission (e.g., from hands contaminated by touching a contaminated surface, object or body part such as mouth, nose)
- Indirect transmission (e.g., from a contaminated object such as an improperly sterilized impression tray)
- Droplet transmission (e.g., from coughing or sneezing)

Elimination of any one of the six links through IPAC measures will break the chain, preventing transmission from occurring. This is an important piece of information that can be used when a Registered Denturist is faced with questions about novel IPAC situations.

2. Routine Practices & Additional Precautions

Routine Practices

PHAC uses the term "Routine Practices" to describe basic standards of IPAC that are required for all safe patient care. Routine Practices encompass the most important measures that all Registered Denturists should be familiar with, understand, and follow in their practices.

Routine Practices are based on the premise that all patients are potentially infectious, even when symptoms are not clinically evident. The same IPAC practices must be routinely applied by all Registered Denturists or their staff when in contact with blood, body fluids, secretions, mucous membranes and non-intact skin.

Most exposures to blood, body fluids, secretions, mucous membranes and non-intact skin can be avoided with the proper use of Personal Protective Equipment (PPE) such as gloves, eyewear, masks and outer protective clothing. Safe handling and disposal of sharps will help to prevent injuries related to the use and transport of sharp instruments.

The five principles in IPAC Routine Practices that Registered Denturists are to adhere to include:

- Personal Risk Assessment
- Hand Hygiene
- Personal Protective Equipment (PPE)
- Environmental Controls
- Administrative Controls

Additional Precautions

Additional Precautions are used to describe measures or interventions (e.g. PPE, barrier equipment, accommodation, additional environmental controls) that are used in addition to Routine Practices to protect staff and patient and interrupt transmission of certain infectious agents.

Additional Precautions are implemented after a personal risk assessment is conducted based on the mode of transmission of the infection e.g. direct or indirect contact, airborne or droplet. Additional Precautions shall not be used to discriminate against patients based on the Human Rights Code.

Additional Precautions may include the following measures:

- Physical separation of the infected patient from others (e.g., a separate waiting area or room)
- Use of PPE (e.g., gowns, gloves, masks) based on the mode of transmission of the organism
- Patients are offered masks and alcohol-based hand rub (ABHR), also known as hand sanitizer, upon arrival

It is up to the professional judgement of the Registered Denturist to determine if Additional Precautions are required, noting that they can always reschedule an appointment, even if during the visit it is determined that the patient may be infectious.

2.1 Risk Assessment

A risk assessment assesses the task, the patient, and the environment. It must be completed by the health care worker before every patient interaction to determine whether there is risk of being exposed to an infection.

Performing a risk assessment is the first step in Routine Practices, which are to be used with all patients, for all care and for all interactions. A risk assessment will help determine the correct PPE required to protect the health care worker in their interaction with the patient and patient environment. A risk assessment can also include screening patients for symptoms of infection.

A Registered Denturist and/or their staff should conduct a risk assessment before every interaction with the patient, including:

- When booking and/or confirming appointments, a Registered Denturist or their staff can confirm with the patient in advance for illnesses (e.g., cough, fever, vomiting, diarrhea)

- When the patient arrives for their appointment, the Denturist or their staff can screen for any symptoms of communicable diseases or acute respiratory infections. Appointments must be rescheduled to prevent the spread of microorganisms.

    - A prominent sign should be posted at the entrance to the reception area requesting patients who are experiencing symptoms of illness (e.g., cough, fever, vomiting, diarrhea) to identify themselves to reception.

    - Additionally, PHO has also provided a sample sign for cough etiquette: "Cover Your Cough" (Appendix 2)

- If the patient's dental condition is of an urgent nature, every effort must be made to separate the ill patient from others by seating them in a secluded space as soon as possible. In this way, the spread of microorganisms by contact or droplet transmission can be minimized. PPE must be selected and worn based on personal risk assessment

2.2 Hand Hygiene

Hand hygiene reduces potential pathogens on the hand and is considered **the single most critical measure for reducing the risk of transmitting organisms to patients and health care workers.** The term hand hygiene includes both handwashing with liquid soap and water, and hand rubbing with an ABHR. It is not recommended to use both ABHR or hand washing with soap and water at the same time as it is irritating to the skin.

Alcohol-Based Hand Rub (ABHR), is the preferred method for cleaning hands when hands are not visibly soiled. It has been shown to be more effective than washing hands with soap (even with antimicrobial soap). ABHR should contain between 70 – 90% alcohol. A minimum of 70% should be chosen.

Hand washing with soap and water must be performed when hands are visibly soiled with dirt, blood, and bodily fluids. ABHR should not be used immediately after hand washing as it is irritating to the skin.

Hand Hygiene must be performed:

Before:

- Initial contact with a patient or items in their environment, this should be done on entry into the clinical room
- Performing an aseptic procedure
- Putting on PPE
- Preparing or handling patient care items
- Leaving the clinical operatory
- Eating or drinking

After:

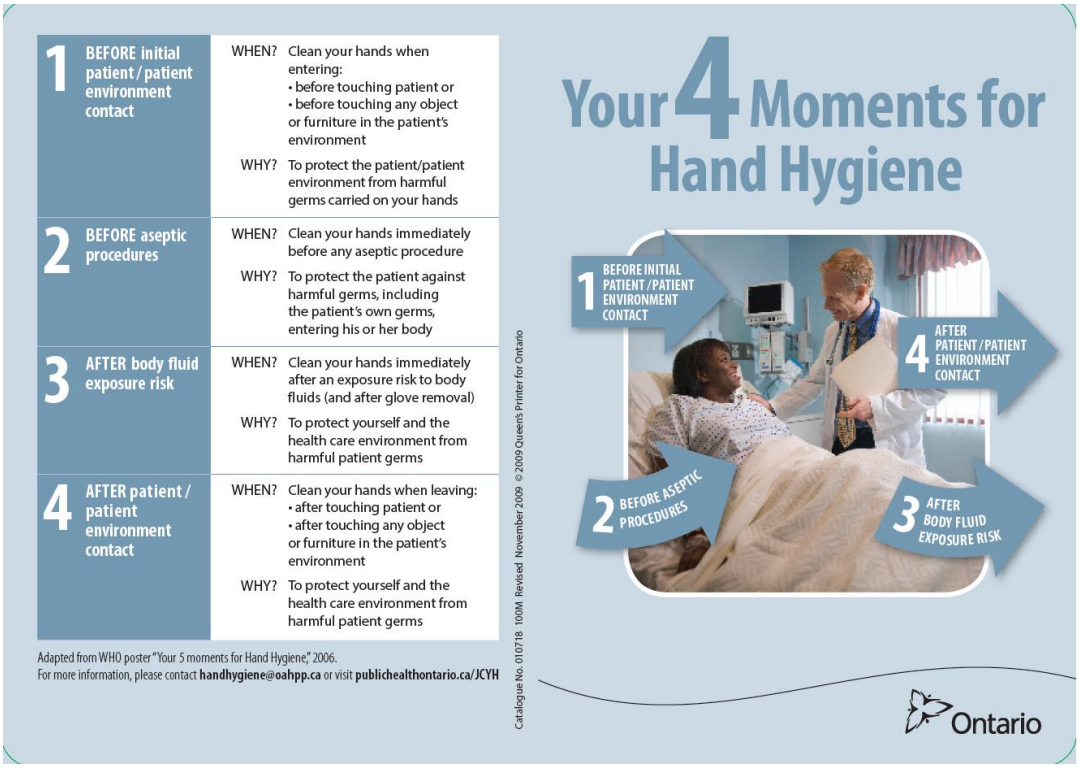
- Contact with blood, body fluids, and secretions of a patient, even if gloves are worn
- Removing PPE such as gloves
- Moving between extra oral and intra oral procedures
- Contact with a patient or items in their immediate surroundings, even if patient has not been touched
- Hands are visibly soiled
- Handling waste
- Cleaning contaminated and visibly soiled equipment (e.g. dental instruments and/or environmental surfaces)
- Personal bodily functions

Whenever in doubt, hand hygiene should be performed.

