

# **Infection Prevention and Control Best Practices for Personal Services Settings**

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# Infection Prevention and Control Best Practices in Personal Services Settings

## 1. INTRODUCTION

### Purpose

This document has been developed for public health inspectors to educate personal service workers (PSWs) to reduce the risk of transmission of blood borne and other types of infection for both clients and PSWs during the delivery of personal services. Percutaneous exposure (through penetration of skin) or mucous membrane exposure to blood or body fluids can lead to infection with blood-borne pathogens including Hepatitis B (HBV), Hepatitis C (HCV), Human Immunodeficiency Virus (HIV), other human retroviruses, bacteria and other pathogens of concern, such as mycobacteria. For this reason, infection prevention and control precautions must be taken in every personal service setting. It is the responsibility of the owner/operator to ensure all PSWs are educated in regards to infection control requirements specified in this protocol; both the client and the operator may be at risk of infection. ***It is important to recognize that blood and body fluids do not have to be visible on instruments or other surfaces for an infection to be transmitted.***

### Applicability

This best practice document applies to any facility, service or person offering services where there is a risk of exposure to blood, such as, **but not limited to:** hairdressing and barber shops, tattoo and body piercing studios, electrolysis, acupuncture and various aesthetic services. The following guidelines comprise general recommendations for all personal service settings and equipment. Requirements specific to each area of practice are presented in summarized formats following the general guidelines.

### Statutory Basis

This document is to be used in conjunction with the Infection Prevention and Control in Personal Services Settings Protocol, 2008. This protocol is named in requirement No. 10 under the Infectious Diseases Prevention and Control Standard of the *Ontario Public Health Standards*, 2008, published by the Minister of Health and Long-Term Care as authorized by Section 7 of the *Health Protection and Promotion Act* (HPPA), Revised Statutes of Ontario, 1990.

**Note:** The *Regulated Health Professions Act* (RHPA) provides that no person shall perform a controlled act (e.g. a surgical procedure) in the course of providing health care services to an individual unless:

- (a) the person is a member authorized by a health profession Act to perform the controlled act; or

- (b) the performance of the controlled act has been delegated to the person by a member of a regulated health profession.

**Any regulated health professional under the RHPA does not require their practice to undergo routine inspections by health unit staff as delineated below.**

### **Inspection of Personal Services Settings by Board of Health Staff**

Routine inspections are required for all personal services settings at least once a year by the Medical Officer of Health for each health unit or their designate. These guidelines also apply to “special events” such as trade shows, conventions, fairs or exhibitions.

Personal Services Settings that serve food must be in compliance with the HPPA in regards to Food Premises.

### **Background**

The use of personal service settings has become a way of life for many individuals.

The range of services offered varies from hair care to invasive procedures such as tattooing and piercing. A 2002 study conducted with university undergraduates found that tattoos were present in 22% of men and 26% of women with an average of one to three sites per person. Piercing was found to be more common with 42% of men and 60% of women reporting that they were pierced. The popularity of personal services has also highlighted the risk of infection in many of these services. Mycobacterial infections related to inadequate cleaning and disinfection of footbaths have been reported. However the lack of formal surveillance of infections related to personal service settings makes it difficult to provide accurate information on the actual risk of these procedures.

Lack of infection prevention and control practice in personal service settings, can affect the health of the client as well as present a risk to the operator. Infections may be spread during procedures even when skin penetration does not occur. Staff who are knowledgeable and consistently practice infection prevention and control will significantly reduce the risk of infections being transmitted within the personal service setting. Public health staff must be knowledgeable resources for personal service staff and assist them in providing a safe environment.

## 2. GLOSSARY

The following definitions apply throughout this protocol:

<b>Approved sharps container</b>	A dedicated, puncture resistant, tamper-resistant, leak-proof container, which is impenetrable by sharps. It should have a tight-fitting lid and bear a clearly identifiable biological hazard label.
<b>Acquired Immunodeficiency Syndrome (AIDS)</b>	A broad spectrum of disease caused by HIV ranging from asymptomatic infection to advanced clinical disease, which is characterized by acquired immunosuppressant.
<b>Acupuncture</b>	The remedial use of long thin needles that are inserted into the skin on specific “energy points” of the body. After shallow insertion, they may be gently rotated as part of the process.
<b>Antiseptic</b>	A chemical agent that destroys micro-organisms on human skin or mucosa
<b>Applicator</b>	A device for applying a substance. Includes a single-use, disposable spatula or a similar device.
<b>Aseptic technique</b>	The absence of pathogenic (disease producing) organisms.
<b>Bacteria</b>	A single cell micro-organism that may cause disease in plants, animals or humans.
<b>Blood-borne infections</b>	Infections (e.g., HIV, HBV, HCV infections) spread through contaminated blood or other body fluids, including semen, vaginal secretions or saliva.
<b>Body fluid</b>	Human body fluids include such things as blood, semen, saliva, sputum and body tissue. Persons who come into contact with human body fluids may be exposed to a number of potential health risks. Of particular concern are HBV, HCV and HIV.

<b>Classification of Devices</b>	
<b>Critical equipment/devices:</b>	Equipment/devices that enter sterile tissues, including the vascular system (e.g. needles, etc.). Critical equipment/devices present a high risk of infection if the equipment/device is contaminated with any microorganisms, including bacterial spores. Reprocessing critical equipment/devices involves meticulous cleaning followed by sterilization.
<b>Noncritical equipment/device:</b>	Equipment/device that either touches only intact skin (but not mucous membranes) or does not directly touch the client. Reprocessing of noncritical equipment/devices involves cleaning and may also require low-level disinfection (e.g. cupping equipment, etc.).
<b>Semicritical equipment/device:</b>	Equipment/device that comes in contact with nonintact skin or mucous membranes but ordinarily does not penetrate them (e.g. tweezers used to remove ingrown hairs, etc.). Reprocessing semicritical equipment/devices involves meticulous cleaning followed by, at a minimum, intermediate level disinfection.
<b>Cleaning</b>	The physical removal of organic matter or debris from objects, usually done using water, detergent and friction. This process removes microorganisms primarily by mechanical action but does not destroy those remaining on the object.
<b>Contamination</b>	The presence of an infectious agent on a surface, clothes, instruments, dressings or other inanimate articles or substances including water.
<b>Controlled Act</b>	Under the RHPA (refer to glossary) a controlled act includes <b>but is not limited to</b> : performing a procedure on tissue below the dermis or below the surface of a mucous membrane and applying or ordering the application of a form of energy on any part of the body. For further information refer to: <a href="http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_91r18_e.htm#BK23">http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_91r18_e.htm#BK23</a>
<b>Cross-contamination</b>	The transfer of an infectious agent from a

contaminated source to a non-contaminated source.

**Disinfectant**

A substance used on inanimate objects that destroys bacteria, fungi, viruses and some bacterial spores depending on the level of the disinfectant and the contact time used.

**Disinfection**

A process that kills or destroys most disease-producing micro-organisms, with the exception of high numbers of bacterial spores. There are different levels of disinfection.

**High-level disinfection**

The level of disinfection required when processing some semicritical equipment/devices. High level disinfection processes destroy vegetative bacteria, mycobacteria, fungi and enveloped (lipid) and non-enveloped (non-lipid) viruses, but not necessarily bacterial spores. Equipment/devices must be thoroughly cleaned prior to high level disinfection

**Intermediate-level disinfection**

Level of disinfection required when processing some semicritical equipment/devices. Intermediate-level disinfection kills mycobacteria, most viruses, and bacteria. Equipment/devices must be thoroughly cleaned prior to intermediate level disinfection.

**Low-level disinfection**

Level of disinfection required when processing noncritical equipment/devices or some environmental surfaces. Low-level disinfectants kill most vegetative bacteria and some fungi as well as enveloped (lipid) viruses. Low-level disinfectants do not kill mycobacteria or bacterial spores. Equipment/devices must be thoroughly cleaned prior to low-level disinfection.

**Electrolysis**

The removal of hair from the body by inserting a solid needle into the hair follicle where the hair shaft emerges. An electric current is passed through the needle to destroy the hair follicle and the hair is removed with tweezers.

**Hand Hygiene**

A process to remove or destroy micro-organisms on hands. Can be done with soap and running

	water or an alcohol-based waterless agent, provided hands are not visibly soiled.
<b>Hepatitis B virus (HBV)</b>	An infection of the liver caused by the hepatitis B virus.
<b>Hepatitis C virus (HCV)</b>	An infection of the liver caused by the hepatitis C virus.
<b>Human immunodeficiency virus (HIV)</b>	The virus that causes AIDS.
<b>Infection</b>	Entry into and multiplication of infectious microorganisms within the body.
<b>Infection prevention and control</b>	The process of minimizing the risks of spreading infection.
<b>Infectious disease agent</b>	Microorganisms such as viruses, bacteria, or fungi that are capable of producing disease. (Also referred to as “pathogens”).
<b>Infectious waste</b>	All waste which could potentially be contaminated with disease-causing microorganisms, (i.e. bacteria, and/or viruses).
<b>Instrument</b>	An item or piece of equipment used during the process of carrying out personal services. This also applies to implements.
<b>Invasive instrument</b>	Any instrument designed to penetrate the skin.
<b>Invasive procedure</b>	Any procedure intended to break the skin (e.g. tattooing, micro pigmentation, piercing, electrolysis, acupuncture etc.).
<b>Micro pigmentation</b>	The permanent imprinting of cosmetic shading also known as “permanent makeup” or “cosmetic tattooing” using different coloured inks or pigments. The process is similar to tattooing and may be done using either a traditional tattoo machine or an implanter.
<b>Mucous membrane</b>	Moist tissue that lines some organs and body cavities (such as nose, mouth, lungs) and secretes mucous (a thick fluid).

<b>Mycobacterium</b>	A bacteria with over 50 species, of which at least 20 have been reported to cause disease in humans. This bacteria has been isolated from various sources including water, birds, animals and soil.
<b>Personal service settings</b>	Settings in which aesthetic services such as body piercing, tattooing, hairdressing salons (etc.) are delivered.
<b>Personal service worker (PSW)</b>	A person who operates or practices in a business offering personal services.
<b>Piercing</b>	The perforation or piercing of a client's body and the attachment or insertion of jewelry. It can be done with a piercing needle, a piercing gun, a trocar and cannula, a dermal punch, or a scalpel.
<b>Puncture</b>	Accidental or intentional penetration (break) through the skin or other body tissue.
<b><i>Regulated Health Professions Act (RHPA)</i></b>	The Act governing certain self-regulated groups of healthcare professionals. The PSSP does not cover services, such as mole or ingrown nail removals, provided by professionals regulated under this Act. This would include services provided by physicians, nurses, physiotherapists, registered massage therapists, chiropractors, etc.
<b>Routine Practices</b>	The Health Canada/Public Health Agency of Canada term to describe the system of infection prevention and control practices recommended in Canada to prevent and control transmission of microorganisms. In the United States these are called Standard Precautions. These practices describe prevention and control strategies to be used with all clients during all care.
<b>Sharps</b>	Any item that may penetrate the skin (e.g. needles, blades, lancets, razors, scalpel, etc.).
<b>Single-use (disposable) items</b>	Any instruments or items that are designed to be used once and then discarded as they cannot be adequately cleaned and disinfected or sterilized.

<b>Spores</b>	A form assumed by some bacteria that is resistant to heat, drying and chemicals. Under the right environmental conditions, the spore may revert to the actively multiplying form of the disease.
<b>Sterilization</b>	The level of reprocessing required when processing critical equipment/devices. Sterilization results in the destruction of all forms of microbial life including bacteria, viruses, spores and fungi. Equipment/devices must be cleaned thoroughly before effective sterilization can take place.
<b>Styptic pencil</b>	A medicated stick, often made of alum, that may be applied to a wound or cut to stop bleeding. The stick must never come into contact with the wound or open cut. Coagulant products must be applied so that the applicator is either disposable or the reusable applicator is not contaminated.
<b>Tattooing</b>	The permanent or indelible imprinting of a decorative design into the skin. Tattoo needles on the end of a reciprocating needle bar are used to puncture the skin or mucosa and introduce different coloured inks or pigments.
<b>Virus</b>	A micro-organism that can only replicate within living host cell.

## **2.1 ROUTINE PRACTICES FOR PERSONAL SERVICE SETTINGS**

Guidelines for the control of infections are needed to assist in developing policies and procedures to ensure an optimal level of care is provided. These guidelines should be seen as directing principles and indications or outlines of the expected practice.

The goal of infection prevention and control is to provide service in a manner that reduces the risk of transmission of microorganisms to the client and the personal service worker. Service should be provided in a manner that prevents disease transmission. Infection prevention practices must be tailored to the services being provided.

Routine Practices describe prevention and control strategies to be used with all clients during all service delivery and include:

- Hand Hygiene
  - Hand hygiene should be performed
    - Between clients
    - Before performing invasive procedures
    - After contact with blood, body fluids, secretions and excretions
    - After contact with items known or considered likely to be contaminated with blood, body fluids, secretions, or excretions
    - Immediately prior to and after removing gloves
    - Between procedures on the same client in which soiling of hands is likely, to avoid cross-contamination of body sites
    - When hands are visibly soiled
  - Plain dispensable soap may be used for routine hand washing
  - When hands are visibly soiled, hands must be washed with soap and water
  - Alcohol-based hand rubs are an acceptable method of hand hygiene especially when access to hand washing facilities is limited.
  - Adequate facilities for hand washing in PSSs need to be ensured.
  
- Gloves
  - Gloves are not required for routine procedures in which contact is limited to a client's intact skin
  - Gloves are not a substitute for hand hygiene
  - Clean, non-sterile gloves should be worn
    - For contact with blood, body fluids, secretions and excretions, mucous membranes, or non-intact skin
    - When handling items visibly soiled with blood, body fluids, secretions and excretions
    - When the PSW has non-intact skin on the hands
  - Gloves should be changed between procedures with the same clients and between clients
  - Gloves should be removed immediately after completion of the procedure, at the point of use and before touching clean environmental surfaces
  - Hand hygiene should be performed immediately after removing gloves
  - Single-use disposable gloves should not be reused or washed.

