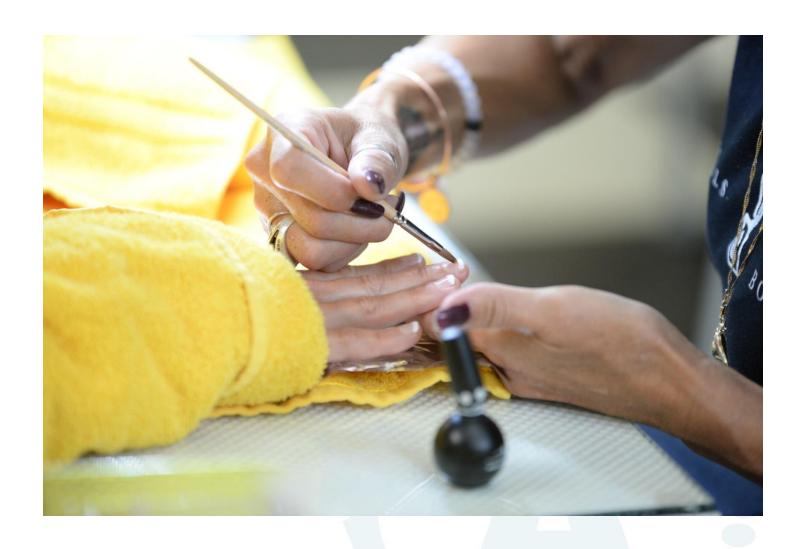


# Apprenticeship

# EST 1 Esthetician – All Trades Sanitation, Disinfection, and Sterilization



This guide is for informational and educational purposes only to provide estheticians with an overview on how to develop safe, appropriate sanitation, disinfection, and sterilization practices. While every effort has been made to ensure the accuracy of the information contained herein, this guide should not be relied upon as the sole source of information on the subject matter nor does SATCC accept any responsibility to update this guide as better or other information becomes available. The provisions of *The Public Health Act, 1994* and *The Health Hazard Regulations* are the official guiding legislation and shall be considered authoritative to the extent they differ from this guide. In the event of uncertainty, you should direct any questions or concerns to your local Public Health Officer or relevant authority having jurisdiction (AHJ).

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This book was developed by the SATCC and the Esthetician Trade Board membership.
Special thanks to Damaris Terleski, Nove Salon & Esthetics Wholesale Ltd, and Veronica Lynne-Swirsky of Spa Academy.

# **Covid-19 Update**

Due to the current health crisis across Canada, while performing client services. various safeguards have been developed and put in place for the safety of Estheticians and their clients.

The Government of Saskatchewan announced the Re-Open Saskatchewan Plan April 23, 2020.

In alignment with the Re-Open Saskatchewan Plan, the SATCC has developed its own plans to re-start SATCC services that were paused due to COVID-19.

Safety is the top priority for our employees and clients, and citizen service was a key consideration in determining when to re-start services.

We are re-starting services gradually, following the direction of public health officials.

Our plans are flexible and may need to change, depending on the circumstances of the COVID-19 pandemic.

For updated information please refer to: <a href="https://saskapprenticeship.ca/re-start-satcc-services-re-start-exams-re-start-psychoeducational-assessments/">https://saskapprenticeship.ca/re-start-satcc-services-re-start-exams-re-start-psychoeducational-assessments/</a>

Regarding Esthetician Journeyperson practical examinations, safeguards have also been put in place to ensure the safety of the Esthetician candidate, their model and SATCC staff. Updated practical examination information has been added to the current Practical Examination Information Sheet for both Esthtechian-Nail Technician and Esthetician-Skin Care Technician practical examinations. Please ensure you have the updated version of these documents when preparing for the practical examination.

The current Examination Information Sheet documents are available at: <a href="https://saskapprenticeship.ca/quick-links/designated-trades/">https://saskapprenticeship.ca/quick-links/designated-trades/</a> Under the Esthetician- Nail Technician or Esthetician-Skin Care Technician trade tabs.

# **Table of Contents**

Objective One	11
Scope of Practice	11
Personal Protective Equipment (PPE) and Supplies	11
Hand Washing	12
What Does "Clean" Mean?	13
An Overview of Sanitizing, Disinfecting, and Sterilizing	13
What is Sanitizing?	14
What is Disinfecting?	14
Critical Items	14
Semi-Critical, and non-Critical Items	15
What is Sterilizing?	16
Storage of Clean Items	16
Objective One Self-Test	17
Objective One Self-Test Answers	19
Objective Two	20
Sanitizing Surfaces	20
Disinfecting Surfaces	20
Disinfecting Surfaces With Disinfectant Wipes	20
Portable Foot Basins	21

Whirlpool Foot Spas, Air-Jet Basins, "Pipe-less" Foot Spas and Other	
Circulating Spas*	.22
Objective Two Self-Test	.23
Objective Two Self-Test Answers	.24
Objective Three	.25
Objective Three Self-Test	.26
Objective Three Self-Test Answers	.27
Objective four	.28
What can be Disinfected?	.28
Disinfecting Instruments	.28
Bits for Electric Files	.28
Linens	.29
Personal Care Packs and Client-Provided Tools	.29
Rocks and Marbles	.30
Objective Four Self-Test	.31
Objective Four Self-Test Answers	.33
Objective Five	.34
Choosing a Chemosterilant / High Level Disinfectant	.34
Re-use Time	.34
Objective Five Self-Test	.37
Objective Five Self-Test Answers	.38
Objective Six	.39
Objective Six Self-Test	.40