PHO's hand hygiene program has identified the essential indications. The four moments for hand hygiene make it easier to understand the moments where the risk of transmission of microorganisms via the hands is highest.).

2.2.1 Your Four Moments for Hand Hygiene

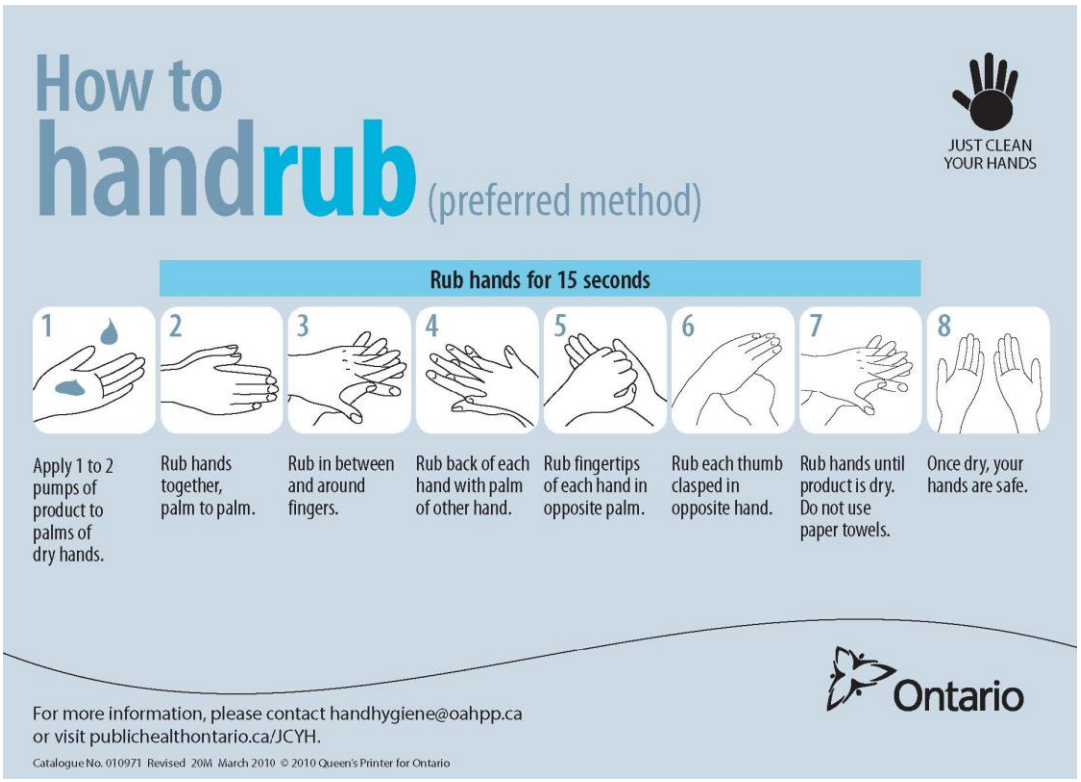
The following figure depicts the points in an activity at which hand hygiene is performed. There may be several hand hygiene moments in a single care sequence or activity.



Source: Just Clean your Hands Program - Your 4 Moments Pocket Card, Public Health Ontario, November 2009

2.2.2 Effective Hand Hygiene Techniques

The following two figures illustrate how to perform hand hygiene using soap and water, and hand rubbing using an alcohol-based hand rub.



Source: Just Clean your Hands Program, Public Health Ontario, March 2010

2.3 Personal Protective Equipment (PPE)

PPE refers to equipment that is designed to protect the wearer from exposure to potentially infectious agents. It serves as a barrier from splashing, spraying or splatter of saliva, blood, or other body fluids. PPE for a Registered Denturist may include gloves, masks, protective eyewear, and outer protective clothing (e.g., gowns, lab coats, scrubs) and is selected based on personal risk assessment.

Gloves

- Perform hand hygiene before putting on gloves and immediately after removing gloves. Wearing gloves does not replace the need for hand hygiene. Use new properly fitting single-use gloves for each patient
- Wear new single-use protective gloves whenever the hands might be contaminated with blood, saliva or other bodily fluid, or will be in contact with contaminated instruments, devices or surfaces
- Do not wash or reuse single-use gloves
- Replace gloves as soon as possible if they become soiled or damaged
- Wear puncture-resistant, heavy-duty utility gloves when handling or manually cleaning contaminated instruments by hand
- Wear gloves specific for handling heated objects
- See PIDAC's gloves selection guide for more information about selecting appropriate gloves.

Masks

- Wear a surgical mask that covers both your nose and mouth during patient-care activities and/or during all procedures likely to generate splashes or sprays of blood or contaminated fluids
- Avoid touching the front of the mask
- Do not hang around neck or chin, fold or store in pockets
- Masks lose efficiency over time and must be changed when they become contaminated
- Change your mask with each patient or when they become wet or visibly contaminated
- Remove gloves, masks and protective eyewear and perform hand hygiene before moving from a contaminated zone to a clean zone in your practice setting
- Follow the manufacturer's instructions for use (MIFU) to ensure the most appropriate fit and optimum protection

Protective Eyewear

- Eye protection may include safety glasses, safety goggles, face shields, and visors attached to masks.
- Prescription eyeglasses are not acceptable by themselves as eye protection, they may be worn underneath face shields and some types of protective eyewear

- Use protective eyewear that is designed for purpose and with complete coverage over and around the eyes, including solid (not vented) side shields. Protective eyewear should be comfortable and not interfere with your vision
- Wear protective eyewear when exposure to blood or other potentially infectious material is possible and during fabrication process when eye injury is possible
- A face shield is recommended if side shields are not used
- Protective eyewear may be disposable or reusable
- Clean and disinfect reusable protective eyewear after each use

Outer Protective Clothing

- Use of outer protective clothing such as gowns, laboratory coats, or scrubs is based on a personal risk assessment
- Wear different outer protective clothing for patient-care activities versus for fabrication processes
- Outer protective clothing is worn for dental or instrument cleaning that are likely to result in splashes or sprays of blood or other body fluids
- All outer protective clothing should be made of synthetic material so that contaminants are not easily absorbed into the material
- Change outer protective clothing as soon as possible when visibly soiled or wet, or when exposed to contaminated aerosols for prolonged periods of time
- Footwear worn in the patient treatment areas and reprocessing areas needs to have enclosed toes and heels
- Outer protective clothing should not be worn outside of the clinic office or worn at home
- Place disposable outer protective clothing in the general laboratory waste after use
- Staff shall not share PPE

2.4 Environmental Controls

2.4.1 Sharps – Handling and Avoiding Injury

Sharps are devices capable of causing a cut or puncture wound, they may include disposable blades, burs, needles, laboratory utility knives, syringes with needles, scalpel blades, scalers, and other sharp instruments. They should be kept out of the reach of patients and should always be safely stored and disposed of.