- Face Protection
  - Face protection should be worn to protect mucous membranes of the eyes, nose and mouth during procedures likely to generate splashes or sprays of blood, body fluids, secretions, or excretions.
  
- Gowns
  - Gowns should be used to protect uncovered skin and prevent soiling of clothing during activities likely to generate splashes or sprays of blood, body fluids, secretions or excretions.
  
- Equipment and Environment
  - Articles that touch the client's intact skin should be clean.
  - Equipment touching mucous membranes or non-intact skin, should be appropriately disinfected between clients
  - Chairs, cabinets, counters and charts should be cleaned on a regular basis.
  - Soiled client care equipment should be handled in a manner that prevents exposure of skin and mucous membranes and contamination of clothing and the environment.
  - Used needles and other sharp instruments should be handled with care to avoid injuries during disposal. Used sharp items should be disposed of in an approved puncture-resistant container located in the area where the sharps item are used.
  - All equipment that is being used by more than one client must be cleaned or cleaned and disinfected or sterilized as appropriate between client according to recommendations.

### 3. GENERAL GUIDELINES FOR EQUIPMENT, INSTRUMENTS AND SUPPLIES

#### 3.1 Physical Setting Requirements

The work site must be appropriate to the personal service activity.

Contact surface(s) (counters, tables, trays, lamps, magnifiers, etc.) must have a smooth and non-absorbent finish.

The work area(s) must be well lit to facilitate cleaning and prevention of injuries.

**All personal services settings must be equipped with a sink(s) for hand washing.**

The hand washing sink(s) must be:

conveniently located near the work area(s) but at least one metre away from where sterile or clean supplies are located.

accessible for use while personal services procedures are being performed (i.e. sink is free of cleaning equipment) and continuously supplied with potable hot and cold running water, dispensable liquid soap from a single-use disposable container and single-use (cloth or paper) hand towels in a dispenser. If the soap container is refilled, it must first be cleaned, disinfected with low-level disinfectant, rinsed and allowed to thoroughly air dry.

***Note: A washroom hand sink(s) within the PSS premises may be used for hand washing as long as it satisfies the requirements in section 3.1 (v).***

Hand washing sinks used by more than one premise are not acceptable (i.e. hand washing sinks in a public washroom within a mall).

All personal services settings must be equipped with a sink(s) for cleaning of equipment/instruments.

The cleaning sink(s) must be:

conveniently located near the work area(s)  
continuously supplied with potable hot and cold running water and of adequate size to accommodate the largest instrument/item of equipment to be cleaned.

If there is only one sink available within the PSS premises, the same sink may be used for both hand washing and cleaning of equipment/instruments providing that it satisfies the requirements of 3.1 (v) and (viii). The PSS water supply should be tested in accordance with local water regulations, unless the water is from a municipally-controlled water source (e.g. tap water in a city or town).

**Note: In the event that a plumbing system cannot be installed in an existing personal service setting (e.g. premises is located in an older building), the PSS must seek approval from their local health department in order to use a portable sink. Such sinks must be inspected and approved by the health unit to ensure a health hazard does not exist.**

#### 4. OPERATIONAL REQUIREMENTS FOR PERSONAL SERVICES SETTINGS

- i. All equipment/instruments or items used must be of durable construction, maintained in good repair, and be in a clean and sanitary condition. All cracked chipped, rusted or otherwise damaged instruments not suitable for use shall not be used and shall be discarded.
- ii. All reusable equipment/instruments or items and work contact surfaces (e.g. chairs, tables, equipment trays, etc.) used in the delivery of personal service procedures must be thoroughly cleaned and then disinfected or sterilized after each use in accordance with Tables 1 to 3 and following the requirements detailed in the cleaning, disinfection and/or sterilization sections that follow. Working surfaces, where invasive procedures are performed, must be cleaned and disinfected with a low-level disinfectant between clients.
- iii. All equipment/instruments or items that cannot be easily or thoroughly cleaned, disinfected or sterilized between each use shall be considered as single-use, disposable items. If an item cannot be cleaned, there is no way to adequately sterilize or disinfect it.
- iv. All single-use disposable equipment/instruments or items shall be appropriately discarded immediately after use. Single-use covers such as table covers, paper towels or dental bibs are single-use items and must be disposed after each client. Reusable towels are to be laundered after each use. All items are to be stored in a manner that prevents contamination.
- v. Elastic bands used on equipment/instruments must be discarded after each client.
- vi. Re-usable equipment/instruments, items and work contact surfaces that cannot be easily or adequately cleaned, disinfected or sterilized between each use (i.e. tattoo or pigmentation machines, electrolysis control panels, pigment or spray bottles used during service, etc.) shall be covered with single-use, disposable covers (e.g. plastic wrap or plastic bags) and the cover shall be discarded after each use.
- vii. Any equipment/instruments or item that is touched or handled during a procedure (even if not used during the procedure) shall be considered contaminated. If the item is single-use disposable, the item shall be discarded. If the item is re-usable, it must be cleaned and then disinfected or sterilized before the next use.

- viii. During any procedure, routine infection prevention and control practices must be followed to prevent contamination of disinfected or sterilized equipment through contact with work surfaces, clothing or hands (refer to 2.1).
- ix. Sterile instruments (e.g. needles, piercing jewelry, forceps, or other items) that become contaminated (i.e. that touch a person, or that come into contact with any other surface or item prior to use) shall not be used and shall be immediately replaced with another sterile instrument.
- x. All products (i.e. wax, pigment, creams, lotion, or cotton balls) must be dispensed in a manner that does not contaminate the remaining portion.
- xi. Any styptic product used must be single-use and discarded after each client. Styptic pencils cannot be used to stop bleeding on clients. Powder or liquid form is acceptable provided that if direct contact with the skin is required, that it be applied by use of a disposable applicator.
- xii. Prior to a PSW performing any invasive procedure, the client site shall be cleansed with a skin antiseptic (e.g. iodine, 70% isopropyl alcohol, 2% chlorhexidine gluconate, 0.5% chlorhexidine gluconate with 70% alcohol, etc.)
- xiii. Whenever a surface anaesthetic is used on a client site, it shall be applied using a clean, single-use, disposable swab. The site must first be cleaned with an approved skin antiseptic, then marked with a (iodine) felt tip/marketing pen prior to the procedure. After one minute, once the pen mark has dried, the site is to be cleaned again with the approved skin antiseptic just prior to the procedure. (Refer to 6.2 ii) Injectable anesthetics are not to be used.
- xiv. Clean linen must be stored in a manner that protects it from contamination. All linen must be laundered or discarded after each client use.
- xv. It is recommended that the personal service settings' first aid/safety kit be equipped with a magnet for retrieval of broken or dropped needles, if needles are used in the premise.
- xvi. Personal items belonging to personal service worker/s (e.g. food, medication, aesthetic items) shall not be stored with client supplies.

#### **4.1 Sharps and Approved Sharps Containers**

- i. All sharps that are intended for use to penetrate the skin and/or mucous membranes (e.g. needles, scalpel, etc.) must be provided as sterile, single-use disposable items. Never re-use needles or scalpels.
- ii. Needles shall not be tested for sharpness or defects (e.g. damaged or blunt points) on the client or PSWs skin before use but shall be visually inspected.
- iii. Needles that require modification or attachment to other items (e.g. tattoo needles) shall be cleaned in an ultrasonic cleaner, packaged and then sterilized prior to being used.
- iv. Used disposable, sharps shall be discarded into an approved sharps container immediately after each single use. Full (3/4 of capacity) sharps containers must be securely closed and shall not be discarded with the regular garbage. They must be discarded in accordance with biomedical waste regulations.
- v. Needles and other sharps shall not be saved for future use on any person (even on the same client).
- vi. Needles/needle bars and other sharps (e.g. lancets, razor blades, scalpel, etc.) shall not be taken apart, bent, recapped re-covered or otherwise manipulated after use prior to disposal.
- vii. Approved sharps containers are required for the safe disposal of used, disposable sharps (e.g. razor blades, needles, lancets, scalpel, etc.).

## 5. CLEANING, DISINFECTION AND STERILIZATION

### 5.1 Classification of Equipment/Instruments

The rationale for cleaning and disinfecting or sterilizing equipment and instruments is based on the intended use of the item. For the purposes of this document, equipment/instruments used in PSSs can be divided into three general categories: **critical, semi-critical and non-critical**.

Table A gives some general guidance regarding cleaning, disinfection and sterilization requirements for equipment and instruments based on their classification.

**Note: The intended use of an item guides requirements for its appropriate cleaning and disinfection or sterilization, rather than the name of the item.**

**Table A: Classification for Methods of Disinfection/Sterilization**

Adapted from Infection Prevention and Control Practices for Personal Services: Tattooing, Ear/Body piercing, and Electrolysis. Health Canada, July 1999.

Classification	Definition	Method to be Used
Critical Items	<ul style="list-style-type: none"> <li>• Instruments that penetrate the skin (<b>used for an invasive procedure</b>) and</li> <li>• Instruments that hold sterile items. In some cases, high-level disinfection may be acceptable.</li> </ul>	<ul style="list-style-type: none"> <li>• Thorough cleaning followed by sterilization is required.</li> </ul> Refer to Table 3 <i>Note:</i> Some equipment must be supplied sterile and discarded following use as it cannot be adequately cleaned or reused.
Semi-critical	<ul style="list-style-type: none"> <li>• Instruments that come in contact with non intact skin or mucous membranes, but are not intended to penetrate them.</li> </ul>	<ul style="list-style-type: none"> <li>• Thorough cleaning followed by intermediate or high-level disinfection is required.</li> </ul> Refer to Table 1 and Table 2 for more detailed information.
Non-critical	<ul style="list-style-type: none"> <li>• Instruments that come in contact with intact skin.</li> </ul>	<ul style="list-style-type: none"> <li>• Thorough cleaning followed by low-level disinfection is required.</li> </ul> Refer to Table 1 and Table 2 for more detailed information.

## 5.2 Cleaning

If an item or surface is not clean it cannot be disinfected or sterilized. Cleaning is a process that removes visible dirt (organic matter) and some microorganisms from work surfaces, instruments and equipment, allowing the disinfection or sterilization processes to work effectively.

Cleaning must always occur as a first step before disinfection or sterilization. Manual cleaning involves the use of a detergent and water solution and scrubbing (the use of friction) to remove soil. Mechanical cleaning of equipment/instruments involves the use of an ultrasonic cleaner and an appropriate cleaning solution.

Detergents shall be rinsed off instrument/equipment surfaces prior to disinfection to prevent neutralization of the disinfectant. Refer to Table 2 (in regards to disinfection).

### 5.2.1 General Cleaning Requirements

- i. Prior to disinfection or sterilization, all equipment/instruments and environmental surfaces must be thoroughly cleaned either:
  - a) manually using lukewarm water, an enzymatic cleaner/detergent and a scrub brush
  - b) or in conjunction with manual cleaning, mechanically, using an ultrasonic cleaner and an appropriate cleaning solution.

### 5.2.2 Cleaning of Equipment/Instruments

- i. PSWs shall always wear appropriate personal protective equipment (PPE) according to Routine Practices when cleaning and disinfecting contaminated equipment/instruments and other surfaces in an attempt to prevent any potential for penetration of the skin or splashing of mucous membranes (such as eyes) during the cleaning and disinfection process.
- ii. Routine Practices include the use of:
  - a) a pair of thick rubber (utility) gloves to protect hands and lower arms

If there is a risk of splashing, the following PPE should also be used in addition to utility gloves:

- b) non-absorbent (i.e. plastic or vinyl) aprons or gowns to protect work clothing and the upper body
- c) safety glasses or goggles to protect the eyes. Prescriptive eyewear does not provide appropriate protection.

- iii. The PSW shall scrub the equipment/instruments below the water surface to prevent splashing into the eyes or onto clothing.
- iv. Dirty equipment/instruments shall be kept separate from clean equipment/instruments at all times to prevent cross contamination.
- v. Whenever possible, dirty/contaminated equipment/instruments shall be cleaned immediately after use on each client in order to prevent drying of debris or blood proteins on their surfaces.
- vi. When it is not possible to clean dirty/contaminated reusable equipment/instruments immediately after each use, they shall be placed to soak in clean, lukewarm water (with or without detergent) to prevent drying of debris/blood proteins onto their surfaces. The sink designated for cleaning may generally be used for this purpose. See section (viii and ix) below for exception.
- vii. Other materials used for cleaning equipment/instruments (e.g. rubber utility gloves, scrub brushes, etc.), must be cleaned and low-level disinfected after each cleaning session. When not in use, they must be stored dry.

**Exception to Paragraph 5.2.2 (vi) – Use of Designated Cleaning Sink for Cleaning of Equipment/Instruments**

- viii. If only one sink is available within the premises for both hand washing and cleaning of instruments/equipment, precautions shall be in place to ensure that this single sink is always available for hand washing while procedures are being performed. In this instance, a puncture-resistant container with a tight-fitting lid, containing water or water and detergent, must be used to store dirty/contaminated instruments until they are ready to be cleaned.
- ix. The designated cleaning sink and/or dirty instruments container (if required) must be of adequate size to accommodate the largest instrument/equipment to be cleaned. If a container is used, it must be appropriately labelled “dirty instruments” and must only used for this purpose. Equipment used for soaking (i.e. sink, containers) must be cleaned and then disinfected after each use.
- x. If an ultrasonic cleaner is used for cleaning instruments, the device shall:
  - a) be operated with the lid on to prevent any microorganisms present in the cleaning solution from splashing or becoming airborne and potentially contaminating surfaces

- b) be operated and maintained according to the manufacturer's instructions
- c) be cleaned and disinfected at the end of each day's use in accordance with manufacturer's directions
- d) be stored dry after the unit is cleaned and disinfected and
- e) be operated such that the cleaning solution is changed daily (when in use) and more often when the cleaning solution is visibly dirty.

***Note: Ultrasonic cleaners do not disinfect or sterilize equipment/instruments. However, when properly used, they do provide a very safe and effective means of cleaning instruments prior to disinfection or sterilization.***

### **5.3 General Cleaning Frequencies**

- i. Work contact surfaces, such as manicure/pedicure tables, tattooing/piercing equipment trays, magnifying lamps, clip cords, electrolysis units, etc. must be either:
  - a) cleaned between each client using a detergent and water solution and friction and then disinfected or sterilized or
  - b) covered with a single-use cover that must be disposed of after each client.

