
*Health Standards and
Guidelines for
Personal Services*

Table of Contents

I. Introduction	
Purpose	1
Scope	1
Approval of Operation	2
II. Definitions	3
III. Infection Risk in Personal Services	
Sources of Infection	6
Work Surfaces	6
Invasive Procedures	7
Skin	7
IV. Cleaning, Disinfection and Sterilization	
Classification	9
Cleaning	10
Disinfection	10
Sterilization Methods	11
Monitoring of Sterilization	14
V. Operational Requirements	
Premises	15
Equipment, Instruments and Supplies	16
General	16
Critical Items	17
Semi Critical Items	18
Non Critical Items	18
General Practices	18
Waste Disposal	19
VI. References	21
Appendix A - Personal Service Worker Health and Safety	
Universal Precautions	23
Response Procedures For Accidental Exposure To Blood and Body Fluids	25
Appendix B - Handwashing Procedures	27
Appendix C - Material Safety Information	29
Appendix D - Laboratories	31
Appendix E - Latex Allergy	33
Appendix F - Glass Bead "Sterilizers"	35
Appendix G - U.V. "Sterilizers"	37

Specific guidelines for various types of personal services are contained in supplementary articles. They are intended to be used in conjunction with these general standards.

I. Introduction

Purpose

Traditionally, infection risks in personal services have been related to infectious agents such as Staphylococcus and Streptococcus. However, there has been increasing concern regarding the transmission of blood borne diseases such as hepatitis B (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV) through personal service procedures. These procedures are often invasive and involve the direct application of instruments, chemicals or ultraviolet radiation to the body of a client. For example, body piercing, tattooing and electrolysis involve the introduction of potentially contaminated equipment through the skin and provide an opportunity for the transmission of blood borne diseases.

Other health concerns have also been identified such as chemical sensitivities to tattoo dyes, keloids and scarring from body piercing, and irregular pigmentation and pitting following electrolysis.

The existing Regulations Governing Barbershop and Beauty Culture Parlours under the Public Health Act provide a standard for hairdressing facilities, but they are outdated and fail to adequately address the infection control issues related to the various types of services and procedures offered in today's facilities. As a result, this standard^a has been developed by representatives from Alberta Health and the Regional Health Authorities in consultation with industry to set a minimum standard of operation and sanitation. The standard contains information for both the operators of the facilities and the environmental health field staff involved in regulating the industry.

Scope

This document applies to any facility or person offering the following service(s), but is not limited to:

Body/Ear Piercing	Barbering
Tattooing	Hair Dressing/Replacement
Electrolysis	Esthetics - manicure, pedicure, facial, waxing
Tanning	
Massage	
Sensory Deprivation Tanks	

^a "Standard" is equivalent to guideline or standard, depending on the section.

This document applies in general to all types of personal services and provides information in the areas of infection prevention measures, general sanitation of equipment and premises, waste disposal and occupational health.

Supplementary documents - which focus specifically on body/ear piercing, tattooing, electrolysis, tanning, esthetics, and sensory deprivation tanks - have also been developed. Each document describes the steps in each procedure; the equipment and instruments used; and the critical points in infection prevention.

This document does not address those services offered under the authority of a health care facility (such as a long term care facility) or those services provided by a medical professional registered under professional legislation. Health professionals registered under the Health Disciplines Act - such as acupuncturists, podiatrists, nurses and physicians - are trained in infection prevention and adhere to a professional standard of practice.

Approval of Operation

All personal service facilities are required to obtain approval to operate from the Regional Health Authority (RHA). This document will be used as the principle standard when reviewing an application to provide any of these services.

II. Definitions

Antiseptic	An antiseptic is a chemical agent intended for disinfection of the skin. The chemicals can inhibit the growth of microorganisms or destroy them (eg. 70% alcohol).
Cleaning	Cleaning is the physical removal of organic matter or debris from objects. It is usually done by using water and detergent. This process removes some micro-organisms primarily by mechanical action but does not kill those remaining on the object. Ultrasonic cleaning equipment assists with the cleaning of intricate objects. It does not sterilize or disinfect.
Contamination	The presence of an infectious agent on the body surface or in clothes, instruments or dressings or other inanimate articles or substances including water.
Disinfection	Disinfection is the intermediate measure that kills or destroys most disease producing micro-organisms, except spores.
Infection	Entry and multiplication of an infectious agent into the body.
Infectious Disease Agent	(also referred to as "Pathogen") Microorganisms such as viruses, bacteria, fungi that are capable of producing infection or infectious disease.
Parenteral	Entry into the body through injection into the bloodstream, skin, muscle, and other tissues.
PSW	Personal Services Worker
Reservoir	An animate or inanimate object which is a source of an infectious agent.
RHA	Regional Health Authority
Sterilization	Sterilization is the destruction of all forms of microbial life. This is most commonly achieved by thermal methods.