Some strategies to avoid injury by sharps include:

- Use an intermediary tray instead of passing sharp instruments between staff members, for example, scalpels or utility knives
- Dispose single-use sharps at point-of-use in a clearly labelled puncture resistant secured container immediately after use
- Transporting sharps by using a puncture-resistant secured container when disposal at point of use is not possible

- Wearing heavy-duty utility gloves, PPE and using long-handled brushes when cleaning instruments.

2.4.2 Blood and Body Fluid Exposure Management

Registered Denturists may be exposed to blood, saliva and other body fluids via punctures, lacerations or by splashing onto their non-intact skin, mucosa of the eyes, nose or mouths. As such it is important for Registered Denturists to have an exposure management protocol in their practices.

The following processes should be included in the standard operating procedures of a denturism practice:

- Immediate first aid procedures
- Prompt referral of injured persons to his/her family physician, an infectious disease specialist or hospital emergency department for counselling, baseline blood tests and, if deemed necessary, post exposure prophylaxis (preventative treatment).
- Document the incident:
    - Include the name and vaccination status of persons exposed
    - Date and time of the exposure
    - Nature and the extent of the exposure including what oral health procedure was being performed and the immediate action taken
    - Name and health status of the source person if known, including any known blood-borne infections

2.4.3 Sending and Receiving Items

Dental prostheses, impressions, orthodontic appliances, and other prosthodontic materials (e.g., occlusal rims, temporary prostheses, or bite registrations) are potential sources for cross-contamination and should be handled in a manner that prevents transmission of infectious agents.

It is routine practice to treat all incoming items as contaminated and to perform cleaning and disinfection procedures if there has been no communication prior that it has been properly disinfected with low-level disinfectant, or there are any lingering doubts or confusion.

Routine Practices may include:

- Creating a dedicated receiving, cleaning, disinfection area in the practice to minimize the spread of contamination
- Conducting a personal risk assessment to determine which PPE should be used
- Clean and disinfect any received items (e.g. impression materials, bite registration) thoroughly and carefully to remove any blood, saliva or bodily fluids

- Dispose of all single-use shipping materials such as plastic bags that have touched contaminated received items
- Using a low-level disinfectant that has a Drug Identification Number (DIN) from Health Canada. Ensure the disinfectant is safe for use with minimal toxic or irritating effects
- When sending items out, all items should always be properly cleaned and disinfected

Effective communication and coordination between the dental office and the commercial dental laboratory will ensure that:

- appropriate cleaning and disinfection procedures are performed in the dental office or the commercial dental laboratory
- materials are not damaged or distorted because of overexposure to disinfectants
- disinfection procedures are not unnecessarily duplicated.

2.5 Administrative Controls

2.5.1 Education and Training

Denturists, like all health care professionals, receive training on IPAC best practices and protocols through their formal education, workplace training, and ongoing continuing professional development. It is important that all staff receive office-specific training in IPAC as part of their orientation, and whenever new procedures, equipment, or processes are introduced.

Regular education (orientation and continuing education) should include the following:

- The risks associated with infectious diseases, including acute respiratory infection and gastroenteritis
- The importance of appropriate immunization
- Hand hygiene, including the use of alcohol-based hand rubs and hand washing
- Principles and components of Routine Practices as well as additional transmission-based precautions (Additional Precautions)
- Assessment of the risk of infection transmission and the use of PPE, including safe application, removal and disposal
- Reprocessing of reusable medical equipment
- Cleaning and/or disinfection of surfaces and/or items in the health care environment

This guideline should be provided to all staff members as a key reference document. An Office Manual for a denture practice can be created from this guideline along with resources from PHO, PHAC, PIDAC, CSA Group, and various manufacturer's manuals for equipment and instruments. The Office Manual should also include written policies and/or procedures for managing patients with suspected illnesses or infections.

Regular education and support should always be provided in all practices and workplaces to help staff consistently implement appropriate IPAC practices. There should be a process to record and report attendance of staff at education/training sessions.

2.5.2 Immunization

Immunizations are an important component of IPAC. They minimize the potential risk for contracting an infectious disease from a patient and from transferring an infectious disease to patients and other staff.

All Registered Denturists should be aware of their personal immunization status and ensure their vaccines are up to date. It is highly recommended by the National Advisory Committee on Immunization - Canada that all health care professionals be immunized against:

- Hepatitis B
- Diphtheria
- Rubella
- Polio
- Influenza
- Mumps
- Tetanus
- COVID-19
- Measles
- Pertussis
- Varicella (Chickenpox)

2.5.3 Illness and Work Restrictions

Hand hygiene is the single most important measure in protecting patients and staff from the transmission of microorganisms. However, even with the best of efforts, Registered Denturists and their staff may become ill.

All practices should create a healthy workplace policy that fosters a positive work environment and culture where employees feel secure and supported in making health lifestyle choices. Such provisions may include quarantining themselves at home when they fall ill.

Registered Denturists and their staff who have any of the following should not see patients:

- Influenza or a common cold
- Severe respiratory illness with fever
- Vomiting and/or diarrhea
- Acute conjunctivitis (e.g., pink eye)
- Dermatitis

2.5.4 The Occupational Health and Safety Act & Workplace Hazardous Materials Information System

In Ontario, employers have the responsibility to meet the requirements of the Occupational Health and Safety Act (OHSA) which includes the Workplace Hazardous Materials Information System (WHMIS).

Depending on the workplace setting, a Registered Denturist may have different roles and responsibilities under the OHSA. They may be classified as an employer, a supervisor or a worker under the Act. In many cases, Registered Denturists may be a combination of roles.

- A Denturist is an employer if they employ one or more workers or contracts for the services of one or more workers
- A Denturist is a supervisor if they have charge of the workplace or authority over any worker
- A Denturist is a worker if they perform work or supply services for monetary compensation

See **Appendix 1** for a detailed breakdown of duties for employers, supervisors and/or workers.

WHMIS is Canada's national workplace hazard communication standard that is exemplified in Ontario Regulation 860 of the OHSA.

The three key elements to WHMIS are:

- Cautionary labelling of containers of hazardous substances, called "controlled products", e.g., disinfectants
- Provision of safety data sheets (SDS) for all hazardous substances, which shall be updated as new information becomes available and routinely reviewed every two years
- Worker education programs

2.5.5 Human Rights

The Ontario Human Rights Code (the Code) provides for equal rights and opportunities, and freedom from discrimination. The Code prohibits discrimination based on any of the following:

- Race
- Colour
- Creed
- Gender identity
- Marital status
- Ancestry
- Ethnic origin
- Sex
- Gender expression
- Family status
- Place of origin
- Citizenship
- Sexual orientation
- Age
- Disability

The Code recognizes persons living with certain illnesses, along with AIDS or HIV. Registered Denturists and their staff are prohibited from discriminating against such patients. This includes using extraordinary and/or unnecessary IPAC measures that are not recommended as per best practices. Registered Denturists may employ Additional Precautions based on the risks associated with certain procedures provided they are used for all patients undergoing the same procedures.

3. Reprocessing: Cleaning, Disinfection, and Sterilization of Reusable Equipment/Instruments

Reprocessing refers to the steps, as outlined in equipment/instrument's MIFU, that are performed to ensure that a contaminated reusable equipment/instrument is made safe for reuse from one patient to another. It requires specialized equipment, dedicated space, qualified staff and regular quality control monitoring.

Newly purchased non-sterile semi-critical and critical medical equipment/instruments shall first be inspected and decontaminated according to their intended use prior to being used. Refer to the table below for the level of reprocessing required based on the intended use of the equipment/instrument.