***Note: If a single-use disposable covering is used, work contact surfaces must still be cleaned (at a minimum) at the end of each day and as often as necessary when they become visibly soiled.***

- ii. Other PSW or client contact surfaces within the premises (i.e. counters, client chairs, washroom surfaces, etc.) shall be cleaned (at a minimum) at the end of each day or more frequently if necessary when they become visibly soiled.
- iii. Floors, walls, cupboards, shelving and other structural surfaces that are not routinely contacted during the course of service delivery must be cleaned when visibly soiled and daily (at a minimum) when they are not visibly soiled.

***Note: If, at any time, any surface within the premises become contaminated with blood or body fluids, these surfaces should be immediately cleaned and then disinfected as detailed below.***

#### **5.3.1 Cleaning Work Surfaces Contaminated with Blood/Body Fluids**

- i. Single-use gloves must be worn during cleaning and disinfection processes.

- ii. Surfaces that have become contaminated with blood or other body fluids must be wiped up as soon as possible while wearing gloves using a disposable cloth or paper towel and then immediately clean the surface. The surface must then be disinfected with a high-level disinfectant, ensuring sufficient contact time. Refer to Table 1 and 2.
- iii. Cloths, gauze or paper towels used for wiping up blood or other body fluids must be discarded in a plastic bag to be placed in regular garbage (refer to section 5.6).

## 5.4 Disinfection

Disinfectants destroy bacteria, fungi, viruses and some bacterial spores depending on the level of the disinfectant and the contact time used. Disinfectants are categorized as high-level, intermediate-level and low-level; please refer to the disinfectant chart Table 2.

The Ministry of Health and Long-Term Care recommends that product labels of disinfectants have a drug identification number (DIN) (with the exception of hypochlorite). The presence of a DIN indicates that, upon a Health Canada review, it has been established to be safe and effective for its intended use. The designation germicidal, virucidal or tuberculocidal is not sufficient.

As well, distributors of products should provide Material Safety Data Sheets (MSDS), which list ingredients and first aid measures, according to Workplace Hazard Information and Material Information Safety (WHMIS) guidelines.

### 5.4.1 General Disinfection Principles

- i. In order for a disinfectant to work properly, instruments and equipment must **first** be thoroughly dismantled (if appropriate) and cleaned.
- ii. Follow manufacturer's instructions for product dilution, use, reuse and contact time in line with recommendations from Health Canada.
- iii. Do not store equipment or instruments in disinfectants for longer than the required contact time.
- iv. All solutions must be prepared, maintained (e.g. dilution, ventilation and storage) and disposed of according to the manufacturer's instructions.

- v. All solutions used for high-level disinfection must be tested daily at a minimum when such test strips exist to ensure that the concentration is within acceptable limits.

## 5.5 Sterilization

Operators should consult with their local public health unit when considering the purchase of a sterilizer.

Sterilization is a process of destroying all microorganisms including bacterial spores. Sterilization is accomplished by using an autoclave, chemical autoclave, or a dry heat sterilizer, based on time and/or temperature of exposure.

**Pressure cookers, glass-bead sterilizers, microwaves, ultraviolet light, immersion in boiling water and domestic ovens are NOT approved methods of disinfecting or sterilizing equipment.**

Autoclave sterilization is dependent on temperature, pressure, duration of exposure, packaging of the instruments and size of the load. The unit must achieve a sufficiently high temperature for a required length of time. It is important that the sterilizing chamber be loaded correctly and not overloaded. Autoclaves use pressure in combination with heat and time to achieve sterilization. All autoclaves must meet with Canadian Standards Association specifications for use in health care or allied health facilities. As per Canadian Standards Association Guidelines, a drying cycle is required for all sterilization cycles for wrapped or packaged goods. The autoclave should be equipped with a print-out that provides details of the mechanical parameters reached during each cycle

Dry heat sterilization is dependent on the sterilizer unit achieving a sufficiently high temperature for a prescribed duration of exposure. Functioning thermometers must be in place to verify temperatures; sterilization time does not start until the appropriate temperature is attained. Ensure instrument packaging can withstand the temperature needed to achieve sterilization. Refer to Table 9 for times and temperatures for dry heat sterilization.

Chemical autoclaves utilize a disinfectant in combination with heat, pressure and time.

Manufacturer's instructions regarding packaging, loading, temperature, pressure and time requirements must be followed. The sterilizer unit manufacturer's instruction manual shall be kept accessible for reference within the premises at all times.

Some chemical (cold) sterilants (e.g. glutaraldehyde) are not recommended for personal service settings because of issues concerning toxicity, disposal, ventilation, lack of training and the long contact times required to achieve sterilization. Additionally it is difficult to monitor and confirm that sterilization has been achieved and the packaging of items to maintain sterility is not possible when chemical sterilants are used. These products must always be diluted, used and disposed of according to the manufacturer's directions.

### **5.5.1 General Sterilization Requirements**

- i. Instruments that penetrate the skin or mucous membranes (critical items) shall be sterile prior to use. These items may either be supplied sterile as pre-packaged, single-use disposable items or they may be provided as reusable items that must be cleaned, sealed in appropriate packaging and then sterilized on site before each use.

The use of pre-packaged, sterile, single-use, disposable items are recommended. Critical items must be sterilized.

- ii. For items purchased as pre-packaged and sterile the PSS must maintain a record of all information required for tracking purposes (e.g. name of company that manufactures/sterilizes the needles).
- iii. Following sterilization, instruments must be stored in a manner that protects them from contamination. Therefore:
  - a) Items/instruments that are intended to pierce skin or penetrate sterile tissue shall be maintained in sterile packaging until time of use.
  - b) The best means of avoiding contamination is appropriate packaging of instruments prior to the sterilization procedure or the use of sterile single-use (pre-packaged, disposable) supplies.
  - c) Packaging shall be specific to the sterilizer being used. Use only packaging materials that are specifically designed and manufactured for use in sterilization. Incorrect packaging can inhibit sterilization or fail to properly protect the contents after sterilization.
  - d) **Sterility must be maintained until point of use.**

- e) The shelf life of a sterile package is event related rather than time related. Event related shelf life is based on the concept that items that have been properly decontaminated, wrapped, sterilized, stored and handled will remain sterile indefinitely, unless the integrity of the package is compromised (i.e. open, wet, dirty).
- f) Equipment/devices purchased as sterile must be used before the expiration date if one is given.
- g) Sterile packages that lose their integrity must be re-sterilized prior to use.
- h) **Reprocessed equipment/devices shall be stored in a clean, dry location in a manner that minimizes contamination or damage.**
- i) Equipment/devices must be handled in a manner that prevents contamination of the item.
- j) Containers used for storage of clean equipment/devices should be moisture-resistant and cleanable (i.e. cardboard boxes must not be used).
- k) Store equipment/device in a clean, dry, dust-free area (closed shelves), not at floor level. Equipment/instruments should be at least one meter away from debris, drains, moisture and vermin to prevent contamination.
- l) Store equipment/device in an area where it is not subject to tampering by unauthorized persons.
- m) Transport processed equipment/device in a manner that avoids contamination or damage to the equipment/device.
- n) **At point of use, upon opening the reprocessed equipment/device, check for integrity of the packaging and the equipment/device; validate results of chemical monitors if present; and reassemble equipment/device if required.**
- o) Provide education to those opening sterile items at point of use. Education should include inspection, interpretation of monitors and reassembly of equipment/devices.

- p) Validate results of chemical tape and internal monitors if present.
  - q) Visually inspect the equipment/device for discoloration or soil. If present, remove from service and reprocess.
  - r) Check for defective equipment/devices and remove from use.
  - s) If sterile package has become damp or wet (e.g. high humidity), reprocessing may be required.
- iv. Sterilized, reusable instruments/ items, that become contaminated must be cleaned and re-sterilized prior to use.
  - v. Contaminated disposable items must be appropriately discarded and not reused.
  - vi. If a package of reusable sterilized instruments is damaged/compromised, that instrument must be reprocessed. If the instruments are single-use, they must be discarded.
  - vii. Autoclaves, chemical autoclaves and dry heat sterilizers must be serviced on a regular basis according to the manufacturer's operating instructions and their operation monitored routinely. Always follow the sterilizer manufacturer's instructions for installation, operation, testing and maintenance. Manufacturer's instructions must be kept on site and be readily accessible.

There are three forms of monitoring required to ensure sterilization is achieved:

**a. Physical (Mechanical) Monitoring**

- i) a record/log must be maintained on site for monitoring each load, including recording the temperature, duration, pressure, date, initials of the individual who is responsible for sterilization of the load. It is recommended that the autoclave be equipped with a print-out that provides details of the mechanical parameters reached during each cycle. This print-out must be signed and dated by the operator and kept in the log book.
- ii) monitoring records must held in a secure location on site for a minimum of one year, and on file for five years.

**b. Chemical Monitoring (Process monitoring)**

- i) during each sterilization cycle, every instrument/package must have a temperature sensitive indicator, (e.g. tape or label) which changes colour if the packaged item was processed.
- ii) the indicator must be specific to the type of sterilizer being used

- iii) solely reaching the required temperature does not ensure sterilization. While the colour change provides an instant visual verification that each package has been processed, chemical indicators do not provide proof that sterilization has occurred as other essential parameters (i.e. time and/or pressure) must be taken into account
- iv) in accordance with (iii) above, biological monitoring must also be carried out

### **c. Biological Monitoring**

- i) each sterilizer actively used must pass a spore test challenge bi-weekly (i.e. every other week) at a minimum.
- ii) results must be accessible on site for a minimum of one year and kept on file for 5 years.
- iii) prior to using a new sterilizer, or after repair of a used machine, the operator must demonstrate the sterilizer is working properly through three consecutive negative tests (i.e. no spore colony growth) with a commercially available preparation of heat resistant spores. The three tests may be run one after another on the same day (i.e. three different loads). The sterilizer must not be used until results of the spore testing are available.
- iv) if back up sterilizers are used they shall demonstrate three consecutive negative spore strip test results prior to use.
- v) if spore strips are used, they must be packaged in the same manner as equipment prior to inserting into the sterilizer.
- vi) after exposure in the sterilizer, the spore strips must be sent to an accredited laboratory as defined by the *Laboratory and Specimen Collection Centre Licensing Act* for testing.
- vii) results must be returned to the owner/operator responsible for the personal services setting for follow-up action as required. The owner is responsible for following up with the laboratory in order to obtain spore testing results in a timely manner.
- viii) test results shall be stored on the personal services settings for a minimum of one year, and on file for 5 years.
- ix) personal services settings should be prepared in the event the mechanical sterilizer malfunctions.
- x) personal services settings should provide alternate means of sterilization, or stop services that are invasive in nature, or use single-use disposable instruments.
- xi) written back up plans may include: always having an adequate supply of packaged, sterilized equipment; purchasing of an additional autoclave; or a pre-arranged agreement with the autoclave manufacturer to loan the premise an autoclave while the original is being repaired. Back up plans are to be reviewed annually.
- xii) prior to re-use of a repaired sterilizer, or use of a new sterilizer, you

- must obtain three consecutive negative (no growth) spore strip test results from an accredited laboratory.
- xiii) reprocess all instruments/items that were sterilized during the time of the failed test prior to re-use.
  - xiv) test results must be provided to the local health unit for review, prior to resuming use of the sterilizer.

***Note: Geobacillus (formerly Bacillus) stearothermophilus spores are used to test steam sterilizers and Bacillus atrophaeus (formerly Bacillus subtilis) spores are used for dry heat sterilizers.***

“Negative” test results (no spore growth) indicate that the mechanical sterilizer is operating properly. “Positive” test (spore growth observed) results mean the sterilizer has failed and is not operating effectively. Discontinue use of this sterilizer until it has been serviced and demonstrates three consecutive negative tests prior to being used to sterilize instruments again. An alternative method of sterilization or single-use/disposable sterile instruments must be used in the interim. Sterilizers must then continue to be challenged with a spore test once bi-weekly (at a minimum). If a control strip is used, it must demonstrate growth (non-sterile).

What to do in the event of a positive (failed) spore test:

- i) **The PSS Owner/operator shall contact their local health unit for every sterilizer failure (positive test) immediately upon notification from the laboratory.**
- ii) Repeat the test. Do not release any items that were processed since the last negative test. If this repeat test is negative, and there is not an indication of a system malfunction – continue as normal. If it has been determined that the sterilizer malfunctioned, have it repaired and then biologically tested until negative results are obtained
- iii) If the repeat biological indicator test is positive again, review all items that were processed since the last negative test. Review the process to ensure this is not a false positive. Complete a report that includes time, date, load description, results of mechanical and chemical monitoring and **contact the local health unit** to facilitate the conduction of a risk assessment.

## **Chemical Integrators**

Integrators respond to critical parameters (e.g. time and temperature) and provide immediate results enabling PSSs to respond more quickly to sterilizer problems. While integrators can provide results between bi-weekly use of

biological indicators, use of chemical integrators **do not** replace the routine use of biological indicators.

## **5.6 Disposal of Equipment and Waste**

Waste material and other garbage must be placed in receptacles and disposed of in the regular garbage in a sealed bag. Waste that is contaminated with blood or body fluids must be placed in a single, leak proof bag. Sharps including needles, needles attached to syringes, and blades, broken glass or other materials capable of causing punctures or cuts and which have come into contact with human blood or body fluids must be placed into an approved sharps container and disposed of as biomedical waste. Local waste management authorities should be consulted to determine any additional requirements for waste handling.

## **5.7 Record Keeping**

Documentation of procedures and clients is essential to allow the PSS owner to conduct investigations.

Client records must be kept on site for settings that offer invasive procedures such as body piercing, tattooing, micro-pigmentation, electrolysis and acupuncture. The records are to include:

- i) date of procedure and full name (first and last) of personal service worker
- ii) client name (first and last), complete mailing address and telephone number,  
and
- iii) details of the procedure carried out.

The PSS owner must keep records on site for a minimum of one year, and on file for a minimum of 5 years. Information is to be collected and stored in accordance with local and provincial privacy legislation.