Direct Contact

Skin to skin contact between the PSW and the client, resulting in the transfer of viruses or bacteria such as impetigo and pink eye

Routine infection surveillance has never been carried out in personal service facilities; therefore, the rate of infection associated with these procedures is not known. Current data, which is limited to case reports or outbreaks, indicates that there is a potential for disease transmission.

The primary infectious agents which may be transmitted during the performance of personal services are:

- Viruses
 - Hepatitis B virus (HBV)
 - Hepatitis C virus (HCV)
 - Human immunodeficiency virus (HIV)
 - Human papilloma virus (HPV) eg. plantar warts
 - Herpes simplex virus (HSV) eg. cold sores, herpetic whitlow of hands
- Bacteria
 - Staphylococcus aureus eg. boils
 - Streptococcus eg. impetigo
 - Pseudomonas eg. folliculitis
- Fungi
 - Tinea pedis ie. athlete's foot
 - Tinea capitis ie. ringworm of the scalp
 - Tinea corporis ie. ringworm of the body
 - Tinea unguium ie. onychomycosis - nail infection (common on hands with excessive water exposure)
 - Candida ie. paronychia - infection of the nail wall
- Ecto-parasites
 - Sarcoptes scabiei ie. scabies
 - Pediculus humani capitis ie. head lice

Sources of Infection

Work Surfaces

The survival time of microorganisms on equipment or work surfaces is not precisely known. However, it is known that warmth and moisture contribute to the survival time of microorganisms. For example, papilloma virus may survive in an improperly cleaned and dried footbath and be spread to the next client.

The survival time of viruses on equipment and surfaces has been studied. It has been found that HIV dies on surfaces in several hours at room temperature whereas HBV may survive heat, freezing and drying for days and even years. Even a small speck of blood on an instrument (visible or invisible) is capable of transmitting HBV to a client or to the PSW.

Invasive Procedures

More is known about the infection risk to health care workers who have sustained an accidental needlestick injury. The risk of contracting infection following exposure to a blood-borne pathogen through the needlestick is estimated to be:

- HBV 19 - 30%
- HCV 4 - 10%
- HIV 0.36%

When a needle breaks a person's skin, blood and body fluids inevitably adhere to the needle or instrument used. When the next customer arrives, any of the contaminated objects, particularly needles may transmit infection through the broken skin. In one outbreak, 30 patients were infected from one carrier through the use of a common needle⁽¹⁾. **It is important to recognize that blood and body fluids do not have to be visible on the instrument or needle to transmit infection.**

Skin

Many species of microorganisms rest on the skin and may be resident (survive and multiply) or transient (skin contaminants for short duration). The skin cannot be sterilized. Therefore, services that involve the skin may result in the transmission of infection, particularly from the moist areas of the body or around the sebaceous glands (one of the many small glands in the skin). When skin is intact, contact with blood/body fluids is a minimal risk.

Personal Services and Associated Infectious Agents

Service	Infectious Agents of Major Concern
Tattooing	HIV, HCV, HBV
Body piercing	HIV, HBV, HCV
Electrolysis	HIV, HBV, HCV, HSV
Facial	Folliculitis, Impetigo, HSV
Pedicure	Plantar wart, Athletes foot
Manicure	Paronychia, Onychomycosis
Massage, Tanning	Scabies, Ringworm of the body
Waxing	Bacterial and viral skin infections
Hairdressing	Ringworm of the scalp, Pediculosis
Sensory Deprivation	Pseudomonas

IV. Cleaning, Disinfection and Sterilization

Classification ⁽²⁾

In order to determine whether to disinfect or sterilize, all equipment, instruments and supplies used in personal services are classified into three categories.