3.1 Spaulding's Classification of Medical Equipment/Instruments

All reusable dental equipment/instruments are categorized as critical, semi-critical or non-critical based on its use, and each category requires a different level of reprocessing. The majority of semi-critical equipment/instruments used in denturism are available in heat tolerant or disposable alternatives.

Category	Use	Minimum Level of Reprocessing	Examples
Critical	Enters sterile tissues, including the vascular system (veins & arteries)	Cleaning followed by Sterilization	Periodontal probes
Semi-critical	Contact with mucous membranes or non-intact skin but does not penetrate them	Cleaning followed by Sterilization	Mouth mirrors, reusable impression trays, facebow intraoral fork, fox plane, implant tools, implant abutment wrenches and screwdrivers, wire bending pliers, suction tips, handpieces, burrs, and any tool used in the mouth
Noncritical	Contact with only intact skin (healthy skin with no breaks, cuts or scrapes) and not mucous membranes	Cleaning followed by Low-Level Disinfection	External portion of a facebow, cameras, mixing spatulas, laboratory knives, rubber mixing bowls, Boley gauges, shade guides, curing lights, radiograph head/cone, and blood pressure cuffs

3.2 Single-Use Items

Single-use equipment/instruments that are labeled by the manufacturer as single-use must be disposed of properly after each use. Single-use equipment/instruments are not to be reprocessed and reused.

3.3 Reprocessing Area

In a clinical practice setting, all equipment/instrument cleaning, disinfecting, and sterilizing should occur in a designated reprocessing area in order to more easily control quality and ensure safety. Registered Denturists should establish a reprocessing area that has the following:

- One-way workflow from dirty to clean to prevent cross-contamination with the following distinct areas:
    - Receiving, decontamination, cleaning, and drying
    - Preparation and packaging
    - Sterilization
    - Storage
- Adequate space for the cleaning process and storage of necessary equipment and supplies
- Distinct separation from areas where clean/disinfected/sterile equipment/devices are handled or stored
- Easy access to hand hygiene facilities (i.e., hand washing sink or alcohol-based hand rub in lieu of a separate hand washing sink)
- Surfaces that can be easily cleaned and disinfected
- Slip-proof flooring that can withstand wet mopping and hospital-grade cleaning and disinfecting products
- Environmental controls in accordance with requirements for reprocessing areas (e.g., temperature, ventilation, humidity)
- Restricted access from other areas in the setting
- Policies or procedures in place to prohibit eating/drinking, storage of food, smoking, application of cosmetics or lip balms, and handling of contact lenses in place

3.4 Transportation and Handling of Contaminated Equipment/Instruments

Soiled dental instruments, dentures, and other medical equipment must be handled carefully to avoid risk of exposure, contaminating contact surfaces, and injury to personnel. Best practices include:

- To prevent percutaneous injuries, contaminated instruments must be placed in a puncture-resistant covered container or locked cassette at the point of use and then transported to the instrument reprocessing area

- Transport of soiled equipment/instruments by direct routes that avoid high-traffic, clean/sterile storage areas, and patient care areas
- Cleaning and disinfection of containers or carts used to transport soiled medical equipment/instruments after each use
- Disposal of sharps in a puncture-resistant sharps container at point-of-use, prior to transportation

3.5 Pre-Cleaning and Cleaning

Cleaning is the removal of visible contamination and gross debris from instruments. It is always required before disinfection or sterilization. If blood, saliva, and other contamination are not removed immediately and are allowed to dry on the instruments, these materials can shield microorganisms and potentially compromise the disinfection or sterilization process. As such, pre-cleaning, the removal of gross soil (e.g., saliva, blood) shall be done immediately at point-of-use (i.e. chair side).

Cleaning can be performed manually or with the use of automated cleaning equipment such as ultrasonic cleaners or automated washers. Ensure equipment/instruments are in the open/unlocked position as per MIFU.

3.5.1 Manual Cleaning

- Cleaning is achieved by manually scrubbing the instruments with a surfactant, detergent, or an enzymatic cleaner and must be done while immersed in water to minimize splashing
- The brush used for scrubbing instruments must be inspected for damage frequently and rinsed throughout the day
- All brushes must be disposed or disinfected at the end of each day
- Instruments must be rinsed after cleaning to remove any disinfectant, or surfactant residue
- Instruments must be dried with a lint-free cloth or designated automatic dryer
- Instruments must be visually inspected to ensure all organic and inorganic materials have been removed and integrity of the instruments has not been altered

3.5.2 Ultrasonic Cleaner

Ultrasonic cleaners work by subjecting instruments to high frequency, high-energy sound waves, thereby loosening and dislodging dirt. They are strongly recommended for any semi-critical or critical instruments that have joints, crevices, lumens or other areas that are difficult to clean. The efficacy of the ultrasonic cleaner is to be tested at least once per week, preferably daily according to the MIFUs.

- Ultrasonic cleaners, if used, are tested for sonification performance at least weekly or preferably each day it is used, using a commercial method or foil test in accordance with MIFU
- Remove gross debris from instruments prior to placement in an ultrasonic cleaner
- Change the ultrasonic cleaning solutions daily or more frequently if they become visibly soiled
- Completely immerse the instruments, in the unlocked open position if applicable, in the washing solution
- Rinse instruments with water after cleaning (with minimal splashing) to remove chemical or detergent residue
- Dry instruments after rinsing with a lint-free cloth or designated automatic dyer
- Inspect instruments visually to ensure all materials or contamination has been removed and the integrity of the instrument has not been altered

3.5.3 Washer-Disinfectors

Washer-disinfectors are generally computer-controlled units for cleaning, disinfecting, and drying solid and hollow surgical and dental equipment. Note that critical and semi-critical instruments must be sterilized. Test the performance of the washer-disinfector each day that it is used.

- Follow the MIFUs for the operation, maintenance and monitoring
- Washer-disinfectors must meet the requirements of the CSA Group
- Liquid chemical sterilants or high-level disinfectants (e.g. glutaraldehyde, ortho-phthalaldehyde) must not be used as holding solutions, due to the fixative nature of these chemicals making surfaces more difficult to clean, as well as their general toxicity
- Avoid stacking or overloading instruments in the washer-disinfectors, and disassemble devices as per the equipment/instrument's manufacturer's instructions
- Maintain and clean the washer-disinfectors regularly to prevent formation of biofilms that could contaminate processed instruments
- Dry instruments with a lint-free cloth or designated automatic dyer if no drying cycle on the washer-disinfector
- Inspect instruments visually to ensure all materials or contamination have been removed and the integrity of the instrument has not been altered

3.5.4 Drying

Drying is an important step that prevents the dilution of chemical disinfectants which can in turn render them ineffective in preventing microbial growth. After cleaning, instruments must be rinsed with water to remove detergent residue, dried and visually inspected to ensure all debris has been removed.

- Follow the MIFUs for drying of the instruments
- Dry instruments by using a drying cabinet, air-dry, or dry by hand using a lint-free towel
- Dry stainless-steel instruments immediately after rinsing to prevent spotting
- Inspect the instruments for any malfunction or damage after drying

3.6 Disinfection

Disinfection is the inactivation of disease-producing microorganisms, it does not destroy bacterial spores. Disinfection of reusable instruments falls into two major categories, low-level disinfection and high-level disinfection.