## 6. HEALTH AND PERSONAL HYGIENE

### 6.1 Occupational Health and Safety

- i. The PSW must ensure that their own health does not in any way endanger the health of clients. If you have a potentially transmissible disease, it is recommended that you seek an assessment from your health care provider regarding the potential for transmission to clients. For example, if the PSW has a febrile respiratory illness (cough or sore throat and fever) or a gastrointestinal illness (diarrhea and/or vomiting), this is usually a good indication that they should stay home.
- ii. The PSW must follow the principles of Routine Practices at all time. Hand hygiene must be performed before and after each client or as necessary during the procedure or interruptions in service (glove changes, etc.).
- iii. The PSW must refrain from eating, smoking or drinking while providing the service in the service area and must comply with local smoking regulations.
- iv. The PSW should wear clean outer clothing when providing personal services.
- v. Health and safety concerns that a PSW may have about workplace conditions should first be brought to the attention of their employer or supervisor. Employers are required under the *Occupational Health and Safety Act (OHSA)* to take reasonable precautions in the circumstances for the protection of workers. Precautions would depend upon the hazards associated with the work. Ministry of Labour inspectors will investigate workplace specific occupational health and safety concerns that remain unresolved by the employer to ensure that workplaces are in compliance with the OHSA and its regulations.

Immunization to protect against Hepatitis B and yearly influenza immunization should be considered for all PSWs. Hepatitis B immunization is strongly recommended for those providing invasive procedures.

#### 6.1.1 General Hand Hygiene Principles

- i. PSWs must perform hand hygiene and then put on single-use gloves prior to providing services to each client.

- ii. Single-use gloves must be worn for invasive procedures, (i.e. tattooing, piercing, acupuncture or electrolysis, etc.) and where there is a risk of exposure to blood or body fluids.
- iii. Single-use gloves must be changed between clients, and between breaks in treatment of the same client.
- iv. Hands must be washed thoroughly for at least 15 seconds with soap and warm running water once service is completed and after gloves are removed. Alternatively, an alcohol-based hand rub (60-90% alcohol) may be used if hands are not visibly soiled.
- v. Hand lotion (emollients) should be available for PSWs to prevent dry or cracked skin. Lotions should not be petroleum based, as such products could affect glove integrity.

## 6.2 Health of the Client

The PSW must ensure that any part of the client's body to be treated is clean and free from cuts, wounds, rash, fungus or visible skin disease.

For invasive procedures, the area to be treated must be cleaned before treatment with an approved skin antiseptic (i.e. povidone-iodine solution, chlorhexidine 2-4% chlorhexidine gluconate, 0.5% chlorhexidine gluconate with 70% alcohol or 70% alcohol) and a single-use applicator. Once applied, the skin antiseptic must be allowed to contact the skin for an appropriate contact time before beginning any procedure.

The PSW must wear single-use gloves prior to dressing the wound. Document any such incident and retain records on site for one year, and on file for a minimum of 5 years. The client must be advised to consult a physician should signs of an infection appear.

***Note: If a non-sterile instrument accidentally punctures a client's skin, allow the wound to bleed freely, apply a skin antiseptic and treat the wound as described in 7.2***

## 7. BLOOD AND BODY FLUID EXPOSURE RESPONSE PROCEDURES

### 7.1 Causes of Exposure

Blood and body fluids may contain pathogens such as hepatitis B virus (HBV), hepatitis C virus (HCV), or human immunodeficiency virus (HIV).

The following could result in exposure to blood-borne pathogens:

- i) a needle stick or cut from a sharp object contaminated with blood and/or body fluid
- ii) blood and/or body fluid contact with broken skin (open cut, wound, dermatitis), or
- iii) blood and/or body fluid contact with a mucous membrane (eyes, nose, mouth).

### 7.2 Procedure for blood and body fluid exposure

Care must be taken to prevent accidental puncture wounds and abrasions to the PSW and clients from needles, razors, glassware or other instruments not intended to pierce the skin. Should such an incident occur:

- i) wear single-use gloves prior to handling or dressing the wound
- ii) wash the exposed skin surface with water and soap. If the area is bleeding, allow it to bleed freely. After cleaning the wound, apply a skin antiseptic and cover with a clean dressing or bandage.
- iii) If there has been a splash on to a mucous membrane, flush the area thoroughly with water
- iv) the person exposed must **immediately** contact a physician for assessment of the need to receive post-exposure treatment or prophylaxis
- v) the PSW shall document all incidents and keep records on site for a minimum of one year, and on file for 5 years.

Accidental exposures to blood or body fluids to the client or operator shall be documented for PSS. A record of the incident must be kept by the owner or operator of the settings including:

- i) name (first and last), complete mailing address and phone number of the person exposed
- ii) name of PSW (first and last) involved in the incident
- iii) date of injury
- iv) site of injury
- v) circumstances surrounding the injury; and

- vi) action taken.

The PSS owner must keep records on site for a minimum of one year, and on file for a minimum of 5 years.

### **Management of equipment inadvertently exposed to blood**

The following process should be used whenever equipment is inadvertently exposed to blood and or body fluids.

- i) Clean to remove organic material
- ii) Disinfect the equipment using the appropriate level of disinfection ensuring adequate contact time.

## **8. ADDITIONAL GUIDELINES FOR SPECIFIC PERSONAL SERVICES**

**All specific personal services described must also refer to general guidelines. For specific requirements, refer to tables 4 to 7 as applicable. Appropriate aftercare should be available for all personal services.**

### **8.1 Manicures, Pedicures and Nail Treatments**

#### **8.1.1 Nail Fungus, Nail “Mould”**

Client’s nails must be carefully examined prior to providing nail services. Nail fungus usually appears as a discoloration in the nail that spreads toward the cuticle. Nail “mould” can often be identified in the early stages as a yellow-green spot that becomes darker with time.

Nail services must not be provided for a client who has this type of discoloration on his or her nails. PSWs should not provide the client with any fungal ointment or treatment. Clients with this condition must be advised to see their doctor for appropriate treatment.

#### **8.1.2 Additional Requirements to the General Guidelines**

Recirculation systems (e.g. foot spa/bath) may be predisposed to development of a biofilm layer, hence cleaning and disinfectant solutions must be circulated through the system. Improper cleaning and disinfection processes have been linked with several mycobacterial outbreaks.

- i. Nail service equipment and instruments (including re-circulation systems) must be cleaned and then intermediate to high-level disinfected between clients.
- ii. Footbaths: After each use, the foot bath must be cleaned with a detergent and water solution, rinsed and then disinfected with an intermediate to high-level disinfectant solution. Each (cleaning and disinfectant) solution must be circulated through the footbath’s circulating system.
- iii. The disinfectant solution must be circulated for the minimum specified contact time as per the manufacturer’s recommendations. For bleach solutions refer to Table 8.
- iv. Footbaths that are equipped with a screen and recirculation systems require additional maintenance. The screen must

be removed daily and cleaned to remove any debris that has accumulated, followed by intermediate to high-level disinfection.

- v. Pedicure blades must be discarded in an approved sharps container immediately after use on each client.
- vi. Any styptic product used must be single-use and discarded after each client. Styptic pencils cannot be used to stop bleeding on clients. Powder or liquid form is acceptable provided that if direct contact with the skin is required, that it be applied by use of a disposable applicator.

## 8.2 Electrolysis and Laser Hair Removal

Electrolysis is a method of permanent hair removal. Common areas treated include the chin, legs and eye brows. During electrolysis, an electric current is conducted through a needle inserted into the hair follicle, destroying hair growth cells.

The heat produced by the current passing through an electrolysis needle will not cause the needle to become hot enough to be sterilized. The temperature is only likely to reach 70-80°C and the period that the current passes through the needle is too short (1-2 seconds only) for sterilization to occur.

### 8.2.1 Additional Requirements to the General Guidelines

- i. Needles used for electrolysis must be single-use, disposable, sterile. **Never re-use needles.**
- ii. The removable tip/cap of the epilator needle/probe holder must be cleaned and at a minimum, disinfected with a high-level disinfectant after each client. Refer to Tables 1 and 2.
- iii. The epilator cord may come in contact with the client's treated skin. The cord must be protected with a non absorbent single-use disposable cover and changed between each client or cleaned then disinfected with an intermediate or high-level disinfectant between clients.
- iv. Equipment/instruments used in laser hair removal must be cleaned then either disinfected or sterilized or disposed of as appropriate after each client. Refer to Cleaning (Section 5.2), Sterilization (Section 5.5), and Tables 1 and 3.

- v. Reusable equipment/instruments used to remove ingrown hairs must be cleaned and then sterilized after each use. Equipment/instruments used to hold sterile items (e.g. tweezers) shall be high-level disinfected at a minimum. Single-use sterile needles are to be used to expose the ingrown hairs. Equipment/instruments NOT used to remove ingrown hairs, but used only to pull the hair, must be cleaned and then disinfected with an intermediate or high-level disinfectant between use.

### **8.3 Tattooing and Micropigmentation**

#### **8.3.1 Additional Requirements to the General Guidelines Before Tattooing and micropigmentation**

To prevent cross-contamination of the work environment:

- i. Only single-use, disposable, sterile needles may be used.
- ii. All supplies required for tattooing or micropigmentation are to be assembled and set-up immediately prior to starting the procedure.
- iii. Prior to using disposable ink caps that are supplied in bulk quantities (e.g. many caps are contained in a bag), individual ink caps must be cleaned and then disinfected with an intermediate level disinfectant (e.g. 70%-90% isopropyl alcohol) for 10 minutes.
- iv. After needles are attached to the needle bar, they must be cleaned (i.e. using an ultrasonic cleaner) before sterilization.
- v. Disposable ink caps must be discarded immediately after each client. Any leftover ink must be discarded. If additional ink is required a new ink cap is required.
- vi. All reusable ink caps must be sterilized between clients. Single-use ink caps are preferred. Ink cap holders are to be high-level disinfected.
- vii. Liquid used for rinsing between colors must be placed in disposable cups. The liquid and cups must be discarded after each client.
- viii. A sufficient number of tissues or wipes required for use during a tattoo or micropigmentation procedure must be

dispensed prior to the service. Any assembled unprotected or unused tissues and wipes not used during the procedure must be discarded after each client.

- ix. Do not tattoo or micropigment within six inches of inflamed or infected skin, or skin with a rash.

### **8.3.2 Additional Requirements to the General Guidelines After Tattooing and micro-pigmentation**

**Note: Any handling and manipulation of used needles in any manner, such as disassembling the needle bar from the needles, increases the risk of needle stick injury for the PSW.**

- i. The entire needle bar assembly (i.e. needle bar with attached needles) must be discarded into an approved sharps container immediately after each tattoo or micropigmentation procedure. Used needles and needle bars must not be handled or manipulated prior to being discarded.
- ii. If a tattoo machine is not used for micropigmentation, the needle holder device on the pen/instrument must be single-use disposable or cleaned and then sterilized before it can be used again.
- iii. Any leftover products must be discarded. They may not be returned to their original containers and must not be used on another client.
- iv. If stencils are used they must be single-use and discarded at the end of the procedure.
- v. Reusable tubes must be disassembled, if appropriate, prior to cleaning.
- vi. The tattoo must be covered with an individually packaged dressing or bandage intended for covering wounds
- vii. Clients must be given verbal and written information regarding tattooing after-care, such as:
  - a) discuss appropriate aftercare for tattooing and micropigmentation
  - b) clean hands immediately before touching tattooed area

- c) discuss the expected healing time of the site with the client
- d) describe possible complications and their signs and symptoms
- e) advise on how to deal with slight redness, pain or swelling and
- f) recommend consultation with a family physician if the problem does not improve within 24 hours.

## **8.4 Body Piercing**

### **8.4.1 Additional Requirements to the General Guidelines**

- i. All jewellery used for body piercing must be sterile. If piercing jewellery is made or modified by a piercer prior to use, it may be cleaned manually, although use of an ultrasonic cleaner is preferred, and then packaged and sterilized by an acceptable method (refer to section 5.5).
- ii. As per section 6.2 i, the site/s to be pierced must first be cleaned with an approved skin antiseptic, then marked with a (iodine) felt tip pen to mark all body sites prior to piercing. After one minute, once the pen mark has dried, the site/s are to be cleaned again with the approved skin antiseptic just prior to piercing. Single-use items (i.e. toothpicks, etc.) can be used to mark such areas.
- iii. If using dermal punch method, (biopsy) tools must be purchased as sterile, single-use disposable items. These devices cannot be re-used and must be disposed of in an approved sharps container immediately after use.
- iv. Closed ended receiving tubes must be sterile, single-use and disposable. Open ended receiving tubes can be cleaned with a wire brush and sterilized between uses.
- v. Following each piercing, all non-disposable equipment must be cleaned and then sterilized.
- vi. Clients must be given verbal and written information regarding body piercing aftercare, such as:
  - a) normal bathing and showering are permitted but otherwise keep the pierced area dry
  - b) cleaning hands immediately before touching jewellery

- c) turning jewellery when wound is not dry
- d) allowing access of the wound to air by using a loose covering
- e) the expected healing time of the wound possible complications and their signs and symptoms
- f) how to deal with slight redness, pain or swelling and recommend consulting a family physician if the problem does not improve within 24 hours, and
- g) advising not to remove the jewellery from a potentially infected piercing and to contact the piercer and seek medical advice.

***Note: Any antiseptic may become contaminated if not handled using aseptic technique. Recent studies have demonstrated persistent contamination of an aftercare solution of benzalkonium chloride used for cartilage piercing sites. Please note that Pseudomonas aeruginosa is resistant to this antiseptic.***

## **8.5 Ear Lobe Piercing**

### **8.5.1 Additional Requirements to the General Guidelines**

Ear piercing instruments shall not be used on any other part of the body except the ear lobes (fleshy part only).