Objective Seven	41
Manufacturer's Specifications	41
Purchasing Supplies	42
Objective Seven Self-Test	43
Objective Seven Self-Test Answers	44
Objective Eight	45
Contamination Types	45
Accidental Exposure to Blood and Body Fluid	45
Remediating a Contamination	46
Objective Eight Self-Test	47
Objective Eight Self-Test Answers	48
Objective Nine	49
General Practices	49
Sanitation Between Clients	49
Linens	50
Daily Sanitation	50
Records and Logs	51
Autoclave Records	52
Objective Nine Self-Test	53
Objective Nine Self-Test Answers	55
Objective Ten	56
Contact Surfaces	56
Laundry	56

Steam Sterilization	.56
Manicures and Pedicures	.57
Warts	.57
Blades	.57
Cuticles	.58
Paraffin Wax	.58
Porous and Non-Porous	.58
Brushes and Applicators	.58
Nodule Summary Self-Test	.60
Nodule Summary Self-Test Answers	.64

# Sanitation, Disinfection, and Sterilization

#### Rationale

#### Why is it important to learn this skill?

When working on people, it is important to practice the highest standard of sanitation to prevent the spread of communicable diseases and infections; some can be fatal. The knowledge and practice of sanitation / disinfection / sterilization (SDS) will reduce the risks.

#### **Outcome**

#### When you have completed this module, you will be able to:

Describe and demonstrate proper sanitizing, disinfecting, and sterilizing in the esthetician industry for the prevention of diseases and infections.

## **Objectives**

- 1. Describe the proper terminology used in the Esthetics industry.
- 2. Describe sanitizing and disinfecting surfaces.
- 3. Demonstrate sanitizing and disinfecting surfaces.
- 4. Describe sanitizing and disinfecting instruments.
- 5. Describe how to sterilize instruments.
- 6. Demonstrate sanitizing, disinfecting, and sterilizing instruments.
- 7. Describe manufacturer's specifications.
- 8. Describe disposal and sterilization procedures for contamination.
- 9. Describe best practices for salon sanitation.
- 10. Unanswered questions and contradictions.

### Introduction

Understanding followed by responsible, thorough actions is paramount in the esthetics industry. Nowhere is this more important than in sanitation, disinfection, and sterilization. This module will provide apprentices with the information and confidence needed to operate safe salons. The information here is based on a permanent salon. Temporary salons may have special guidelines which are not included.

For further reading:

- Best Practices for Environmental Cleaning for Prevention and Control of Infections
   In All Health Care Settings 2nd edition. Provincial Infectious Diseases Advisory Committee (PIDAC). 2012.

   Government of Ontario.
- Saskatchewan Personal Service Facility Best Management Practices. 2014. Government of Saskatchewan.

# **Objective One**

When you have completed this objective, you will be able to: Describe the proper terminology used in the Esthetics industry.

#### **Scope of Practice**

A scope of practice is the procedures, actions, and processes that a person is permitted to undertake in performing their job. A scope of practice is defined within the law and limited by education, experience, training, and competency. Always consult with the authority having jurisdiction (AHJ) to be sure of a scope of practice. Examples of AHJ's include local and provincial health authorities, and Infection and Control Departments. Within their scope of practice, an esthetician cannot cut into live tissue, cannot diagnose diseases and disorders. Callus can be reduced, but not removed. Estheticians learn to recognize diseases and disorders, but cannot treat medical ailments. Estheticians can provide aid to some conditions such as excess callus reduction, and ingrown toenail prevention.

**For example**, a client presents with onychomycosis under a nail. Estheticians may recognize this disease, but they cannot inform the client of their opinion, nor can they suggest treatment methods; instead, they should refer the client to a physician. An esthetician could say to the client: "this looks abnormal to me, please have a physician check this."

#### Personal Protective Equipment (PPE) and Supplies

Exposure to the chemicals in this booklet can cause negative health effects. The use of PPE (gloves, eye protection, breathing protection, and proper clothing) can reduce exposure. Refer to EST 2 for a complete list of PPE for this trade. Only commercial grade supplies should be purchased. Salon distributors are recommended because they have access to a wide variety of commercial grade products. Home-use products are not acceptable because they have not been tested in a commercial setting.

#### **Hand Washing**





It is crucial that proper hand washing techniques are performed before and after each service. Hand washing will remove debris and pathogens from flat areas of skin, skin folds, and under nails. Hand sanitizer alone will not remove debris; it will only slow reproduction of bacteria temporarily. Thoroughly wash hands with a soft-bristled, disinfected brush, liquid soap, and warm running water. Dry hands completely with disposable towels and then apply an alcoholbased hand sanitizer. Water-based sanitizers are not effective enough for a salon. Washing hands after the service is performed will reduce the risk of transferring pathogens; in addition, hand washing after the service can reduce the possibility of developing contact dermatitis. Contact dermatitis is a condition that can result from over exposure to enhancement products being left on skin for extended periods of time. Provide clean, disinfected brushes for each client, because

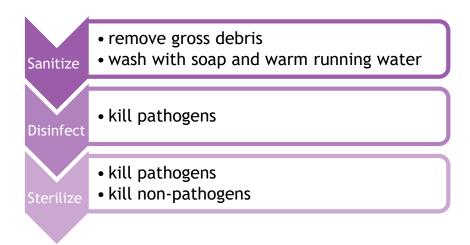
bacteria can transfer to or from a brush. Store used brushes in a sterilisable bowl. Follow the procedures in this booklet to properly clean the brushes and bowl.