Classification	Definition	Method to be Used
Critical	Items that penetrate the skin or mucous membranes and thereby enter the tissues or other normally sterile areas of the body (eg. electrolysis needles, tattoo needles) ^b	Sterilization
Semi-Critical	Items that come into contact with mucous membranes, those that may potentially penetrate body surfaces, or objects that are used to handle sterile items (eg. forceps, needle holder) (eg. nipper, tweezers, piercing gun)	High level disinfection Intermediate level disinfection may be used on items rarely contaminated with blood/body fluids.
Non-Critical	Items that come in contact but do not penetrate intact skin, or those that do not ordinarily touch the client (eg. combs, tanning beds, head rests, chairs, counter tops, light handles)	Low level disinfection Detergent may be adequate for items that do not touch the client's skin

^b This definition was modified from the Health Canada definition in order to address issues related to personal services.

Cleaning

Adequate cleaning of surfaces is always the first step for both disinfection and sterilization. Cleaning physically removes both the microorganisms which may be contained in organic material, and the organic material which can inactivate disinfectants/sterilants.

Prior to disinfection or sterilization, instruments should be thoroughly washed using water and a detergent. An ultrasonic cleaning device may be used if sharps or other intricate items are being cleaned.

Disinfection⁽²⁾⁽⁹⁾

Disinfectants may be categorized as follows:

1. High Level Disinfectants

These disinfectants destroy all bacteria, fungi, viruses and some spores. Proper use of these disinfectants provides reasonable assurance that the objects are free of pathogens. Most disinfectants of this level can also achieve sterilization if used for a longer time period.

Example: Glutaraldehyde - eg. Cidex, Coldspor, Sonacide, etc.

2. Intermediate Level Disinfectants

These disinfectants destroy most bacteria, fungi, and viruses. The level of disinfection varies widely among different products and cleaning situations.

*Examples: Alcohols - eg. 70% Ethanol, Isopropanol (10 min. immersion)
Phenols - eg. Sanikleen, Surgikleen
Halogens - eg. Bleach (1:10 dilution, 10 min. immersion)⁹*

3. Low Level Disinfectants

These disinfectants will kill some bacteria, viruses and fungi, but may not be effective against specific bacteria and viruses.

Examples: Quaternary ammonium compounds (QUATS) = Zephiran, Fulltrol Plus, Barbicide etc. Most "QUATS" contain benzalkonium chloride. (10 min. immersion)¹⁰

Applicable phenols - eg. Pinesol, Lysol, Dettol

Sterilization Methods

1. Steam Under Pressure (Autoclave)

Sterilization is based on the time- temperature exposure using steam. Heating of the instruments occurs by both steam penetration and heat conduction. The sterilization is dependent on the temperature, pressure, the duration of exposure to steam, packaging of the material and size of the load. It is important that the autoclave chamber be loaded correctly so that steam can circulate and penetrate. Manufacturers' instructions for loading should be followed. Regular maintenance is also very important.

Time temperature relationships, such as those listed below, may be acceptable. Manufacturers' instructions regarding packaging, temperature, pressure and time requirements should be followed. The following are some examples of manufacturer's requirements:

Temperature	Pressure (Pounds/Square Inch)	Time (Minutes)
273°F (134°C)	15	3 ⁽⁴⁾
260°F (126°C)	15	10 ⁽⁴⁾
250°F (121°C)	15	20 ⁽⁵⁾

Advantages

- very effective because saturated steam carries seven times as much available heat as air at the same temperature
- least expensive and most effective method of sterilization

Disadvantages

- unsuitable for plastics with low melting points, powders or anhydrous oils (oils free of water)

2. Dry heat

This method relies solely on temperature without steam to achieve sterilization; therefore, it usually requires higher temperatures and longer exposure times.

Temperature	Time (Minutes)
320°F (160°C)	120
338°F (170°C)	60
374°F (190°C) (rapid heat)	6 (unwrapped) 12 (wrapped)

Advantages

- better for some products, eg. powder
- does not erode glass
- minimal rusting effect
- reaches some parts of instruments by conduction

Disadvantages

- sensitive loading
- long exposure times
- heat penetrates slowly and unevenly
- damages some rubber goods and burns fabric or paper packages

3. Liquids

Sterilization is achieved by a period of immersion in a high level disinfectant. Exposure time is the critical factor.