- i. If a needle or dermal punch method is used for piercing the ear lobe refer to Body Piercing (Section 8.4).
- ii. The person performing the ear piercing must wear single-use disposable gloves on both hands during the procedure.
- iii. Ear piercing instruments without disposable adapters or cartridges are not recommended.
- iv. Ear piercing instruments without sterile, single-use disposable plastic adapters or cartridges that come in direct contact with the ear during the piercing procedure must be cleaned and then sterilized between each client use. Refer to Cleaning and Sterilization (Section 5.2 and 5.5) and Tables 1 and 3. Many of the old style instruments (i.e. those that do not have disposable single-use sterile cartridges or plastic adapters or cartridges, but rather a fixed stud adapter and/or a fixed clasp retainer) have plastic components that are not capable of withstanding the sterilization process without incurring damage. **If the gun/instrument cannot be sterilized, it must not be used.**

- v. Ear piercing instruments must be loaded without touching either the sterile jewellery or the stud-holding sterile, (disposable) devices on the gun.
- vi. The piercing instrument equipped with disposable parts must be cleaned and then disinfected with an intermediate to high-level disinfectant after each client. Refer to Tables 1 and 2.
- vii. Jewellery must be supplied prepackaged and sterile. Jewellery cannot be sampled or returned.
- viii. Do not spray sterile earrings with disinfectant solution prior to piercing.
- ix. As per section 6.2 ii, the ear lobe must first be cleaned with an approved skin antiseptic, then marked with a (iodine) felt tip/marketing pen prior to piercing. After one minute, once the pen mark has dried, the site is to be cleaned again with the approved skin antiseptic just prior to piercing.
- x. After each client, all disposable parts must be discarded. Previously opened packages of jewellery can no longer be considered sterile. Any jewellery stored in opened or damaged packages may no longer be used to pierce the skin.
- xi. Store the piercing instrument in a sanitary manner to prevent contamination. Instruments that are sterilized must be stored in a manner that maintains their sterility (refer to section on sterilization and storage). Avoid touching the piercing instrument unless hands are washed and single-use gloves are worn.
- xii. Clients must be given verbal and written ear piercing after-care, as in 8.4.1 section vi above.

## 8.6 Acupuncture

- i) Needles used to pierce the skin in acupuncture treatments are critical items.
- ii) These needles must be supplied pre-packaged and sterile, and discarded immediately after use since they cannot be adequately cleaned. **Never re-use needles.**
- iii) Needles must not be saved to be reused on the same client.

- iv) If the acupuncture treatment is performed by a regulated health professional, their practice does not require routine inspections by health unit staff.

#### **8.6.1 Additional Requirements to the General Guidelines**

- i. All acupuncture needles that pierce the skin must be supplied as prepackaged, single-use, disposable and sterile. It is recommended the needles with plastic sheaths (guiding tube) be used for acupuncture treatments. Do not remove the plastic sheath prior to insertion in client.
- ii. Any item used to manipulate a sterile needle prior to insertion must also be sterile.
- iii. Each individual needle must only be used on one site on the same client.
- iv. The reusable handles for seven-star or plum-blossom needles must be cleaned and then disinfected using a high-level disinfectant after each client use.
- v. Sterile needles must not be placed on or in any non-sterile environment (i.e. solution, cotton, foam, tray, etc.) before use. It is recommended that needles be removed from sealed packages in view of clients, just prior to insertion in the client.
- vi. Care must be taken to touch only the upper part of the needle (called the 'handle') when removing them from the packaging, particularly when the needles are bundled together. Any unused bundled needles must be discarded after each client.
- vii. Instruments (i.e. tweezers, forceps) coming in contact with the needle(s) after insertion into the client, must be cleaned and then high-level disinfected between clients. Electro-stimulation metal clips/hoops must be cleaned then thoroughly wiped using an intermediate or high-level disinfectant after each client.
- viii. Items used for cupping intact skin must be cleaned and then low-level disinfected between clients.
- ix. Acupuncture should not be performed on non-intact skin.

## 8.7 Hairdressing/Barbering

- i. Any reusable surface cover that is not cleaned/launched between each client use must be used in conjunction with a single-use, disposable sheet.
- ii. When a reusable protective cover is used around a client's neck, a sanitary strip or clean towel must be used to keep the protective cover from coming into direct contact with the client's neck. The neck strip or towel must be discarded/launched after each use.
- iii. Items, which only contact hair and not skin, are considered to be non-critical and require, at a minimum, cleaning with soap or detergent and a brush under running water between uses. A low-level disinfectant solution can be used to disinfect pre-cleaned, non-critical items.
- iv. If a non-critical item, such as scissors or clippers, nicks the skin, it must be processed as a semi-critical item before it can be reused. Low-level disinfectant solutions cannot be used to disinfect semi-critical items. An intermediate to high-level disinfectant is required to process semi-critical items.
- v. Any blades used for shaving skin, must be single-use and discarded in an approved sharps container immediately after use.
- vi. The handle and cradle of the razor, which holds the blade in place, must be cleaned and disinfected as a semi-critical item after each use. It is recommended to use razors that allow for easy cleaning of the cradle.
- vii. A straight razor with a fixed blade (all in one piece, so the blade is reusable and not disposable) is not recommended, as cleaning sharps is hazardous to the PSW. If using a straight razor, it must be cleaned and sterilized between uses.
- viii. Styptic pencils cannot be used to stop bleeding on clients. Powder or liquid forms are acceptable provided that if direct contact with the skin is required that it be applied by use of a disposable applicator.
- ix. Razors used for cutting hair must have a proper guard in place to prevent the blade from coming in contact with the skin. Razors are to be disposed of in an approved sharps container.

- x. The handle and cradle of razors used for cutting hair require no processing and the blade can be reused, if only used for cutting hair.
- xi. “Crochet hooks” used for cap highlights are considered semi-critical items as they may scratch the scalp, and must be processed accordingly after each use.
- xii. All disinfectant solutions must be made fresh daily, or according to the manufacturers’ specification.
- xiii. All items must be cleaned and dried with a clean towel before they can be placed in a disinfectant solution. Placing a soiled item in a disinfectant solution contaminates the entire solution and therefore contaminates all items placed in it.
- xiv. To achieve disinfection, items require full immersion in the solution for the appropriate contact time instructed by the manufacturer.
- xv. Most hair salons and barbershops use a low-level disinfectant solution, which is a quaternary ammonium compound. Since items to be placed in quaternary ammonium compounds require cleaning prior to immersion and rinsing after contact time in the solution, it is recommended that the disinfectant solution be placed next to a sink, as opposed to a workstation, to encourage proper use of the disinfectant.
- xvi. Clean items must be stored separately to prevent cross contamination with soiled items or surfaces. Never store clean items and dirty items together. Do not store any item in a container in which contaminated objects were placed or into a container that cannot be cleaned due to the nature of its surface material.
- xvii. Any needles used for hair weaves and extensions that contact the client or operator must be discarded in an approved sharps container immediately after contact.

## REFERENCES

1. Ontario Ministry of Health. Ontario Public Health Standards, 2008. [http://www.health.gov.on.ca/english/providers/program/pubhealth/oph\\_standards/ophs/index.html](http://www.health.gov.on.ca/english/providers/program/pubhealth/oph_standards/ophs/index.html)
2. Heymann D.L., Control of Communicable Diseases Manual 18th Edition. 2004
3. Fauci AS, Clifford-Lane H. Human Immunodeficiency Virus (HIV) diseases: AIDS and related disorders, in: Harrison's Principles of Internal Medicine 13<sup>th</sup> Edition, New York: McGraw-Hill Inc., 1994, pg 1567.
4. Health Canada. Infection Prevention and Control Practices for Personal Services: Tattooing, Ear/Body Piercing, and Electrolysis. 1999.
5. Alberta Health. Health Standards and Guidelines for Personal Services, 1995.
6. Dychdala GR. Chlorine and Chlorine compounds, in: Block SS, Disinfection, Sterilization, and Preservation 4<sup>th</sup> Edition, Philadelphia: Lea and Febiger, 1991, pg 146 and 1012.
7. Cremieux A, Fleurette J. Methods of Testing Disinfectants, in: Block SS, Disinfection, Sterilization, and Preservation 4<sup>th</sup> Edition, Philadelphia: Lea and Febiger, 1991, pg 146 and 1012.
8. Health Canada. Recommendations for Prevention of HIV Transmission of Human Immunodeficiency Virus, Hepatitis B virus and other Blood borne Pathogens in Health Care Settings. Canada Diseases Weekly Report 1988; 117-124.
9. Health Canada. Hand Washing, Cleaning, Disinfection and Sterilization in Health Care. 1998
10. City of Toronto Public Health Department. Skin Piercing - Personal Service Workers: Tattoo, Micro pigmentation, Electrolysis, Body Piercing, 1995.
11. Rutala W.A., Weber D.J. APIC Text of Infection Control and Epidemiology. Chapter 55, Cleaning Disinfection and Sterilization. 2002
12. CDC Guidelines for Infection Control in Health Care Personnel, 1998
13. Alberta Health and Wellness. Health Standards and Guidelines for Esthetics, June 2002

14. British Columbia Ministry of Health and Ministry Responsible for Seniors. Guidelines for Personal Service Establishments, 1995
15. California Conference of Local Health Officers. Sterilization, Sanitation, and Safety Standards for Tattooing, Permanent Cosmetics and Body Piercing, 1998
16. Gira AK et al. Furunculosis Due to *Mycobacterium mageritense* associated with Footbaths at a nail salon. J Clin Microbiol. 2004 Apr; 42(4): 1813-1817.
17. Vugia DJ et al. Mycobacteria in Nail Salon Whirlpool Footbaths, California. Emerg Infect Dis 2005 Apr; 11(4): 616-8.
18. Winthrop KL et al. An Outbreak of Mycobacterial Furunculosis Associated with Footbaths at a Nail Salon. N Engl J Med 2002 May; 346 (18): 1366-71
19. College of Physicians and Surgeons of Ontario, Infection Control in the Physician's Office, 2004 Edition.
20. Mariano A, Mele A, Tosti ME, Parlato A, Gallo G, et al. Role of Beauty Treatment in the Spread of Parenterally Transmitted Hepatitis Viruses in Italy. Journal of Medical Virology. 2004 (74)
21. Fisher CG, Kacica MA, Bennett NM. Risk Factors for Cartilage Infections of the Ear. American Journal of Preventative Medicine. 2005.
22. Keene WE, Markum AC, Samadpour M. Outbreak of *Pseudomonas aeruginosa* Infections Caused by Commercial Piercing of Upper Ear Cartilage. Journal of the American Medical Association. February 25, 2004.
23. Redbord KP, Shearer DA. Atypical *Mycobacterium* furunculosis occurring after pedicures. Journal of the American Academy of Dermatology. March 2006.
24. Mayers et al. Mayo Clinic Proceedings 2002 77:29-34
25. M.F. Loughlin, M.V. Jones and P.A. Lambert. *Pseudomonas aeruginosa* cells adapted to benzalkonium chloride show resistance to other membrane-active agents but not to clinically relevant antibiotics. J Antimicrob Chemother (2002), pp. 631–639.
26. Canadian Standards Association. Infection Prevention and Control in Office-Based Health Care and Allied Services. Second Edition, 2004

## Table 1 : Steps to Clean Instruments

Adapted from *Infection Prevention and Control Practices for Personal Services: Tattooing, Ear/Body piercing, and Electrolysis*. Health Canada, July 1999.

	Cleaning Process	Comments
1.	<b>Soak</b> items that cannot be immediately cleaned in a container of clean warm water with or without detergent in a clean sink or in a labelled "dirty instruments" container.	Soaking instruments prevents blood and other organic matter from drying on the item. <b>Do not</b> soak dirty items in hot water or in a disinfectant before cleaning, as this can cause organic matter (dirt) to stick to the surface of the object.
2.	Put on thick rubber <b>gloves</b> (non-medical gloves).	Thick rubber gloves suitable for cleaning have a wider bib at the wrist to help prevent water from entering the inside of the glove.
3.	Take instruments apart and <b>rinse</b> in a sink filled with <b>lukewarm</b> water.	Hot water may cause organic matter (dirt) to stick to objects.
4.	Prepare cleaning sink by adding warm water and <b>detergent</b> .	To reduce the risk of injury, ensure that sharp objects are visible by using low sudsing detergent according to directions.
5.	Clean instrument surfaces by using <b>friction</b> (washing and scrubbing motions). Use a brush to clean any crevices or seams in instruments.	Scrub below the water surface to prevent splashing into the eyes or onto clothing. An <b>ultrasonic cleaner</b> may be used for cleaning. When using this device, the lid should be closed to prevent aerosolization.
6.	<b>Inspect</b> instruments to ensure removal of all visible organic matter.	Organic matter prevents disinfection from occurring.
7.	Drain dirty water. <b>Rinse</b> cleaned instruments under running water.	Rinsing removes residual detergent and soil that may impair the function of the instrument or interfere with the action of disinfectants.
8.	Either air dry or <b>dry</b> with a disposable towel.	If wet items are not dried a film may be left on the surface which may contain pathogens.
9.	Store cleaned instruments in a <b>covered</b> container (can be towel or clean storage area) until disinfected or sterilized, as required.	Uncovered, clean instruments may become contaminated by dust or moisture.
10.	Clean and disinfect the <b>sink</b> .	Sinks become contaminated during use, therefore, cleaning and disinfection is required to reduce microorganisms prior to reuse.
11.	Remove rubber <b>gloves</b> and wash, rinse and, hang to dry.	Cleaned rubber gloves may be used again as long as the rubber is not torn or punctured.
12.	<b>Perform hand hygiene</b> .	Hand hygiene should be performed after removing gloves.