#### What Does "Clean" Mean?

An apprentice needs to understand the term "clean" for two main reasons. First, a task can only be completed properly if an apprentice knows what the finished job is supposed to look like. If an apprentice is told to "clean" something, they must know what "clean" means in order to perform the task properly. Secondly, "clean" is often used as a baseline, or measurement, or point of reference. Some surfaces and tools only need to be "clean." For other surfaces and tools, "clean" is not good enough and they must be sterilized. Here is a simple and functional definition for *clean*: tools and surfaces are, at a minimum, disinfected.

#### An Overview of Sanitizing, Disinfecting, and Sterilizing

In the esthetics industry, surfaces and tools must be clean in order to prevent the spread of diseases and infections. Generally, prevention is a three stage process (precise actions in a certain order). The process begins with the removal of gross debris such as dirt and skin cells. The next two stages further reduce then eliminate pathogens. The goal is to have an environment that is theoretically devoid of pathogens (keeping in mind that air itself contains pathogens) and this is never truly possible. Strict adherence to the correct process is necessary to health and safety. It is important to continually inspect instruments and surfaces for signs of damage, defect, and debris such as blood and body fluids.



#### **Porous and Non-Porous Materials**

Porous materials and non-porous materials are treated differently. A **porous** material has minute spaces or holes through which liquid or air may pass. **Non-porous** material does not have spaces of holes through which liquid or air may pass. A porous material cannot be disinfected, while a non-porous material can be disinfected. For example, a glass tool can be disinfected, while a pumice stone cannot.

#### What is Sanitizing?

Many text books describe **Sanitizing** as a process of removing gross debris. This reduces the number of disease-causing germs on clean surfaces to a safe level. Sanitizing can be stated in simpler terms: washing something with soap and water. For example, instruments can be sanitized by scrubbing the tool under running warm water with soap and a brush. Surfaces can be sanitized by wiping the area with soapy water and a cloth.

It needs to be understood that 'safe level' in the definition of sanitizing does not mean that tools are not ready for re-use. Tools must undergo further treatment before being safe for re-use. Rinsing is always done with clean running water.

#### What is Disinfecting?

Disinfecting is the process that eliminates most, but not necessarily all micro-organisms on non-porous surfaces. This process is not effective against bacterial spores. A bacterial spore is a spore or spore-like structure produced by bacteria. Spore formation in bacteria is not the principal method of reproduction but simply a method of surviving unfavourable conditions. After sanitizing, disinfecting is the next stage. Disinfecting requires the use of a chemical other than the soap that was adequate in the previous stage. In a salon, a countertop will be washed with warm soapy water and then allowed to dry. Next, the area is sprayed with a surface disinfectant and allowed to remain wet for a period of time. Contact time is a time period that allows a product to 'do its job.' If a disinfecting spray has as contact time of ten minutes, the surface must remain wet with the product for at least ten minutes in order for the spray to perform properly. All products have their own unique characteristics, and many have different contact times. It is important to read the labels of each product.

#### **Critical Items**

Critical items include instruments intended to or accidentally penetrate the skin or mucus membrane, or contact a puncture site; for example, cuticle nippers or tweezers that have contacted blood or live tissue. Critical items must be sterilized because they have a high risk of spreading infectious diseases.

#### Semi-Critical, and non-Critical Items

Items need to be disinfected to different levels depending on how critical the item is.

Classification	Definition	Level of disinfection
Semi-critical	Any instrument contacting non-intact skin or a mucus membrane*, but does not penetrate it (ingrown nail file or cuticle nippers)	High level disinfection (HLD)
Non-critical	Any instrument contacting intact skin only (cuticle pusher)	Intermediate level disinfection (ILD)
	Any instrument or equipment that does not directly contact the client or contacts only intact skin (UV/LED lamp)	Low level disinfection (LLD)

<sup>\*</sup>A mucous membrane is made up of layers of cells and connective tissues located on body cavities, tracts, canals, and structures that lead to the outside of the body. Of importance to estheticians are the mucus membranes located in/around the mouth, nose, and eyelids.

Level of Disinfection	Description
High level disinfection (HLD)	A process capable of destroying or irreversibly inactivating bacteria that can sit dormant such as tuberculosis; fungi; enveloped viruses; non-enveloped viruses; and some bacterial endospores
Intermediate level disinfection (ILD)	A process capable of destroying or irreversibly inactivating bacteria that can sit dormant such as most fungi; enveloped viruses; and most non-enveloped viruses

Low level disinfection	A process capable of destroying or irreversibly inactivating, at a minimum, vegetative bacteria, some fungi, enveloped (lipid) viruses
(LLD)	and some non-enveloped (non-lipid) viruses

An apprentice may hear the term **Hospital-Grade Disinfectant**: A low-level disinfectant that has a drug identification number (DIN) from Health Canada indicating its approval for use in Canadian hospitals.