3.6.1 Low Level Disinfection

Low level disinfection eliminates vegetative 'live' bacteria, some fungi and enveloped viruses. It is used for the disinfection of some environmental surfaces and the reprocessing of noncritical equipment/instruments that only had contact with intact skin (healthy skin with no breaks, cuts or scrapes) and **not** mucous membranes.

Impressions, prostheses, or appliances that are removed from a patient's mouth should be cleaned and disinfected as soon as possible before drying of blood or other organic debris. The MIFU regarding the stability of specific materials during disinfection should be consulted. Oral appliances or wet impressions should be placed in a secured plastic leak-proof bag or rigid container prior to transport.

Choose a disinfectant that:

- Has a Drug Identification Number (DIN) from Health Canada
- Has efficacy for the intended use
- Is compatible with the instrument or product (e.g. impression material) being disinfected
- Is safe for use with minimal toxic and irritating effects for staff

Follow the MIFUs regarding:

- The use of disinfectants (e.g., amount, dilution, contact time, safe use, shelf life, storage and disposal).
- The method for monitoring the disinfectant's concentration.
- The instructions for rinsing the disinfectant (e.g., water quality, volume, time) after disinfection.

3.6.2 High Level Disinfection & Cold Soaking

High-level disinfection is used for the disinfection of semi-critical equipment/instruments. They may include 2% glutaraldehyde, 6% hydrogen peroxide, 0.2% peracetic acid, 2-7% enhanced

action formulation hydrogen peroxide and 0.55% ortho-phthalaldehyde. HLD is performed **after** the equipment/instrument is thoroughly cleaned, rinsed and dried.

The use of cold-soaking as a **sterilization method** is associated with a number of challenges: 1) difficulty in properly tracking immersion time, 2) unnecessary exposure to corrosive chemicals that may pose health risks to patients, Denturists, and clinic staff, 3) the need for direct ventilation in the reprocessing area, 4) disposal requirements for used disinfectants, 5) a lack of reliable monitoring mechanisms (physical, chemical or biological indicators) to ensure sterilization has occurred and 6) processing requires the rinsing of soaked instruments with sterile water to remove potentially irritating HLD chemicals and 7) devices cannot be wrapped during processing in a liquid chemical sterilant; thus, it is impossible to maintain sterility following processing and during storage

Because of these challenges, the use of HLD for sterilization through cold soaking **does not reflect current best practices** for the sterilization of dental equipment and instruments. PHO notes that dynamic air removal steam sterilization, such as autoclaving, is the preferred method of decontamination for heat-resistant equipment and instruments and the CDO strongly discourages the use of cold-soaking as a method of sterilization.

3.7 Sterilization

Sterilization is a process by which all disease-producing microorganisms including spores are eliminated. All critical medical instruments must be sterilized by steam under pressure (autoclaving), or by dry heat. Sterilization is the preferred method for reprocessing critical and semi-critical medical instruments.

All sterilization must be performed by using medical sterilization equipment licensed with Health Canada. You can verify if your autoclave is licensed by Health Canada by using Medical Devices Active Licence Listing (MDALL). Sterilization times, temperatures and other operating parameters recommended by the manufacturers of the equipment used, as well as instructions for the correct use and placement of packages and chemical or biological indicators, must be followed.

Instrument packages must be allowed to dry inside the sterilizing chamber before handling to avoid wicking of moisture and possible contamination with bacteria from hands.

3.7.1 Preparing and Packaging of Reusable Items

Equipment and instruments that are to be sterilized require wrapping prior to sterilization. Equipment and instruments must be wrapped/packaged in a manner that will allow adequate air removal, steam penetration and evacuation on all surfaces (e.g., no over-filling, instruments are in the open position). The most common packaging material for the clinical office are plastic/peel pouches. They are easy to use, often with features such as self-sealing closures,

chemical indicator strips, and they come in a variety of sizes that can accept single or small groups of instruments.

Suitable packaging materials may include wrapped perforated instrument cassettes, peel pouches of plastic or paper, and woven or non-woven sterilization wraps.
Each package must be labelled with:

- Date reprocessed
- Package contents if you cannot see into the package
- Cycle or load number
- Reprocessor's initials
- Sterilizer used

Instruments should be evenly distributed in a single layer within the package or container, unless the container is designed by the manufacturer for more than one layer. Hinged instruments must be reprocessed in the open and unlocked position. Equipment/instruments shall be disassembled as per the MIFU.

A packaged instrument must not be placed within another package, unless this is supported by the sterilizer and the manufacturer of the internal packaging has designed and validated its product for this use.

Labels, chemical indicator tapes, and handwritten or printed inks must be compatible with the packaging system and colour-fast, so as not to degrade, run, leach, fade or become illegible with exposure to the sterilization process. If a labelling sticker is used, it shall be placed in an area that does not block the breathable area of the package. Ball point pens should not be used.

3.7.2 Monitoring of Sterilization Process

The sterilization process shall be monitored to ensure the integrity and effectiveness of the process. Performance monitoring includes a combination of physical, chemical and biological indicators:

Physical Indicators

- Physical indicators must be checked and recorded for each load. If the sterilizer has a recording device, the physical parameters must be checked at the conclusion of the sterilization cycle for each load and documented

- Newer sterilizers can display, printout, or provide results through a digital record

- If an autoclave does not have a printout or a data logger (digital record) to record the physical parameters, the following must be done:
    - Have the autoclave retrofitted with a printer/data logger or replace the autoclave with one that has a printer or can record the record digitally

- Monitor the display and record the data during each cycle
- Place a Type 5 chemical indicator in every package

Chemical Indicators

- Chemical indicators (CI) use sensitive chemicals that respond to critical indicators (temperature, time, moisture – presence of steam). It does not indicate sterility, it only indicates the package has been processed through a sterilization cycle. An internal indicator and an external indicator must be placed on the inside and outside of each package.

- External indicators (Type 1) - indicate that the package has been directly exposed to heat. This helps distinguish between processed and unprocessed packages. **Each package must have an external Type 1 indicator**

- Internal indicators (Minimum Type 4) - indicates that the CI has been exposed to two or more critical indicators. A CI must be placed inside each package in the area least accessible to steam penetration as per the packaging manufacturer's instructions. **Each package must have, at a minimum, an internal Type 4 indicator**

- See **Appendix 3** for the different types of chemical indicators

Biological Indicators

- A Biological Indicator (BI) is a test system containing viable microorganisms that provide a defined resistance to a specified sterilization process. They are tested contained within a Process Challenge Device (PCD). Once sterilized, the BI, along with a control from the same lot number is incubated to see if the microorganism will grow, which indicates a failure of the sterilizer

- **A BI is used to test the sterilizer each day the sterilizer is in use and with each type of cycle that is used that day**

- BI testing can be conducted only once per day that the sterilizer is in use, even though multiple batches are run throughout the day – usually the BI test is completed on the first load of the day

- Items in the processed loads should be quarantined until the results of the BI test are available (most are 24 hours for steam sterilization, but there are some BIs with incubation times as short as 30 minutes)

- If a failed BI is found, the contents of the autoclave load shall be reprocessed before use

- An investigation shall be made to determine why the autoclave failed and if the need for service is required

- Contingency plans including policies on recall and procedures must be in place in the event of reprocessing failures

3.7.3 Conducting Sterilizer Testing and Process Challenge Devices (PCDs)

Process challenge devices (PCD) are devices used to provide a challenge to the sterilization process that is equal to or greater than the challenge posed by the most difficult item that is routinely processed. Put another way, PCDs are used to verify that the sterilizer has effectively sterilized all items in that cycle and that the sterilizer is working as intended.