**Table 2 : Disinfection Chart \***

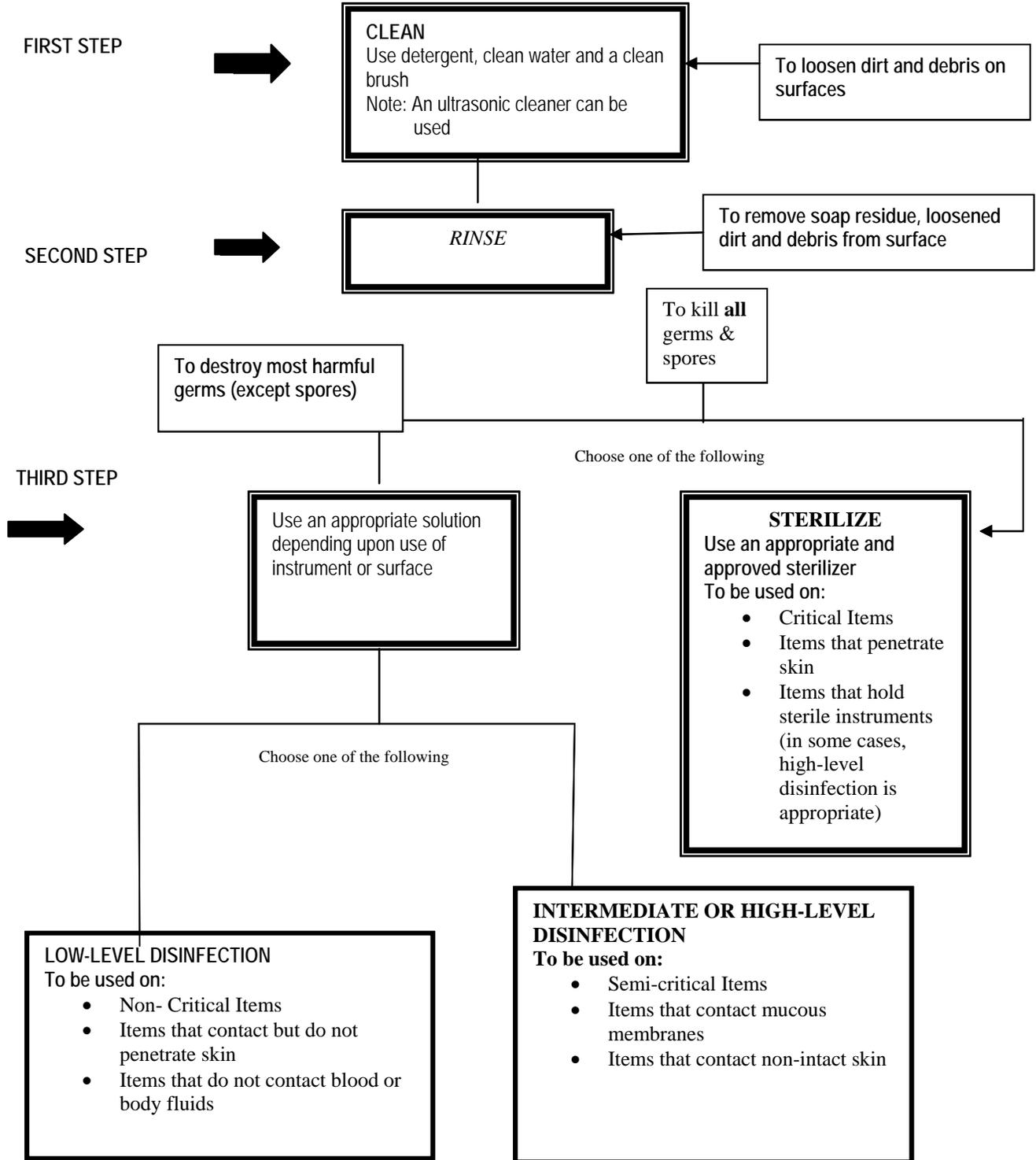
Adapted from *Infection Prevention and Control Practices for Personal Services: Tattooing, Ear/Body piercing, and Electrolysis*. Health Canada, July 1999. This chart is not intended to be inclusive of all approved high, intermediate and low-level disinfectants.

Level of Disinfection	When to Use	Disinfectant Active Ingredients	Contact Times (Approximately)	Advantages	Disadvantages
HIGH-LEVEL Kills all microorganisms (bacteria, fungi and viruses) except bacterial spores	Use on semi-critical items  Items that come into contact with nonintact skin or mucous membranes but do not penetrate them	1:50 chlorine bleach** solution (1 part bleach and 49 parts water) 1,000 ppm (parts per million)	≥ 20 minutes	<u>Inexpensive, fast acting</u>	Corrodes metal, may destroy adhesives with prolonged soaking
		2% glutaraldehyde (not recommended for personal service settings)	45 minutes Follow Manufacturer's instructions	Non-corrosive to metal, rubber or plastics, reusable	Toxic fumes, expensive. (Not recommended for PS settings)
		6% hydrogen peroxide	45 minutes Follow Manufacturer's instructions	Environmentally friendly, no residue	Oxidizing properties may be destructive to some equipment (brass, zinc, copper and nickel/silver).
		7% stabilized hydrogen peroxide	30 minutes Follow Manufacturer's instructions	Environmentally friendly, no residual, irritant to skin or to respiratory tract	Oxidizing properties may be destructive to some equipment (brass, zinc, copper and nickel/silver).
		0.55% ortho-phthalaldehyde (OPA)	10 minutes Follow Manufacturer's instructions	Fast acting, no mixing needed	Stains proteins
INTERMEDIATE-LEVEL Kills most bacteria, fungi, viruses and mycobacteria (tuberculous)	Use on semi-critical items  As above	70-90% isopropyl alcohol	10 minutes	Fast acting, leaves no residue	Can damage rubber and plastics
		70-90% Ethyl alcohol	10 minutes	Fast acting, leaves no residue	Can damage rubber and plastics. Flammable
		1:50 chlorine bleach** (1 part bleach and 49 parts water)	≥10 minutes	Inexpensive, fast acting	Corrodes metal, may destroy adhesives with prolonged soaking
LOW-LEVEL Kills some viruses bacteria, and fungi	Use on non-critical items. Items that contact intact skin and not mucous membranes, or items that do not ordinarily touch the client. May be used for routine housekeeping	Quaternary ammonium	Follow manufacturer's instructions	Good cleaning agent for environmental surfaces	Cannot be used on instruments, not recommended as an antiseptic
		1:500 chlorine bleach** solution (1 part bleach and 499 parts water) or 100 ppm	≥10 minutes	Inexpensive, fast acting	Corrodes metal, may destroy adhesives with prolonged soaking
		3% hydrogen peroxide	10 minutes	Environmentally safe	Oxidizing properties may be destructive to some equipment (brass, zinc, copper and nickel/silver).
		Phenols	Follow manufacturer's instructions	Easy to obtain, cleans and disinfects	Residual phenols on porous materials may cause tissue irritation even when thoroughly rinsed. For environmental surfaces only

\* Please adhere to manufacturer's instructions for use, some disinfectants may require rinsing after use \*\* Based on 5.25% chlorine bleach

**Figure 1: Cleaning, disinfection and sterilization flowchart**

Adapted from Durham Region Health Department



### Table 3: Steps to Sterilization of Instruments

Adapted from *Infection Prevention and Control Practices for Personal Services: Tattooing, Ear/Body piercing, and Electrolysis*. Health Canada, July 1999.

	Steps	Comments
1.	Clean instruments as per Table 1: Steps to clean instruments.	Instruments that are not clean cannot be sterilized.
2.	Perform hand hygiene and apply gloves.	Hands should be as clean as possible to prevent contamination of clean instruments/equipment.
3.	Clean instruments/equipment must be placed in the appropriate sterilization package and sealed.	Sealed packaged items will maintain sterility after sterilization has been achieved until opened for use. If packaging becomes wet or damaged, sterility cannot be ensured. Instruments in damaged packages must be resterilized or discarded. Ensure packaging is appropriate for type of sterilizer used.
4.	Temperature sensitive chemical indicators must be used with each package.	Temperature sensitive chemical indicators provide an immediate visual check to ensure package has been processed. Note: The colour change demonstrated by a chemical indicator does not ensure that the processed items have been sterilized. Only an appropriate biological indicator can confirm that the sterilization cycle has been successful.
5.	Load the sterilizer evenly and avoid overloading the chamber. Follow manufacturer's directions for loading the chamber.	Overloading the sterilizer will prevent effective sterilization; allow space between the packages.
6.	Start the sterilization process.	Sterilizing time, temperature, pressure and cycles may vary depending on the type of sterilizer used. Follow manufacturer's instructions at all times. With dry heat and autoclave sterilization, time does not start until the appropriate temperature has been reached.
7.	After the sterilization cycle has been completed, remove instruments.	Ensure items are dry before removing from the unit. Sterilized instruments may become contaminated when wet packaging is handled.
8.	Store sterilized items in a clean, dry place that is protected from dust, dirt, and moisture. Sterile items must be stored off the floor.	Handling increases the chances of punctures of sterilized bags. Sterilized items must be stored separately from dirty equipment/instruments.
9.	Record information about each sterilization cycle in the log book.	Monitor each load, recording temperature, pressure, cycle length, etc.

**Table 4: Detailed Infection Prevention and Control Procedures for Electrolysis**

Adapted from *Infection Prevention and Control Practices for Personal Services: Tattooing, Ear/Body piercing, and Electrolysis*. Health Canada, July 1999.

		<b>Equipment/Supplies</b>	<b>Use During Electrolysis</b>	<b>Procedures for Infection Prevention</b>
1	Client preparation	single-use paper or laundered towel	Drape the towel around electrolysis treatment area of the client.	The towel offers added protection for supplies and equipment that may touch surfaces near the treatment area, e.g. the client's clothes.
		eye shields	Protect client's eyes from injury and lamp glare during electrolysis involving the face.	After each client service, detergent and water must be used to clean the eye shields, followed by low-level disinfection.
		wet sponge pad with holder	Hold in client's hand to complete the electrical circuit in the galvanic/blend (not thermolysis) method.	The sponge pad should be cleaned in detergent and water after client use. The single-use conductive gel pad must be discarded after client service.
		dental lip rolls	Lip rolls may be used to create a taut skin surface for electrolysis, e.g. the upper lip.	Dental lip rolls shall be discarded after each client service.
2	Skin preparation	topical anesthetic (optional)	A topical anesthetic may be used to decrease client discomfort during electrolysis.	Whenever a topical anesthetic is used on a client site, it must be applied with a clean, single-use, disposable swab. The anesthetic should be applied on the site before the skin is cleansed with an antiseptic.
		skin antiseptic	A non-irritating antiseptic is used to cleanse the skin before electrolysis.	Antiseptic should be applied to the clean swab using a pump pack. Pre-packaged antiseptic swabs may be used.
		clean swabs, e.g. cotton balls, gauze or single-use cotton applicators pump pack containing the antiseptic		Care should be taken to avoid the antiseptic coming into contact with the eyes and mouth during electrolysis. Cotton applicators moistened with water may be used to clean the treatment area near the eyes.

		Equipment/ Supplies	Use During Electrolysis	Procedures for Infection Prevention
3	Epilator	client sponge holder cord  needle holder and cord  button/knob controls	Conducts the electric current for electrolysis. Button/knobs are to control current intensity and times.	The epilator button/knob controls shall be cleaned then wiped with a low-level disinfectant after each client service or covered with single-use plastic. Since the cords may come in contact with the area being worked on, the cords shall be covered with single-use plastic or cleaned then disinfected with an intermediate to high-level disinfectant.
4	Instruments	electrolysis needle or needle and cap combination unit	An electric current is passed through a specialized needle that has been inserted along the hair follicle.	Pre-packaged sterile, single- use, solid needles or a combination unit (sterile needle permanently attached to the plastic cap) must be used.  Needles must not be tested on the practitioner's skin.  <b>Needles must not be saved for reuse for future treatments on the same client.</b>  The needle must not be recapped prior to disposal in an approved sharps container.  Used electrolysis needles must be discarded into an approved sharps container immediately after each client.
		hypodermic needle or lancet	The hypodermic needle/lancet should be used to lift or remove ingrown hairs.	Sterile, single-use pre- packaged hypodermic needles/lancets should be used to lift or remove ingrown hairs and shall be discarded into the sharps container after use on each client. <b>Never re-use needles or lancets.</b>  This procedure breaks the skin tissue and usually draws some blood; therefore the electrologist shall wear single-use gloves.

		<b>Equipment/ Supplies</b>	<b>Use During Electrolysis</b>	<b>Procedures for Infection Prevention</b>
		tweezers or forceps	Tweezers should be used to lift and hold the hair during electrolysis and may be used to lift ingrown hair.	Tweezers must be sterile if used to break skin and remove ingrown hairs or high-level disinfected if used to load a sterile needle into the epilator. Tweezers must be cleaned and packaged before sterilization.
		scissors	Scissors may be used to cut hair before electrolysis.	Scissors shall be cleaned and disinfected with an intermediate-level disinfectant after each client service.
5	Needle holder	metal pin device	The electrolysis needle is inserted or screwed into the prongs of the metal pin device.	The permanently attached pin device must be cleaned then disinfected with a high-level disinfectant, after each client service.
		reusable plastic needle holder tip or single-use combination unit, i.e. needle and needle holder tip or cap in one unit	The reusable, plastic needle holder tip that is screwed on or the cap of the single-use combination unit that covers the pin device to prevent electric shocks to the practitioner.	The reusable, screw-on, plastic needle holder tip should be cleaned with a pipe cleaner after each client service and must be disinfected with a high-level disinfectant, and stored dry.  The needle shall not be recapped prior to disposal in an approved sharps container to reduce the risk of needle injury to the practitioner.
6	Additional supplies	tray, e.g. metal or glass	Rest instruments/ supplies on the tray during the procedure.	Trays shall be cleaned then low-level disinfected after each client service.
		magnifying lamp and the arm holding it/glasses or microscope and light source, e.g. lamp	Permits visualization of the treatment area.	Equipment surfaces touched by the practitioner shall be cleaned then disinfected with a low-level disinfectant after each client. Alternatively, surfaces may be covered with single-use plastic that is discarded and changed between each client.
		"dirty instrument" container with lid (containing water or detergent and water)	Used instruments are stored in water or a detergent and water solution to prevent drying of body proteins onto instrument prior to manual or ultrasonic cleaning.	The dirty instrument container must be cleaned daily and then subjected to low-level disinfection. The solution in the container must be changed daily.