#### What is Sterilizing?

**Sterilizing** is the process that eliminates all pathogens from an instrument. It is important to note that after an instrument is submerged in chemosterilant for the contact time, it is sterile. A chemosterilant is a chemical used for sterilizing. Once the instrument contacts air, it is not considered sterile, but rather disinfected. Using an autoclave is a reliable way to ensure that instruments maintain sterility because they are sterilized in an airtight package. Some facilities place tools in an autoclave without using a sterilization pouch. After the autoclave cycle is complete, the tools are placed in a container. In this case, these tools are not considered sterile, but rather disinfected. A surface cannot be sterilized, because it cannot be submerged in chemosterilant and it is in constant contact with air.

#### Storage of Clean Items





After an item has been cleaned to its appropriate level and thoroughly dried (by air or a paper towel) it must be stored. The best option for instruments is storage in sterilizing pouches. These pouches are one-time use only, which prevents the mistake of reusing a storage bag such as a Ziploc bag. Other options include air tight containers. Large items such as moveable foot basins can be stored in a cupboard with the doors closed to decrease air exposure. In the photo above, instruments are stored in self-sealing sterilization pouches.

# **Objective One Self-Test**

1) Match the following terms with the correct definitions:

Sterilization the procedures, actions, and processes that a person is permitted to undertake

in performing their job.

Hospital grade

disinfection tools and surfaces are, at a minimum, disinfected.

**Scope of** a process for reducing the number of disease **practice** causing germs on clean surfaces to a safe level.

**Clean** the process that eliminates most, but not necessarily all micro-organisms on

non-porous surfaces. This process is not effective against bacterial spores.

**Sanitizing** a time period that allows a product to 'do its job.'

**Contact time** means that a disinfection product kills the tuberculosis virus in less than 10

minutes.

**Disinfecting** the process that eliminates all pathogens from an instrument.

2) List three things that are outside an esthetician's scope of practice.

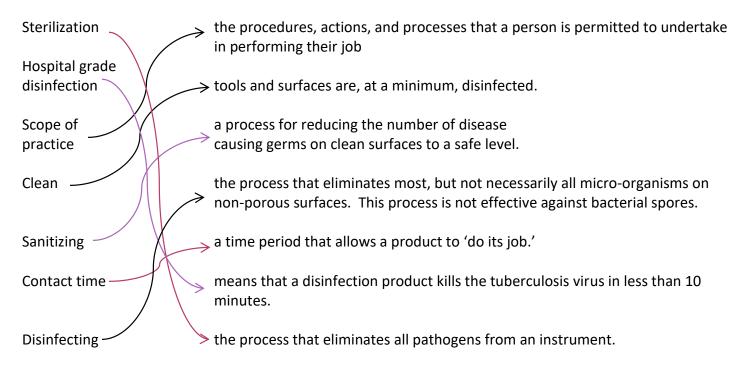
3) Why is it important to know what 'clean' means?

4) What is a non-critical item?

5) What is intermediate level disinfection?		
6) What is the best option for storing items after they have been cleaned to the appropriate level?		

# **Objective One Self-Test Answers**

1) Match the following terms with the correct definitions:



- 2) An esthetician cannot cut into live tissue, diagnose diseases, diagnose disorders, Remove callus, and treat medical ailments.
- 3) An esthetician needs to know what 'clean' means in order to properly complete a task, and 'clean' is often used as a baseline, or measurement, or point of reference.
- 4) Any instrument contacting intact skin only, or any instrument or equipment that does not directly contact the client or contacts only intact skin.
- 5) A process capable of destroying or irreversibly inactivating bacteria that can sit dormant such as tuberculosis; most fungi; enveloped viruses; and non-enveloped viruses.
- 6) The best option for instruments is storage in sterilizing pouches.

## **Objective Two**

When you have completed this objective, you will be able to: Describe sanitizing and disinfecting surfaces.

#### Sanitizing Surfaces

Common surfaces that need sanitizing include countertops, workstations, and equipment such as beds and lamps. One method of sanitizing surfaces is to thoroughly wash them with a clean cloth and soapy water. Let the surface dry. A second method of sanitizing a surface is to wipe the surface with a disinfectant wipe (such as PREempt Wipes® / CaviWipes™).

#### **Disinfecting Surfaces**

After a surface has been sanitized, it is ready for disinfection. Most often, a spray such as CaviCide™ is used. This spray disinfects hard, non-porous surfaces where environmental controls of cross contamination between treated surfaces is important. The contact time for CaviCide1™ is one minute. Once the surface is dry from sanitizing, spray it with an approved product and ensure that the surface remains wet for the minimum contact time. Some manufacturers require that surfaces be rinsed with clean water after the contact time has expired. Surfaces can be air dried or dried with a paper towel. Never use a cloth. It is important to read the labels of each product. Apply spray products carefully to minimize introducing the chemical into the air which can be inhaled.

#### **Disinfecting Surfaces With Disinfectant Wipes**

Surfaces can be disinfected with disinfectant wipes. The area is cleaned thoroughly with the first wipe, then the wipe is discarded. A second wipe is used to cover the area with a disinfecting solution. Wet the area with the second wipe, making sure that the area stays wet for the minimum contact time. In order to ensure that the area remains wet for the minimum time, the wipe can be laid over the area. For example, a wipe can be laid inside a tunnel lamp after it has been initially cleaned. If an area is in danger of drying after the first cleaning, the area can be sprayed with the same brand of surface disinfectant to keep it wet.