Example: An accepted chemical liquid sterilant is a 2% glutaraldehyde preparation. ⁽³⁾

Sterilant	Temperature	Exposure Time (Hours)
2% alkaline with phenolic buffer (full strength)	20 °C	7
2% acidic (full strength)	21 °C	10
2% neutral (full strength)	20 °C	10
2% alkaline (full strength)	20-25 °C	10

Advantages

- effective for heat sensitive instruments

Disadvantages

- long immersion time
- difficulty in determining effectiveness
- fresh solutions may be needed for each load
- health risks to those handling the solution

4. Chemical Vapour, Chemi-Clave ⁽³⁾

This method uses a mixture of formaldehyde, alcohols, ketone, acetone and water. This solution is purchased from the manufacturer.

Example:

Temperature	Pressure	Cycle Time
131 °C	20 psi	30 minutes

Wrappers which do not react with vapours have been developed especially for the chemical vapour heat sterilization process. Nylon wrappers are not recommended.

Advantages

- proper exposure destroys all forms of microbial life
- quick and easy to use
- no drying time
- minimal rusting or corrosion
- can be monitored for effectiveness

Disadvantages

- odour is associated with this process - mechanical ventilation of noxious fumes may be required
- will not penetrate fabric wrap
- damages plastic
- high cost of solutions

Note:

Glass bead and ultraviolet "sterilizers" are not capable of sterilizing equipment and instruments. Therefore, they should not be used to achieve sterilization. (Refer to Appendix F and Appendix G)

Monitoring of Sterilization

The following three methods are used to monitor the effectiveness of sterilization.

1. Physical Monitoring

A log of the monitoring information for each load should be maintained including temperature, pressure, cycle length, loading, packaging and test results.

2. Chemical Monitoring

Chemical indicators are used to provide visual confirmation that instruments have been exposed to adequate temperatures; however, they do not guarantee sterilization. These indicators are usually paper or tape strips which are impregnated with a dye. The dye changes colour once the desired temperature is reached.

Chemical indicators are to be used with each load, and manufacturers' instructions should be followed.

3. Biological Monitoring

Biological indicators are used to demonstrate that sterilization has occurred. Biological monitors consist of tubes or paper strips containing "known" amounts of bacterial spores; these spores are deactivated during a successful sterilization process.

Autoclaves and chemi-claves should be tested using *Bacillus stearothermophilus* (a micro-organism with spores that are particularly resistant to moist heat, thus assuring a wide margin of safety). The spores are put through the cycle, then tested for viability.

Dry heat sterilization should be evaluated using *Bacillus subtilis*.

Heat sterilizers should be biologically monitored on a monthly basis to evaluate effectiveness. One positive spore test does not mean items are not sterilized; the sterilizer should be checked for proper temperature, pressure, cycle length and loading, and then retested.

In Alberta, biological monitoring testing is available through many laboratories (See Appendix D).

V. *Operational Requirements*

Premises

1. The worksite shall be appropriate to the personal service activity.
2. The facility shall be entirely separate from any premises used for living, sleeping, dining or other incompatible activity.
3. The premises shall be maintained in a clean and sanitary condition and in good repair.
4. Floors, walls and ceilings of the work area(s) shall be constructed of easily cleanable material.
5. The work area(s) shall be well lit.
6. A handsink(s) shall be provided in a convenient location, and shall be supplied with soap and single service towels in suitable dispensers. It is recommended that a handsink be provided in each room where personal services are performed.
7. A sink with hot and cold running water dedicated to the personal service provided shall be supplied for cleaning of equipment (this sink may be used as a handsink).
8. Washroom facilities shall be conveniently located and available for the operators and clients during the hours of operation.
9. The plumbing and drainage system shall be free from defects and shall be maintained in proper operating condition.
10. In situations where contaminated water may enter the potable water system, a backflow prevention device shall be provided.
11. Natural or mechanical ventilation systems shall be free from defects and shall be maintained in proper operating condition.
12. Work surface(s) - including counter tops, trays, or other surfaces used by the PSW to place instruments and supplies during a personal service - shall have a smooth and impervious finish, and shall be cleaned and disinfected with a low to intermediate level disinfectant after each session.