		Equipment/ Supplies	Use During Electrolysis	Procedures for Infection Prevention
		ultrasonic cleaner/manual cleaning	An ultrasonic cleaner that contains detergent and water may be used to clean instruments.	The ultrasonic cleaner must be cleaned daily with detergent and water. A fresh solution of detergent and water shall be placed in the device each day. If solution becomes visibly dirty ultrasonic cleaner should be emptied, cleaned and filled with fresh solution. The ultrasonic cleaner <b>does not sterilize</b> the instruments. If manual cleaning is done, follow the instructions outlined in 5.2.2
		sharps container	Electrolysis needles or lancets must be discarded into an approved sharps container immediately after use.	Puncture-resistant sharps containers must be used to help prevent needle injuries.
7	Client aftercare	skin antiseptic swabs	An antiseptic that cleanses the skin.	Antiseptic should be applied with a clean swab dispensed from a pump pack containing the antiseptic or pre-packaged single-use antiseptic swabs should be used.
		ointment or mild astringent	Ointment/astringent may be used to soothe the skin and promote skin healing.	A single-use wooden tongue depressor or spatula should be used to remove ointment from a bulk container to apply to the skin. If removing a large amount of ointment, use a single-use spatula/tongue depressor and dispense into a smaller single-use container. The spatula must be discarded into a waste bin after single-use. <b>Do not double dip.</b> Apply astringent or ointment with a clean swab or clean gloved hands. Clients shall be instructed to avoid touching skin that has undergone electrolysis or to touch only with washed hands. The client should avoid using make-up or any cosmetic products in the area that has been worked on according to the practitioner's advice. Clients shall be given written aftercare instructions.

		<b>Equipment/ Supplies</b>	<b>Use During Electrolysis</b>	<b>Procedures for Infection Prevention</b>
8	Practitioner supplies	hand washing soap	Soap is used to remove dirt and some microorganisms from the practitioner's hands.	Refer to general recommendations Section 6.1.1
		alcohol-based hand rubs	Alcohol-based hand rubs containing between 60-90% alcohol can be used to perform hand hygiene when hands are not visibly soiled.	
		hand lotion	Lotions are used to prevent skin from drying and cracking and to keep the skin in good condition.	
		single-use gloves (e.g., latex, neoprene, nitrile, or vinyl)	Single-use gloves must be worn when hands are expected to come in contact with blood or body fluids. Gloves shall also be worn when working on an infected hair follicle, or if the practitioner has cuts or other breaks in the skin.	<p>Single-use gloves must be worn for all procedures involving:</p> <ul style="list-style-type: none"> <li>• breaking through skin</li> <li>• expected contact with mucous membranes</li> <li>• expected contact with blood or body fluids.</li> </ul> <p>Single-use gloves act as a barrier and reduce the potential transfer of microorganisms between the client and the electrologist.</p> <p>Hand hygiene must be performed before gloves are applied and after glove removal. Gloves are not a substitute for hand hygiene</p> <p>Cuts/breaks in the skin shall be covered with a waterproof dressing before the gloves are applied.</p>

## Table 5: Detailed Infection Prevention and Control Procedures for Body Piercing

Adapted from Infection Prevention and Control Practices for Personal Services: Tattooing, Ear/Body piercing, and Electrolysis. Health Canada, July 1999.

		Equipment/ Supplies	Use During Skin Piercing	Procedures for Infection Prevention
1	Client preparation	single use towel	A towel may be used to drape the piercing site.	The towel should be used to protect the client from any soiling during the procedure. The towel must be laundered after each client.
2	Skin preparation	skin antiseptic, e.g. 70% alcohol or an iodine, such as betadine. The antiseptic selected should be appropriate for the piercing site according to the manufacturer's instructions, e.g. 70% alcohol is suitable for application to skin but should not be used on mucous membranes.  clean swabs, e.g. gauze or cotton balls	Swabs moistened with an antiseptic are used to disinfect the skin piercing sites.  Warm water is used to cleanse areas around the eyes.	The skin antiseptic should be applied with a moist swab, using a circular motion. If alcohol is used it should be stored in a pump pack which is used to moisten the swab with alcohol. Other antiseptics, e.g. betadine, may be poured into a disposable cup. If betadine is used to prepare the skin before genital piercing, any excess antiseptic should be removed to avoid irritation to mucous membranes.
		antibacterial mouth wash	Mouthwash is used as an antiseptic before piercing the tongue.	Antibacterial mouthwash cleans the mouth prior to tongue piercing if used for several minutes.
3	Skin marking	calipers	Calipers are used to measure skin piercing sites to create a symmetrical appearance.	Calipers shall be cleaned then disinfected with a low-level disinfectant if the skin is intact.  Calipers used on mucous membranes shall be high-level disinfected.

		<b>Equipment/ Supplies</b>	<b>Use During Skin Piercing</b>	<b>Procedures for Infection Prevention</b>
		tooth picks and ink, e.g. gentian violet	Tooth picks, dipped in ink mark the piercing site(s).	A few drops of ink should be placed on a clean surface, e.g. the inner surface of the  wrapper used for a sterilized item, to avoid dipping the tooth pick into the ink container itself. The site/s to be pierced must first be cleaned with an approved skin antiseptic, then marked with a (iodine) felt tip pen  to mark all body sites prior to piercing. After one minute, once the pen mark has dried, the site/s are to be cleaned again with the approved skin antiseptic just prior to piercing.
		forceps	Forceps should be used to hold the marked skin taut for the needle piercing. They may become contaminated with blood during the procedure.	Forceps must be cleaned and sterilized after use on each client.
		elastic bands	Elastic bands are used to hold the handles of the forceps closed to ensure secure gripping of the skin surface.	Clean elastic bands should be stored in a covered container and discarded after use. Forceps should be used to remove the elastics from the container at the outset of the procedure to avoid contamination of other elastic bands in the container.
4	Service tray	a tray that is smooth, nonporous and easy to clean, e.g. metal	The tray is covered with a clean towel. Sterile instruments and other supplies, e.g. lubricant, cork, elastic bands, and any additional required items should be placed on the towel. The sterile needle, jewellery, and forceps should be left in the opened packages until just before use. The tip of the needle must not be touched prior to insertion.	The tray must be cleaned then wiped with a low-level disinfectant after use.  The towel shall be a single use disposable or freshly laundered cloth.

		<b>Equipment/ Supplies</b>	<b>Use During Skin Piercing</b>	<b>Procedures for Infection Prevention</b>
5	Instruments	single use hollow skin piercing needles, e.g. stainless steel	The needle pierces the skin/tissue and the jewellery is inserted in the channel created by the needle.	One new, sterilized piercing needle should be used for each client <b>and</b> each procedure. The needle/s must be discarded into the sharps container after use. Because the needle is hollow it cannot be properly cleaned or sterilized, therefore must be discarded.
		needle pushers (plastic)	The practitioner may use needle pushers to push the blunt end of the needle through tissue.	Needle pushers should undergo sterilization because of contact with the sterile needle that will be inserted through skin/tissue.
		insertion tapers	Insertion tapers are most often used to upgauge or put in a thicker piece of jewellery into already healed piercing.	Insertion tapers are to be cleaned and sterilized after use on each client.
		connectors (solid metal)	Connectors are used to facilitate the insertion of internally threaded barbells by providing a link between the hollow needle and the hollow jewellery.	Specialized connectors are to be cleaned with small brushes in a solution of detergent and water and sterilized after use on each client.
		receiving tubes	Receiving tubes are used when piercing difficult to reach areas, such as the nostril or the glands of the penis. The tube forms a drum of skin into which the piercing needle is received.	Closed ended receiving tubes must be sterile, single-use and disposable. Open ended receiving tubes can be cleaned with a wire brush and sterilized between use.
		corks (single-use)	Corks are used to cover the sharp end of the needle after it has pierced through tissue to prevent a needlestick injury to the practitioner.	Clean, single-use corks are to be discarded after one piercing. It is not necessary to sterilize the cork prior to use as it does not come in contact with open skin areas.  The needle tip, which is inserted into the cork, should not be pulled back through the freshly pierced tissue. Instead, the cork and needle shall be placed in the sharps container.

		<b>Equipment/ Supplies</b>	<b>Use During Skin Piercing</b>	<b>Procedures for Infection Prevention</b>
6	Jewellery	rings, studs, and barbells are common forms	Sterile jewellery is inserted through the needle channel and secured.	Jewellery must be sterilized before use.  Jewellery should be smooth to avoid skin irritation, which delays healing and increases infection risk.
		the composition of jewellery is primarily 14-18 carat gold, titanium, niobium or stainless steel (some steel contains nickel)		
		ring opening pliers ring closing pliers	Sterile ring pliers are to be used to open and close jewellery, taking care not to scratch or nick the metal.	Pliers are to be cleaned and sterilized after each use.
7	Additional supplies:	container, e.g. metal, with lid  cool water and detergent	The container is used to store used instruments prior to cleaning. Soaking instruments prevents drying of body proteins.	The container shall be cleaned and then to low-level disinfected daily.  The solution in the container shall be changed daily.
		Sharps container with secure lid	For the disposal of piercing needles and cork	Approved sharps containers must be used to help prevent sharps injuries.
8	Client aftercare	soap	Clients should be instructed to wash their hands before washing the pierced area with soap on a daily basis and to rotate the jewellery to help with the cleaning process.	The skin piercing site must be cleaned to promote healing and reduce the chance of infection. Oral and written instructions for aftercare are to be provided to the client.
		antibacterial ointment	Ointment may be applied to the freshly pierced skin area and the jewellery should be rotated.	If ointment is used, single-use ointment applications are recommended. Ointment also acts as a lubricant and may reduce the chance of infection.  If ointment is taken from a bulk container it is to be removed with a single-use spatula or tongue depressor.  Some people develop an allergic reaction to the ointment, and so some practitioners do not use it.

		<b>Equipment/ Supplies</b>	<b>Use During Skin Piercing</b>	<b>Procedures for Infection Prevention</b>
9	Practitioner supplies	<p>hand washing soap</p> <p>alcohol-based hand rubs</p> <p>hand lotion</p>	<p>Soap is used to clean the practitioner's hands of microorganisms.</p> <p>Alcohol-based hand rubs containing between 60-90% alcohol can be used to perform hand hygiene when hands are not visibly soiled.</p> <p>Lotions are used to keep the skin in good condition as frequent hand washing may dry out the skin.</p>	<p>Refer to recommendations in section 6 of the main document.</p>
		<p>clean medical gloves, e.g. latex, vinyl, neoprene, or nitrile</p>	<p>Gloves shall be used as a protective barrier on hands after cleaning of the skin with an antiseptic and opening the package that contains the sterile needle. Gloves or forceps are to be used to remove the needle from the package. If the gloves are contaminated, they shall be removed, hand hygiene performed, and a new pair put on.</p>	<p>Gloves shall be worn to reduce the number of organisms on the hands and offer some protection from sharps injuries.</p> <p>Gloves should be used to touch only the objects needed to do the procedure.</p> <p>Hand hygiene must be performed before gloves are applied and after glove removal.</p>

**Table 6: Detailed Infection Prevention and Control Procedures for Tattooing and Micropigmentation**

Adapted from Infection Prevention and Control Practices for Personal Services: Tattooing, Ear/Body piercing, and Electrolysis. Health Canada, July 1999.

		Equipment/ Supplies	Use During Tattooing	Procedures for Infection Prevention
1	Skin preparation	spray bottle with a solution of soap and water	The skin area to be shaved is sprayed with the solution for lubrication purposes.	The spray bottle shall be covered with a single-use plastic sheath (e.g. plastic bag). This plastic shall be discarded after each client service. At the end of each day, or when soiled, the spray bottle shall be cleaned then disinfected with a low- level disinfectant. The solution should not be “topped up” with more solution. The inside of the bottle should be washed and dried prior to adding new solution.
		single-use disposable razor	The skin is shaved prior to tattoo placement.	Razors are to be discarded in an approved sharps container immediately after use on each client.
		topical anesthetic (optional)  skin antiseptic	A topical anesthetic may be used to decrease client discomfort during the procedure.  Antiseptic is used to cleanse the skin prior to tattooing.	Whenever a topical anesthetic is used on a client site, it must be applied with a clean, single- use, disposable swab. The anesthetic should be applied on the site before the skin in cleansed with an antiseptic.  The skin antiseptic is to be applied with a clean swab using a circular motion. If alcohol is used, it should be stored in a pump pack that is used to moisten the cotton balls. Alternatively, the swab may be moistened by pouring the antiseptic from the original container into a disposable paper cup. The disposable cup is to be discarded in the waste bin after use. Skin antiseptics should not be sprayed onto clients skin For cosmetic tattooing of areas around the eye, (e.g. eyeliner), potable water should be used and an antiseptic should be avoided .

		Equipment/ Supplies	Use During Tattooing	Procedures for Infection Prevention
2	Stencil and image transferring solution	lotion or spray bottle with solution as above, skin antiseptic	Lotion or other solution moistens the skin prior to application of the stencil.	Lotion should be applied in the same way as skin antiseptics OR with spray bottle.  Deodorant sticks are <i>not</i> recommended instead of lotion since they can become contaminated with microorganisms and are usually not discarded after each client.
		single-use stencil transfers or plastic stencils	Stencils are used to outline the design of the tattoo on the skin.	Single-use stencils shall be discarded after use.
3	Lubricating product	e.g. gel or petroleum jelly	The lubricating product is placed on the skin with a single-use spatula or a piece of clean gauze prior to tattooing.	The lubricating product shall be removed from the bulk container with a single-use wooden spatula or dispensed from a pump container onto a single-use applicator. Any remaining product must be discarded and never used on another client. Alternatively, a single-use preparation may be used.
4	Tattoo dyes	pigments/ink	Sterile needles, which have been dipped into pigments, pierce the tissue below the skin to create the permanent marks forming the tattoo	Currently, commercially prepared pigments are not sterile. Contamination of pigment bulk containers should be avoided by placing pigment into smaller, clean containers, (e.g. plastic squeeze bottles).
		pigment/ink caps/cups	Each unique pigment is placed in an individual cap/cup into which the tattoo needles are dipped.	Pigments to be dispensed in a manner that prevents contamination.
		pigment/ink cap holding tray	Trays are sometimes used to hold the pigment/ink caps.	The pigment/ink cap trays shall be cleaned and high-level disinfected as a minimum after use for each client or preferably are to be discarded.
		disposable cup with tap water	Tap water is used to rinse pigment/ink from the needles prior to using another colour.	Water should be poured into the sink at the completion of the procedure. Discard disposable single-use cups into a plastic lined waste bin.