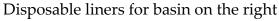
#### **Portable Foot Basins**

Portable foot basins must be metal or glass because these materials can be disinfected. Glass is not recommended because it is breakable. Over time, scratches can weaken the glass, making it prone to failure. Plastic basins cannot be disinfected because they are porous. In order to disinfect a portable foot basin, follow these steps. Step one: scrub the entire basin—inside and out—with soap and warm running water; rinse; and, dry with paper towel. Step two: spray the inside of the basin with a surface disinfectant, then cover the inside of the basin with paper towel. Make sure to spray the paper towel until saturated. This ensures that the surface remains wet for the minimum contact time. Once the contact time is met,

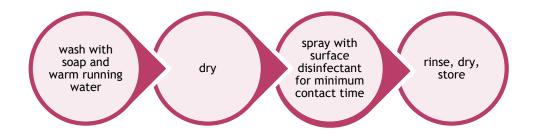


remove the paper towel and rinse if required by the manufacturer's specifications. Dry and store in a cupboard or other protected location that will reduce its chances of contamination. Even when using a liner, the basin must still be disinfected.









# Whirlpool Foot Spas, Air-Jet Basins, "Pipe-less" Foot Spas and Other Circulating Spas\*

#### **After Each Client**

- 1. Drain the foot spa and remove any visible contaminants.
- 2. Remove screen.
- 3. Wash and scrub the basin with soap and warm water.
- 4. Fill the foot spa with soap and warm water to above the fill line and turn on the recirculation system as per manufacturer's directions.
- 5. Drain and rinse with clean water.
- 6. Fill the spa with an intermediate-level disinfectant.
- 7. Turn on the recirculation system and allow the disinfectant to run through the unit.
- 8. Drain the foot spa and rinse with clean water.
- 9. Replace screen.

#### At the end of the day

- 1. Drain the foot spa.
- 2. Remove the filter screen, jets, all removable parts and any visible contaminants.
- 3. Clean the basin, screen, jets and other removable parts with soap, water, and a brush.
- 4. Reassemble unit.
- 5. Fill the foot spa with water and low sudsing detergent, turn on the re-circulation system and allow to run as per manufacturer's directions.
- 6. Drain and rinse the unit again, refill with water and a high-level disinfectant.
- 7. Turn on the re-circulation system and allow to operate as per manufacturer's directions.

8. Drain the unit, rinse with clean water.
*Ensure the manufacturer's operating and cleaning instructions are followed.
Saskatchewan Personal Service Facility Best Management Practices 2 July 2014
Objective Two Self-Test
1) What is the difference between sanitizing and disinfecting a surface?
2) Disinfectant wipes are used to disinfect a surface. What is done to prevent the second wipe from drying out?
3) True / false. A liner is used inside a foot basin. The foot basin must still be disinfected.
4) After a client has used a whirlpool foot spa, what is done with the water in the foot spa?
5) At the end of the day, how many times is the circulating foot tub drained? (Check the "End of the Day" procedures on page 22).

# **Objective Two Self-Test Answers**

- 1) Sanitizing is a process for reducing the number of disease-causing germs on clean surfaces to a safe level, while disinfecting eliminates most, but not necessarily all micro-organisms on non-porous surfaces.
- 2) The area can be sprayed with the same brand of surface disinfectant to keep it wet.
- 3) True.
- 4) The water is drained.
- 5) Three times.

# **Objective Three**

When you have completed this objective, you will be able to:

Demonstrate sanitizing and disinfecting surfaces.

Contact time for surface disinfecting:

#### **Laboratory Exercise**

**Purpose**: Demonstrate sanitizing and disinfecting surfaces.

Materials:

Clean cloth	Paper towels
Sink with warm running water	Hard, non-porous surface to disinfect
Soap	PPE

Commercial grade surface disinfectant such as but not limited to: PREempt  $CS20^{\text{TM}}$ , PREempt Wipes, PREempt HLD5, CaviCide, CaviWipes, CaviWipes.

**Procedure**: using the information provided in this module and the instructor's guidance, follow the steps to sanitizing and disinfecting a surface. Follow all manufacturer's specifications. Using the commercial grade product(s) provided by the instructor, complete the information below before beginning work.

Product name:	Surface disinfectant?
Method of use:	

# **Objective Three Self-Test**

1)	What is the process for sanitizing a surface?	
2)	What is the process for disinfecting a surface with a wipe?	
3)	During this laboratory exercise, what was used: a clean cloth or paper towels?	
4)	During this laboratory exercise, which surfaces were sanitized and disinfected?	
5)	What was the expiry date of the product(s) that were / was used?	

# **Objective Three Self-Test Answers**

- Surfaces can be sanitized by thoroughly wash them with a clean cloth and soapy water, then letting the surface dry. Alternatively, wipe the surface with a disinfectant wipe.
- 2) Thoroughly clean the area with the first wipe, then discard the wipe. Use a second wipe to cover the area with a disinfecting solution. Wet the area with the second wipe, making sure that the area stays wet for the minimum contact time. In order to ensure that the area remains wet for the minimum time, the wipe can be laid over the area. If an area is in danger of drying after the first cleaning, the area can be sprayed with the same brand of surface disinfectant to keep it wet.