Three most commonly used PCDs in the denturism practice are:

- Bowie-Dick, air removal PCD test pack
- Biological indicator PCD test pack
- Chemical indicator PCD test pack

Bowie-Dick, air removal PCD test pack

The Bowie-Dick test is only required for *pre-vacuum sterilizers* as it indicates sufficient air has been removed from the sterilizer for steam penetration and contact with instrument surfaces. The Bowie-Dick test pack must be performed in an empty sterilizer at the beginning of each day the pre-vacuum sterilizer is used. If the Bowie-Dick test fails, the sterilizer must be removed from service until it has been inspected, repaired and successfully re-challenged three times. Follow the manufacturer's guidelines on where to place test pack within the sterilizer.

Biological indicator PCD test pack and BI interpretation

A Biological Indicator (BI) PCD test pack is performed daily and included usually with the first load of the day. They are placed in the chamber along with a full load of packages. All sterilized loads completed throughout the day must be quarantined until the BI PCD test pack successfully passes. When using a BI test pack, a Type 5 or Type 6 Chemical Indicator (CI) strip should be included as well. See **Appendix 3** for the different types of chemical indicators.

Once the sterilization cycle has completed, the BI is prepared and incubated for the recommended time as indicated by the MIFU. A control BI, from the same lot as the test indicator that has not been processed through the sterilizer must also be prepared and incubated with the test BI. The control BI will indicate positive results for bacterial growth while the sterilized BI indicates negative results/no growth. If the Type 5 CI also indicates a pass and

all physical parameters have been met (time, temperature, and pressure), the reprocessed instruments may be released for use.

In the event of a failed BI test, ensure the following are carried out:

- Remove the sterilizer from service
- Review all the records pertaining to physical and chemical indicators since the last negative BI
- Review procedures to determine if it was an operator error or mechanical error i.e. overloading, inadequate package separation, incorrect or excessive packaging material
- If the reason for the failure is identifiable, correct procedural problems, repeat BI test immediately using the same cycle that produced the failure. While waiting for repeat test results, the sterilizer must remain out of service. If repeat BI test is successful, the sterilizer may be placed back into service. Packages from the failed load are to be reprocessed
- If the repeat BI test is unsuccessful or the cause of the initial failure is not known, the sterilizer must remain out of service until it has been inspected, repaired and successfully re-challenged with the BI test in 3 consecutive full chamber sterilization cycles. Previous items from the suspect load must be recalled and reprocessed

Chemical indicator PCD test pack

A Type 5 or Type 6 CI in a PCD must always be used if the reprocessed instruments are going to be released prior to knowing the result of the BI test. If the sterilizer does not have a printer/USB or recording device, then a Type 5 CI must be placed in every package of the load to demonstrate that correct sterilizing conditions were achieved in the cycle.

A successful CI PCD test pack will indicate the critical indicators that the CI is measuring have been met (e.g., time, temperature, and pressure) and that instruments may be released upon successful daily BI test results. Although instruments can be released based on the results of the Type 5 or Type 6 CI in a PCD, along with physical indicators met, best practice is to quarantine the load until results of the BI are available.

A log must be kept documenting the date, time of sterilization, sterilizer number, sterilizer cycle, and location of the PCD within the cycle.

In the event of a failed CI test:

- Remove the sterilizer from service
- Review all the records of physical and chemical indicators since the last negative CI. Review procedures to determine if it was an operator error or mechanical error

- If the failure is confined to one load and can be immediately corrected, correct the problem and reprocess the load.
- If it was failed in only one package, reprocess the package. If the failure was found in multiple packages, the entire load must be reprocessed.
- If the failure cannot be immediately corrected, recall and reprocess all items back to the last successful load (Physical, CI, and BI parameters met)
- Sterilizer must remain out of service until it has been inspected, repaired and successfully re-challenged with BI test in 3 consecutive full chamber sterilization cycles.

3.7.4 Sterilization Record Keeping

A log of test results during sterilization must be maintained and reviewed. The following parameters are to be recorded:

- Load details (sterilizer model #, load number, date of sterilization and time of sterilization)
- Physical parameters of the sterilization cycle met (temperature, time, pressure)
- Load or pouch contents
- Operators' initials
- CI monitoring results – change occurred: yes/no
- BI monitoring results – pass/fail

The results of all sterilization monitoring tests must be recorded and retained for a period of 7 years from the date of the last entry into that record – as per the College's Standard of Practice for Record Keeping.

Other logs such as efficacy testing and maintenance of sterilizers, ultrasonic cleaners, and washer/disinfectors must be maintained as per manufacturer's instructions for use. See appendix 4 for an example of a sterilization log provided by PHO.

Sterilization record keeping requirements can be met in several ways to best accommodate your practice. Manual labelling of packages and cassettes, using a package labelling system designed to withstand the sterilization process, using sterilizers with integrated printers that produce load control labels or using sterilization tracking software are several ways record keeping can be completed.

There are no specific requirements in using one record keeping system over another as long as all the parameters are recorded. The table below depicts the advantages and disadvantages of each type of system.

Record Keeping System	Advantages	Disadvantages
1. Manual labelling	Minimal investment in additional equipment and technology	Time consuming, requires manual labelling and manual entry into sterilization log
2. Package labelling system	Time saving for labelling loads	Investment required in labelling system – application gun and labels. Labels placed on packages, manual or digital entry into sterilization log required,
3. Sterilizer with integrated printer	Provides printouts for each sterilization cycle saving some entry into sterilization log	Requires sterilizer with integrated printer.
4. Sterilization tracking software	Custom labels are produced for each package/cassette, all result parameters are electronically logged, time saving and efficient	Requires investment in software and technology (scanners, labels, software and support)

4. Cleaning of Environmental Surfaces and Management of Waste

The prevention of cross-contamination or the spread of microorganisms from one source to another is of primary concern in the practice of denturism. When evaluating the environment, Registered Denturists should consider ways to minimize the transfer of microorganisms from soiled hands, soiled instruments or soiled environmental surfaces. Cleaning and low-level disinfection of environmental surfaces will help achieve this.

There are two categories of cleaning for clinical practice settings:

- Public environmental surfaces - reception areas, consultation rooms, and offices
- Clinical environmental surfaces - patient treatment areas and reprocessing rooms

4.1 Public Environmental Surfaces

Public environmental surfaces refer to areas open to the public such as reception areas with chairs, toys, countertops, consultation rooms, washrooms, and business offices that patients may touch or encounter.

Public areas should be cleaned daily, or more frequently if soiled or contains high touch areas. In the event public environmental surfaces become soiled with blood or body fluids, the surfaces must be cleaned and disinfected.

While floors and walls have a limited risk of disease transmission, these surfaces require periodic cleaning. Mop heads and buckets must be cleaned thoroughly between uses and allowed to dry completely. Mops used in clinical areas should not be used in public areas. Carpeted areas and upholstered furnishings are discouraged. Areas where carpets have not yet been removed should be vacuumed daily using a HEPA filtered vacuum.

Public Health Ontario's Best Practices for Environmental Cleaning for Prevention and Control of Infections in All Health Care Settings document specifies that bathrooms should be cleaned daily at a minimum with consideration given to twice daily cleaning, particularly where there is high traffic or use.

4.2 Clinical Environmental Surfaces

Clinical environmental surfaces refer to areas of patient treatment/care as well as instrument reprocessing areas.