		<b>Equipment/ Supplies</b>	<b>Use During Tattooing</b>	<b>Procedures for Infection Prevention</b>
5	Cleaning the skin during tattooing/micro pigmentation	spray bottle containing a solution of soap and water as in #1.	The skin is cleaned to enable the practitioner to see it clearly and to avoid the mixing of colours.	Care should be taken to avoid contamination of the soap solution when it is being prepared and during use.  The spray bottle shall be covered and cleaned then disinfected as in #1.
		single-use disposable paper towels	Single-use disposable paper towels are used to wipe the treated area during the procedure.	All paper towels shall be discarded into a plastic lined waste bin, including any unused paper towel in the immediate work area.
6	Tattoo machine	motor frame	The motor frame is connected to an electrical source by the clipcord. The clipcord may be touched multiple times during tattooing, especially if more than one machine is used on the client .	The clipcord and the motor frame shall be covered with a disposable plastic sheath. The plastic sheath shall be discarded after each client service. The clipcord and motor frame shall be cleaned and then disinfected with a low-level disinfectant after each use. Alternatively, surfaces may be covered with single-use plastic that is discarded and changed between each client
		clipcord		
		chuck or clamp	The chuck/clamp attaches the needle bar/tube to the motor frame.	After each client service the clamp shall be cleaned then disinfected with an intermediate-level disinfectant.
		elastic bands	The elastic bands apply pressure on the needlebar so that the needles can rest in the bottom of the tube tip.	Elastic bands are single-use and disposable.
7	Instruments	needles, e.g. stainless steel needle bars	Needles are soldered onto needle bars. The needles place pigments in tissue under the skin.	Any flux residue produced by soldering should be removed with a solution of baking soda and water or an alternate appropriate chemical prior to cleaning. New needles and the needle bar shall be cleaned, in an ultrasonic cleaner, rinsed, air dried, then sterilized or packaged for sterilization. Needles must not be tested on the practitioner's skin.

		Equipment/ Supplies	Use During Tattooing	Procedures for Infection Prevention
				<p>Needles that have been cleaned in the ultrasonic cleaner between colours are not sterile.</p> <p>Used needle bar combination shall not be disassembled. Instead the intact needle bar unit should be discarded.</p>
		metal tube and grip (as one unit or as separate parts)	The metal tube and grip assembly surrounds the needle and needle bar and is attached to the motor frame,	Metal tubes and grip shall be cleaned and sterilized for each client use. Because the grip is grooved metal, a brush should be used during cleaning. Tubes that can be disassembled must be taken apart to facilitate cleaning.
8	Other equipment	metal container with lid or puncture resistant container	The container for used instruments is kept in an area designated for dirty items/instruments, and is partially filled with water, or water and detergent to prevent drying of body proteins on soiled instruments before cleaning.	The metal container shall be cleaned and disinfected with a low- level disinfectant daily.
		ultrasonic cleaner	The ultrasonic cleaner contains detergent and water to clean reusable instruments after use on a client prior to sterilization. The ultrasonic cleaner is also used to clean the needles and needle bar after the new unused needles have been soldered onto the needle bar. Cover the device with a lid when in use.	The ultrasonic cleaner shall be emptied and cleaned daily with detergent and water. The ultrasonic cleaner <b>cannot</b> be used to disinfect or sterilize instruments. Needles cleaned in this manner, (i.e. critical items), shall not be reused.
		approved sharps container	For disposal of needles and razors after each client service (needles and attached bar),	Approved sharps containers shall be sealed and discarded in accordance with local regulations.

		<b>Equipment/ Supplies</b>	<b>Use During Tattooing</b>	<b>Procedures for Infection Prevention</b>
9	Client aftercare products	dry clean dressing ointment/cream/ lotion	The ointment or lotion and dry dressing are applied to freshly tattooed skin to help prevent infection and protect the client's clothing.	Ointment shall be applied with single-use applicator and gloved hands in a manner to prevent contamination. The tattooed skin is to be covered with a dry clean dressing.  The client shall be given oral and written instructions about care of the tattooed area, and signs of infection that may require medical treatment.
10	Practitioner supplies	liquid hand washing soap in a dispenser  alcohol-based hand rubs	Soap is used to wash the practitioner's hands to remove organic matter and transient microorganisms.  Alcohol-based hand rubs containing between 60- 90% alcohol can be used to perform hand hygiene when hands are not visibly soiled.	Refer to recommendations in section 6.1.1
		hand lotion	Lotion is used to prevent skin from cracking and to keep the skin in good condition.	
		clean medical gloves	Single-use gloves are to be used as a protective barrier on hands.	After the skin has been cleaned with an antiseptic agent and the packages containing the sterile needlebar(s)/sterile needles have been opened, gloves shall be put on to remove the needlebar(s)/sterile needles from the package and to assemble them on the grip and tube assembly.  Gloves shall be removed and changed during the tattooing process if, at any time, the practitioner touches any device or surface that may be contaminated.  Hand hygiene must be performed before gloves are applied and after glove removal.
		lap pad (single- use paper or reusable cloth)	Worn on the lap of the practitioner to protect clothing.	Single-use, disposable lap pads be used. If the lap pad is cloth, it shall be laundered after each client service.

**Table 7: Detailed Infection Prevention and Control Procedures for Ear Lobe Piercing**

Adapted from *Infection Prevention and Control Practices for Personal Services: Tattooing, Ear/Body piercing, and Electrolysis*. Health Canada, July 1999.

		<b>Equipment/ Supplies</b>	<b>Use During Skin Piercing</b>	<b>Procedures for Infection Prevention</b>
1	Client preparation	single-use towel	A towel may be used to drape the piercing site.	The towel should be used to protect the client from any soiling during the procedure.
2	Skin preparation	<p>Skin antiseptic, (e.g. 70% alcohol or an iodine, such as betadine). The antiseptic selected must be appropriate for the piercing site and must be used according to the manufacturer's instructions.</p> <p>Clean swabs, (e.g. gauze or cotton balls).</p>	Swabs moistened with an antiseptic are used to disinfect the skin piercing sites.	The skin antiseptic shall be applied with a moist single-use swab, using a circular motion. If alcohol is used it should be stored in a pump pack which is used to moisten the swab with alcohol. Other antiseptics, such as betadine, may be poured into a disposable cup. The ear lobe must first be cleaned with an approved skin antiseptic, then marked with a (iodine) felt tip/marketing pen prior to piercing. After one minute, once the pen mark has dried, the site is to be cleaned again with the approved skin antiseptic just prior to piercing.
3	Jewellery	studs are the common form		<p>Jewellery used for piercing must be sterile.</p> <p>Jewellery must be smooth to avoid skin damage, which delays healing and increases the risk of infection.</p>

		<b>Equipment/ Supplies</b>	<b>Use During Skin Piercing</b>	<b>Procedures for Infection Prevention</b>
4	Ear piercing instrument	single-use pre-packaged stud and butterfly clasp	The stud is pierced through the lobe of the ear by the practitioner through activation of the spring mechanism in the instrument or by squeezing the instrument. The butterfly clasp at the back of the ear lobe holds the stud in place.	Studs must be sterile and pre-packaged.
		head of piercing instrument	The piercing instrument is used to hold the sterile stud. Blood may be splattered onto the instrument as the stud is pierced through ear tissue.	
		a single-use removable cartridge is strongly recommended.		The removable cartridge must be discarded after single-use. The piercing instrument surface must be cleaned then soaked in an intermediate to high level disinfectant, (e.g. 70% alcohol) between clients.
5	Client aftercare	soap alcohol-based hand rubs	Clients shall be instructed to perform hand hygiene before washing the pierced area with soap on a daily basis and to rotate the jewellery to help with the cleaning process.	The skin piercing site shall be cleaned to promote healing and to prevent the chance of infection. Oral and written instructions for aftercare shall be provided to the client.
		antibacterial ointment	Ointment may be applied to the freshly pierced skin area and the jewellery should be rotated.	If ointment is used, single-use ointment applications are recommended in a manner to prevent contamination. Ointment acts as a lubricant and may reduce the chance of infection.  If ointment is taken from a bulk container it must be removed with a single-use spatula or tongue depressor.

		<b>Equipment/ Supplies</b>	<b>Use During Skin Piercing</b>	<b>Procedures for Infection Prevention</b>
6	Practitioner supplies	hand washing soap  alcohol-based hand rubs  hand lotion	<p>Soap is used to remove microorganisms on the practitioner's hands.</p> <p>Alcohol-based hand rubs containing between 60-90%.</p> <p>Alcohol can be used to perform hand hygiene when hands are not visibly soiled.</p> <p>Lotion is used to keep the skin in good condition as frequent hand washing may dry out the skin.</p>	Refer to recommendations in section 6.1.1.
		single-use gloves	<p>Single-use gloves must be used as a protective barrier on hands after cleaning of the skin with an antiseptic and before opening the package that contains the sterile jewellery. If the gloves are contaminated, they must be removed, hand hygiene must be performed and a new pair put on.</p>	<p>Single-use gloves must be worn to reduce the number of organisms on the hands and offer some protection from sharps injuries.</p> <p>Gloves must be used to touch only the objects needed to do the procedure.</p> <p>Hand hygiene must be performed before gloves are applied and after glove removal.</p>

## Table 8: Preparing Household Bleach as a Disinfectant

*Adapted from APIC Guideline for Selection and Use of Disinfectants*

The solution must be made fresh daily to preserve strength.

Household Bleach Solution is 5.25% sodium hypochlorite solution (50,000 ppm available chlorine)

Level required	When to be used—see Table 2 on disinfection	How to mix the bleach solution
<p><b>High-level Disinfection</b></p> <p>1:50 dilution of bleach (1 part bleach: 49 parts water)</p>	<p>Use on semi-critical items: items that may accidentally penetrate skin and /or come into contact with blood or body fluids. Also use to clean surfaces following contact with blood or body fluids or where sterilization is not possible.</p> <p>Contact time <math>\geq</math> 20 minutes</p>	<p>10 ml bleach with 495 ml water or 2 tsp. bleach with 2 cups water</p>
<p>Intermediate-Level Disinfection</p> <p>1:50 dilution of bleach (1 part bleach: 49 parts water)</p>	<p>Use on semi-critical items: items that may accidentally penetrate skin and/or come into contact with blood or body fluids (e.g. hair clippers, cuticle scissors).</p> <p>Contact time <math>\geq</math> 10 minutes</p>	<p>10 ml bleach with 495 ml water or 2 tsp. bleach with 2 cups water</p>
<p><b>Low-Level Disinfection</b></p> <p>1:500 dilution of bleach (1 part bleach: 499 parts bleach)</p>	<p>Use on non-critical items: items that come in contact but do not penetrate intact skin, or those that do not ordinarily touch the client. These items do not contact blood or body fluids. May be used for routine housekeeping (e.g. floors or surfaces).</p> <p>Contact time <math>\geq</math> 10 minutes</p>	<p>5 ml bleach with 2½ litres water or 1 tsp bleach with 10 cups water</p>

**Table 9: Times and Temperatures required for dry heat sterilization**

<i>Times and Temperatures Required for Dry Heat Sterilization</i>	
Temperature	Time
171 C (340 F)	60 minutes
160 C(320 F)	120 minutes
149 C (300 F)	150 minutes
141 C (285 F)	180 minutes
121 C (250 F)	12 hours

Appendices

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## Appendix 1: Methyl Methacrylate (MMA)

On May 22, 2003, Health Canada released a health advisory warning against the use of MMA. The strong adhesive properties of MMA can cause painful tearing and possible permanent loss of the natural nail, should the artificial nail be jammed or caught. Allergic reactions to MMA include red skin rashes, contact dermatitis, itching and/or small oozing blisters in the affected area. MMA may also cause irritation to the nose and throat, as well as headaches.

For the PSW, there is a risk that ongoing exposure to this substance can cause irritation to the nose and throat, headaches as well as adverse skin reactions. Masks worn to reduce exposure to dust are not designed to reduce the effect of the MMA vapours.

No cosmetic products containing MMA are to be sold in Canada. Ethyl methacrylate, polymethyl methacrylate and other methacrylate polymers are all alternatives to MMA which are currently permitted by Health Canada for use in cosmetic products. However, some cosmetic products containing MMA may still be available on the Canadian marketplace.

For further information, contact your nearest Health Canada Product Safety Office:

[http://www.hc-sc.gc.ca/home-accueil/contact/hecs-dgsesc/pso-bsp\\_nrcn\\_e.html](http://www.hc-sc.gc.ca/home-accueil/contact/hecs-dgsesc/pso-bsp_nrcn_e.html)

For further information you may also refer to Health Canada's website at:

[http://www.hc-sc.gc.ca/ewh-semt/pubs/contaminants/psl1-lsp1/methyl\\_methacrylate\\_methyle/methyl\\_methacrylate\\_methyle\\_synopsis\\_e.html](http://www.hc-sc.gc.ca/ewh-semt/pubs/contaminants/psl1-lsp1/methyl_methacrylate_methyle/methyl_methacrylate_methyle_synopsis_e.html)

## Appendix 2: Ear Candling

Ear Candling refers to a variety of procedures that are associated with placing a hollow cone-shaped device in the ear for the supposed purpose of extracting earwax and other impurities. The cone is soaked in beeswax or paraffin that is then hardened. During ear candling, the client lies on his/her side while another person inserts the point of the cone into the ear. The top of the cone is then set on fire and allowed to burn for a few minutes.

The health claim made for these products is that the flame creates warmth and suction, to draw earwax out of the ear canal. Since earwax is sticky, significant negative pressure would be required in order to pull the wax from the ear canal. Health Canada has conducted laboratory tests that showed that ear candling produced no significant heating or suction in the ear canal.

There are significant dangers posed by ear candling. It can result in a risk of fire, and can cause serious burns or other injuries should the hot wax drip into the ear, skin or hair. A number of cases of ear injury have been reported in Canada.

Ear candles cannot be legally sold in Canada. The Medical Devices Regulations of Canada's *Food and Drugs Act* states that medical devices, such as ear candles, must be licensed by the Therapeutic Products Program of Health Canada before this product can be legally sold. No licenses have been granted for ear candles to be used for therapeutic purposes.

For further information you may also refer to Health Canada's website at: [http://www.hc-sc.gc.ca/iyh-vsv/med/ear-oreille\\_e.html](http://www.hc-sc.gc.ca/iyh-vsv/med/ear-oreille_e.html)

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