# **Objective four**

When you have completed this objective, you will be able to:

Describe sanitizing and disinfecting instruments.

Instruments are sanitized in a manner similar to surfaces. Instruments are brushed with soap under warm running water, rinsed, then dried. However, instruments and surfaces are disinfected differently. Instruments frequently contact skin cells and they are more likely to contain disease or infection.

#### What can be Disinfected?

In short, glass and metal can be disinfected. Examples include nail clippers, glass files, metal files, and moveable metal or glass foot basins. Porous items cannot be disinfected. Porous materials include wood, cotton, gauze, and plastic. Disposable items such as paper files are for a single use and must be discarded.

#### **Disinfecting Instruments**

Discard porous instruments. These are single use only. Sanitize and dry non-porous instruments, then immerse in commercial grade HLD for the minimum contact time stated by the manufacturer. Rinse and dry the instrument. The preferred drying method is with paper towel. Air drying is not recommended because air may contain pathogens, and the length of time exposed to air should be minimized. A *pathogen* is any disease producing agent, especially a virus, bacterium, or other microorganism. After drying, instruments should be stored in sterilization pouches. These pouches are the preferred method of storage. Air tight containers may also be used.

#### **Bits for Electric Files**

Bits for electric files are comprised of various materials. They can be constructed from industrial diamond particles, carbide, and bonding agents. Check with manufacturer's specifications to determine if a bit can be disinfected. Porous bits such as those used for polishing and ceramic / pumice stone bits cannot be disinfected.



Because bits have tiny grooves and depressions which can hold material, an additional step is needed before the SDS cycle. Brush the bit with a brass brush to remove particles from the brush. After this initial step, the sanitation stage can begin. Brass brushes can be purchased at most suppliers and vary in shapes. Brass is a softer metal, so it will dull bits slower than using a brush of harder metal. It is easy to brush the bit while it is in the electric file. Lock the bit in place and operate the electric file on a medium to low speed. Lightly touch the bit into the ends of the brass brush. Turn the electric file off, and brush the bit parallel to any grooves. Brushing the bit at different angles will improve the removal process. Store disinfected bits in an airtight container until use.

#### Linens

Linens must be washed separately from other items in a household or salon. Do not use hot water; use warm water with chlorine bleach (oxygen-based bleaches are inadequate) and detergent. Dry the linens on the hottest setting until thoroughly dry. Do not rinse soiled articles.

Separate baskets must be used for the dirty linens and clean linens. Make sure that baskets have lids and are labelled in a permanent and legible manner. Disturbing linens (shaking or fluffing) can release pathogens into the air. When removing linens after a service, carefully fold or roll them to ensure the part of the linen that was contacting the client is folded or rolled on the inside. Soiled laundry is to be handled with gloved hands. Linens are to be used only once per client, placed into laundry bags or containers at the point-of-use, and then transported to the laundry area. Design the laundry area to keep soiled and clean laundry separate. This prevents cross contamination. When practicable, minimize agitation when stripping linens after a service, transporting, cleaning, and storing.

	Linens			
Disinfectable / Sterilizable	Sanitize Only	Sanitize and Disinfect	One Time Use	
	Towels Sheets Pillows Blankets Headbands Pillow cases			

#### **Personal Care Packs and Client-Provided Tools**

Personal care packs are often used to reduce cost. This pack would typically include a foam 'disinfectable' file and a buffer block for the exclusive use of the client. The pack is kept at the spa, and its contents are used for each visit. Packs are labeled to prevent cross contamination. Keeping these items for reuse prevents the

salon from purchasing new items for every visit. These items must still be sanitized to prevent the client from re-contaminating themselves. In between services a client may have contracted a disease which is then transferred to the items in the care pack. Sanitizing will help prevent the client from becoming re-infected every time they receive a service. The items in a care pack should be stored in a fashion that allows air flow. An air-tight container provides an environment that encourages the growth of pathogens and bacteria.

\*Foam 'disinfectable' nail files / buffers can only be sanitized; best practice is to consider them single use tools.

Clients sometimes provide their own tools for salon services. Keep in mind that these implements must always be cleaned to the highest level possible by the apprentice before beginning the service.

#### **Rocks and Marbles**

'Specialty' rocks (non-porous) and marbles are often used in massages and to provide texture. They should be disinfected in the same manner as instruments. Some estheticians overlook rocks and marbles, forgetting to disinfect them. Marbles are sometimes put into foot basins. This is not recommended, as the marbles can chip and cut clients.

# **Objective Four Self-Test**

1)	Identify four types of porous materials.
2)	After an instrument has been disinfected, why should it not be 'air dried'?
3)	What is a pathogen?
4)	When has a contamination occurred?
5)	How are porous items bagged after a contamination?
6)	To what level can a dust brush be cleaned?

7) Can a wood foot file be disinfected and reused?

8)	What is the temperature of the w	vater used for washing linens?
9)	Consider the items in a spa pack.	How is cross contamination prevented?

August 2020

# **Objective Four Self-Test Answers**

- 1) Wood, cotton, gauze, and plastic.
- 2) Air drying is not recommended because air may contain pathogens, and the length of time exposed to air should be minimized.
- 3) A pathogen is any disease producing agent, especially a virus, bacterium, or other microorganism.
- 4) A contamination has occurred if an implement has come into contact with blood or bodily fluids.
- 5) They are double bagged.
- 6) It can only be sanitized.
- 7) No. It is a single use tool and must be discarded after use.
- 8) Warm water is used.
- 9) The items are sanitized after each visit.