Treatment rooms should not be carpeted, upholstered, or contain wood furnishings as they are difficult to clean and disinfect. When choosing finishes and furnishings for the clinical practice setting, seamless, slip-resistant, non-porous and easy to clean materials should be considered. Sinks and garbage bins ideally should operate hands free. The table below depicts areas that are considered high-touch or frequently in contact with people.

High-touch surfaces may include:

- Dental chair & switches
- Chairside computer keyboards, monitors and mouse
- Sink and faucet handles
- Overhead light handle and switches
- Drawer and door handles
- Pens
- Telephones
- Countertops

Clinical surfaces including the high-touch surfaces must be cleaned of gross debris and then disinfected with a low-level disinfectant. Treatment areas must be free of clutter and unnecessary supplies and equipment on counter tops in order to minimize contamination with spatter, droplets or sprays and facilitate effective disinfection. Appropriate PPE must be worn while disinfecting surfaces to prevent occupational exposure to infectious microorganisms and chemicals.

Clinical surfaces can be protected from contamination by using barriers. Barriers are particularly effective for those surfaces that are difficult to clean and disinfect, due to their shape, surface or material characteristics.

Suitable barrier materials include:

- clear plastic wrap
- plastic bags
- plastic sheets
- plastic tubing
- plastic-backed paper
- other moisture-proof materials

4.3 Management of Waste

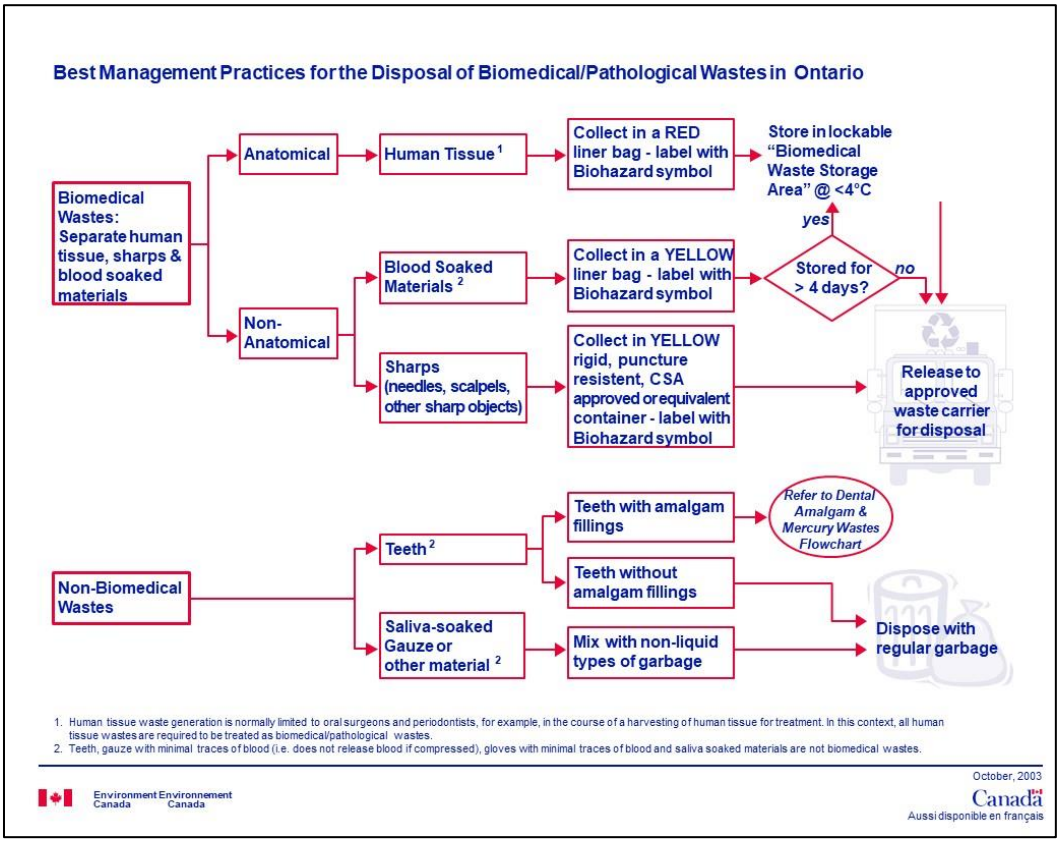
Waste must be separated into biomedical waste (hazardous waste) and general office waste. General office waste may be disposed of by your regular municipal waste collection service. Biomedical waste must be disposed of in an appropriate manner to prevent the transmission of possible infections from contaminated waste.

4.3.1 Biomedical waste

Biomedical waste is classified as hazardous waste and must not be disposed with regular office waste. It must be handled safely to protect human health and the environment. In general, all biomedical waste must be:

- Stored in colour-coded containers that are marked with the universal biohazard symbol
- Released to an approved biomedical waste carrier for disposal
- For further information, visit the Government of Ontario's online guidelines for the management of biomedical waste.

The figure below depicts best practices for the disposal of various biomedical/pathological waste.



Source: Dental Wastes Best Management Practices for the Dental Community, Environment Canada, April 2005.

Blood and Body Fluid Soaked Items

In the rare event that a Registered Denturist encounters blood and body fluid soaked items, considerations for cleaning up a blood or body fluid spill include:

- Wipe up any blood or body fluid spills immediately using disposable towels, dispose into regular waste if they do not release liquid or semi-liquid blood when compressed/squeezed
- Blood soaked gauze, cotton rolls, examination gloves, and disposable towels are considered general office waste if it also does not release liquid or semi-liquid blood when squeezed
- Non-anatomical waste includes blood-soaked materials that release liquid or semi-liquid blood if compressed. It must be separated and collected in a YELLOW liner bag that is labelled with the universal biohazard symbol
- If blood-soaked materials are to remain on site for more than four days, they must be stored in a refrigerated storage area marked "Biomedical Waste Storage Area" displaying the universal biohazard symbol. Refrigeration should be at or below 4^0C

- Disinfect the entire area with hospital-grade disinfectant, wipe up the area again with disposable towels and discard into regular waste
- Blood-soaked materials must be released to an approved biomedical waste carrier for disposal

4.3.2 General Office waste

General office waste is no different than residential waste. The majority of soiled items generated in a denture clinic do not require any special disposal methods other than careful containment and removal, with the exception of biomedical waste. Some general recommendations for office waste include:

- Ensure all garbage containers are waterproof and have tight-fitting lids, preferably operated by a foot pedal. Open wastebaskets are unadvised
- Use plastic bags to line the garbage containers. The use of double bagging is not necessary, unless the integrity of the bag is jeopardized, or the outside is visibly soiled
- Do not overfill garbage containers
- Do not place sharp, hard or heavy objects into plastic bags that could cause them to burst
- Do not place biomedical waste or sharps with general office waste

4.3.3 Sharps Disposal

The following are best practices regarding the disposal of sharps:

- Dispose of a single use sharp immediately after use
- Sharps must be disposed of in a YELLOW puncture-resistant, leak-proof container specifically designed for their management and labelled with the universal biohazard symbol
- Use rigid walled, leak- and puncture-resistant yellow containers for disposal of sharps. The closure should be secure
- Containers must not be filled beyond their designated capacity as per MIFU
- Must be released to an approved biomedical waste carrier for disposal
- For reusable sharps, carry them in a lidded puncture-resistant container, cassette or covered tray from the point of origin to the reprocessing area.
- Place appropriate sharps (biohazard) containers as close as possible to the area where the items are used

Most healthcare professionals, including Registered Denturists, source a private company to assist with the appropriate disposal of sharps and biomedical waste. Such companies may also provide clinics with appropriate containers to store disposed sharps in between pick-ups.