## **Objective Five**

When you have completed this objective, you will be able to:

Describe how to sterilize instruments.

The first step in sterilizing instruments is sanitizing as per Objective Four. Discard any disposable instruments. Metal and glass are the only sterilizable instruments. Submerge in a chemosterilant for minimum contact time, as per manufacturer's specifications. A *chemosterilant* is a chemical compound that causes reproductive sterility in an organism. In other words, a chemosterilant is a chemical that destroys all forms of microbial life including bacteria, viruses, spores, and fungi. Once contact time is met, remove the instrument from the chemical with rubber gloves and / or tongs. Rinse the instrument under warm running water, then dry it with a paper towel and package it. Air drying of instruments is not recommended because of an increased chance of contamination. Package the tools in sterilization pouches or air-tight containers.

#### Choosing a Chemosterilant / High Level Disinfectant

Before a chemical can be selected, read and understand the label to make sure that it is correct for the application. A HLD must, at minimum, used for semi-critical instruments; therefore, choosing a disinfectant for them is acceptable. In contrast, a critical instrument must be sterilized, and a disinfectant will not meet that requirement and a chemosterilant must be selected. Contact time for both chemosterilants and disinfectants vary between manufacturers and products produced by a common manufacturer. All chemicals for disinfecting and sterilizing *acceptable for use in Canada* are identified by a Drug Identification Number (DIN). A DIN is proof that the product has been registered and tested by Health Canada. For a product to be a minimum of a HLD, the label must contain the following statements:

- 1) tuberculocidal
- 2) sporicidal
- 3) fungicidal
- 4) viricidal (not necessary)

Chemicals have expiry dates, so regularly check the date of all chemicals. If a chemical has passed its expiry date, it can no longer be considered effective and must be disposed of according to local regulations.

#### **Re-use Time**

A chemosterilant or disinfectant can be poured into an immersion tray at the start of a work day and be used throughout the day for instrument submersion. The tray of chemical can stay out for a period of time dependent on several factors. Each manufacturer's specifications will state the time period if the product is suitable for re-use. Not all chemicals are suitable for re-use. The chemicals must be discarded if they

- Contain visible contaminants such as debris
- Have been diluted with water beyond manufacturer's mixing ratios
- Have reached the end of their re-use time
- Have been contaminated in any other fashion



When discarding chemicals, follow the guidelines set out in the MSDS or SDS. Immersion trays must be sanitized thoroughly and dried completely before adding new chemical. The photograph to the left shows an immersion tray.

Maximum Level of Sanitation	One Time Use	Sanitizable Only	Sterilizable
	Orange wood sticks	Plastic cuticle pusher	Metal cuticle pusher
Instruments	Paper nail files	Credo Tool	Diamond bits
(this list is not	Credo blades	Make-up brushes	Carbide bits
exhaustive)	Paper foot files	Dust brushes	Diamond nail file
	Wood foot files	Scrub brushes	Cuticle nippers
	Wooden spatula		Ingrown nail files
	Cotton		Steel files
	Gauze		Glass files
	Wipes		Corn chisel
	Arbor bands		Ceramic foot file
	Wax refill rollers (one client per		Metal spatula
	roller)		Extractors
	Disposable make-up applicators		Tweezers
	Foam 'disinfectable' nail Files*		Rasps

\*Foam 'disinfectable' nail files can only be sanitized; best practice is to consider them single use tools. See **Personal Care Packs** on page 30.

Maximum Level of Sanitation	Sanitizable	Disinfectable
	Electric file	Pedicure basin (HLD)
Equipment	Lamps	Esthetician bed and chair (LLD)
(this list is not	Paraffin warmer	Pedicure station (LLD)
exhaustive)	Wax pots	Nail station (LLD)
	Wax roller warmers	Chairs (LLD)
		Stools (LLD)
		UV / LED light units (LLD)
		Make-up station (LLD)

# **Objective Five Self-Test**

1)	What is a chemosterilant?
2)	Consider the process of sterilizing a glass file. What is the final step?
3)	To what level is a critical instrument cleaned?
4)	Identify four reasons for discarding a chemosterilant that is in a tray, being used for sterilizing instruments:

# **Objective Five Self-Test Answers**

- 1) A chemosterilant is a chemical that destroys all forms of microbial life including bacteria, viruses, spores, and fungi.
- 2) Package the tool in sterilization pouches or air-tight containers.
- 3) It is sterilized.
- 4) The chemosterilant may contain visible contaminants, it may have been diluted with water beyond manufacturer's mixing ratios, it may have reached the end of its re-use time, and it may have been contaminated in any other fashion.

# **Objective Six**

When you have completed this objective, you will be able to:

Demonstrate sanitizing, disinfecting, and sterilizing instruments.