Appendix 1 – Duties of Employers, Supervisors, and Workers under the Occupational Health and Safety Act

The following information was reproduced with permission from the Infection Prevention and Control for Clinical Office Practice, April 2015, Public Health Ontario.

Duties of Employers

- Make sure workers know about hazards and dangers by providing information, instruction and supervision on how to work safely.
- Appoint a "competent person" as defined by the OHSA to be a supervisor.
- Make sure supervisors know what is required to protect workers' health and safety on the job.
- Create workplace health and safety policies and procedures where more than 5 workers are regularly employed. If you regularly employ 5 or less workers, you do not have to put policies in writing unless ordered by a Ministry of Labour inspector.
- Make sure everyone follows the workplace health and safety policies and procedures.
- Make sure workers wear and use the correct PPE.
- Maintain equipment, material and protective devices in good condition.
- Comply with applicable legislation and reporting requirements.
- Do everything reasonable under the circumstances to protect workers from being hurt or getting a work-related illness.

Duties of Supervisors

- Inform workers about hazards and dangers and respond to their concerns.
- Show workers how to work safely, and make sure they follow the law and workplace health and safety policies and procedures.
- Make sure workers wear and use the right PPE.
- Do everything reasonable under the circumstances to protect workers from being hurt or getting a work-related illness.

Duties of Workers

- Comply with the OHSA and its regulations and the workplace's health and safety policies and procedures.
- Work and act in a way that won't hurt themselves or anyone else.
- Report any hazards or injuries to the supervisor/employer.
- Wear and use the PPE required by the employer.

Additional requirements under the Occupational Health and Safety Act include:

- A joint health and safety committee shall be implemented in any workplace that regularly employs 20 or more workers.
- A health and safety representative is required at a workplace where six or more workers are regularly employed, and where there is no joint committee. The representative shall be chosen by the workers.
- No matter how small the workplace, it shall be inspected at least once a month.

Monthly Inspection Checklist

Visit all areas of the workplace, looking for hazards that need correction, such as:

- are sharps containers overfilled?
- is PPE (gloves, masks, gowns) available and accessible?
- is PPE in good condition?
- are chemical disinfectants/sterilants labelled and stored properly?
- are food preparation areas clean and dedicated for that purpose?
- is there adequate ventilation if liquid disinfectants are used?
- is storage shelving in good condition?
- is there adequate liquid soap available at hand washing sinks?
- is there alcohol-based hand rub at point-of-care?
- is the protocol for disposal of hazardous waste being followed?
- is the waste collection area clean and tidy, with waste covered?
- are blood/body fluid spills cleaned by trained staff as they occur?

Appendix 2 – Cover Your Cough Signage

The following is reproduced with permission from Infection Prevention and Control for Clinical Office Practice, April 2015, Public Health Ontario

Appendix 3 – International Types of Steam Chemical Indicators

The following is reproduced with permission from the Best Practices for Cleaning, Disinfection and Sterilization of Medical Equipment/Devices In All Health Care Settings, 3rd edition, May 2013, Public Health Ontario.

Type	Definition	Use	Examples
Type I: Process Indicators	Indicators that differentiates processed from non-processed items	• Used with individual units (e.g., packs, containers) to indicate that the item has been directly exposed to the sterilization process • Usually applied to the outside of packages • Respond to one or more critical process variables	• Indicator tapes • Indicator labels • Load cards
Type II: Indicator for Use in Specific Tests	Indicator for use in specific test procedures as defined in sterilizer/sterilization standards (e.g., air-detection, steam penetration)	• Used for equipment control to evaluate the sterilizer performance	• Bowie-Dick test
Type III: Single Variable Indicator	Indicator that reacts to a single critical variable in the sterilization process to indicate when a specified value has been reached (e.g., temperature at a specific location in the chamber)	• May be used for monitoring process control but not as useful as type IV or type V indicators • May be used for exposure control monitoring (e.g., temperature at a specific location in the chamber)	• Temperature tubes
Type IV: Multi-variable Indicator	Indicator that reacts to two or more critical variables in the sterilization cycle under the conditions specified by the manufacturer	• May be used for process control	• Paper strips
Type V: Integrating Indicator	Indicator that reacts to all critical variables in the sterilization process (time, temperature, presence of steam) and has stated values that correlate to a BI at three time/temperature relationships	• Responds to critical variables in the same way that a BI responds • Equivalent to, or exceeds, the performance requirements of BIs • Used for process control • May be used as an additional monitoring tool to release loads that do not contain implants	
Type VI: Emulating Indicator	Indicator that reacts to all critical variables (time, temperature, presence of steam) for a specified sterilization cycle (e.g., 10 min., 18 min., 40 min.)	• Used as internal CI for process control • A different Type VI emulating indicator is required for each sterilization cycle time and temperature used • Cannot be used as an additional monitoring tool to release loads that do not contain implants	

Appendix 4 – Sample Sterilization Log for Table-top Steam Sterilizers

The following is reproduced with permission from the Best Practices for Cleaning, Disinfection and Sterilization of Medical Equipment/Devices In All Health Care Settings, 3rd edition, May 2013, Public Health Ontario.

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Sterilization Monitoring Log for Table-top Steam Sterilizers

The purpose of this document is to record process parameters for steam sterilization in community health care settings. This will assist with tracking of medical devices used on clients/patients/residents in the event of a recall or follow-up investigation. For more information, see the Best Practices for Cleaning, Disinfection and Sterilization of Medical Equipment/Devices or email ipac@oahpp.ca.

Sterilizer Model: ____________________________ **Sterilizer Serial Number:** ______________________________

Load Details	Pouch Contents	Sterilizer Readings Met*	Operator Initials	Quality Indicators*	Operator Initials
Date: ___________ Time: ___________ Load #: __________		Temperature: ☐ Yes ☐ No Time: ☐ Yes ☐ No Pressure: ☐ Yes ☐ No		Chemical indicator Change: ☐ Yes ☐ No Biological Indicator: ☐ Pass ☐ Fail	
Date: ___________ Time: ___________ Load #: __________		Temperature: ☐ Yes ☐ No Time: ☐ Yes ☐ No Pressure: ☐ Yes ☐ No		Chemical indicator Change: ☐ Yes ☐ No Biological Indicator: ☐ Pass ☐ Fail	
Date: ___________ Time: ___________ Load #: __________		Temperature: ☐ Yes ☐ No Time: ☐ Yes ☐ No Pressure: ☐ Yes ☐ No		Chemical indicator Change: ☐ Yes ☐ No Biological Indicator: ☐ Pass ☐ Fail	
Date: ___________ Time: ___________ Load #: __________		Temperature: ☐ Yes ☐ No Time: ☐ Yes ☐ No Pressure: ☐ Yes ☐ No		Chemical indicator Change: ☐ Yes ☐ No Biological Indicator: ☐ Pass ☐ Fail	

* Any "no" or "fail" requires system failures procedure documentation and follow up.

Print Name:________________________________ Signature:__________________________ Initials:_____________
Print Name:________________________________ Signature:__________________________ Initials:_____________
Print Name:________________________________ Signature:__________________________ Initials:_____________

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Ontario
Agency for Health Protection and Promotion
Agence de protection et de promotion de la santé

List of Revisions

Date	Revision
March 24, 2021	Updated list of recommended vaccines for health care workers
July 29, 2021	Added reference to bathroom cleaning under Public Environmental Services subheading
October 13, 2022	Updated cover page