### **Laboratory Exercise**

**Purpose**: Demonstrate sanitizing, disinfecting, and sterilizing instruments.

**Materials**: as chosen by instructor. Must include at least one critical instrument. May include but is not limited to:

Paper towels	Glass file	
Sink with warm running water	Metal foot file	
Soap	Cuticle nippers	
Comedone extractor	PPE	
Commercial grade high level disinfectant or chemosterilant such as but not		

Commercial grade high level disinfectant or chemosterilant such as but not limited to:  $PREempt\ CS20^{\text{TM}}$ ,  $PREempt\ HLD5^{\text{TM}}$ ,  $CaviCide^{\text{TM}}$ .

**Procedure**: using the information provided in this module and the instructor's guidance, follow the steps to sanitizing, disinfecting, and sterilizing instruments. Follow all manufacturer's specifications. Using the commercial grade product(s) provided by the instructor, complete the information below before beginning work.

Product name:	High level disinfectant?	
	Chemosterilant?	
Method of use:		
Contact submersion time:	Expiry date:	
Description and arrela-	Marinerum darra of no reac	
Day of re-use cycle:	Maximum days of re-use:	
Instructor verification:		

# **Objective Six Self-Test**

1)	What material was the chemical tray made from?
2)	What were / was the semi-critical instrument(s) in this experiment?
3)	What were / was the critical instrument(s) in this experiment?

## **Objective Seven**

When you have completed this objective, you will be able to:

Describe manufacturer's specifications.

### **Manufacturer's Specifications**

Manufacturers are constantly bringing new products forward. Each new product has unique advantages, disadvantages, handling procedures, and storage requirements. Each chemical must be used according to its own specifications. Before working with a chemical, always consult the Material Safety Data Sheet (MSDS) or the Safety Data Sheet (SDS) that was provided by the supplier.

## **Questions to ask When Reading Labels**

Do I spray the product or immerse instruments in it?

Is this product for surfaces or instruments?

Am I required to dilute it? If so, what are the ratios?

What is the procedure if the solution becomes contaminated?

How long does it take to use this product?

How often is the disinfection tray emptied (and cleaned?) Daily, weekly, bi-weekly?

What is the proper disposal method?

What is the contact time?

#### **Typical Product Label**



## **Purchasing Supplies**

Only commercial grade supplies should be purchased. Salon distributors are recommended because they have access to a wide variety of commercial grade products. Home-use products are not acceptable because they have not been tested in a commercial setting.

# **Objective Seven Self-Test**

1)	What must be consulted before working with a chemical?		
2)	Why is it recommended to purchase supplies from a salon distributor?		
3)	Why are home-use products not acceptable for use by estheticians?		

# **Objective Seven Self-Test Answers**

- 1) The Material Safety Data Sheet (MSDS) or the Safety Data Sheet (SDS) that was provided by the supplier.
- 2) They have access to a wide variety of professional grade products.
- 3) They have not been tested in a commercial setting.

## **Objective Eight**

When you have completed this objective, you will be able to:

Describe disposal and sterilization procedures for contamination.

## **Contamination Types**

Two types of contamination can occur: body fluid, and chemical. A body fluid contamination occurs when a client is cut and blood is present, or other body fluids are present. A chemical contamination occurs when a chemical such as a primer (which is acidic) is spilled. When remediating a chemical contamination, consult the MSDS or the SDS that was provided by the supplier. Always assume that blood and body fluids contain pathogens.

### **Accidental Exposure to Blood and Body Fluid**

- 1. Exposure to blood or body fluids presents a high risk of transmission of blood-borne pathogens.
- 2. Blood and body fluids may contain pathogens such as Hepatitis B (HBV), Hepatitis C (HCV), or Human Immunodeficiency Virus (HIV). Estheticians may be exposed to blood-borne pathogens by:
  - a needle prick or cut from a sharp object;
  - contacting the esthetician's broken skin (open cut, wound, dermatitis) with blood or body fluid; or
  - contacting the esthetician's mucous membrane (e.g. eyes, nose, mouth) with blood or body fluid.
- 3. Each salon must create an 'Accidental Exposure to Blood and Body Fluid Protocol' and train workers to carefully follow it. If accidental exposure occurs, the esthetician delivering the service is to follow the salon's protocol. Here is a sample protocol:
  - Wash hands and put on new single use gloves and other (PPE) as needed prior to handling or dressing the wound.
  - Allow the punctured area to bleed freely; this reduces the amount of contamination that may enter the body. Do not 'milk' the wound.
  - Wash the area with liquid soap and running water.
  - Clean the area with an antiseptic.
  - Cover the wound with a clean dressing or bandage.
  - If blood has splashed into the eyes or mouth, flush the area with water for 15 minutes.
  - Ensure the client contacts a physician or if in a rural area, goes to the nearest Emergency Room for immediate assessment of the need for post-exposure treatment (or prophylaxis). Note: some treatments must be initiated within 2 hours of exposure.
  - Advise client that blood tests may be required.
  - Document the following details of the blood and body fluid exposure:
    - a) Personal information of individuals involved, including: name (first and last), address, telephone number, driver's license number (if available) and

birth date of person exposed

- b) Date and time of injury
- c) Site of injury
- d) Circumstances of injury
- e) Action taken
- 4. It is important to remain calm. Keep the client calm and informed. Ask them how they are feeling, and talk to them during the process.

Saskatchewan Personal Service Facility Best Management Practices 2 July 2014

### Remediating a Contamination

Use all required PPE during remediation; this may include eye protection, gloves, and breathing protection. Once the client has been cared for, the area must be remediated. Disinfect the area according to the procedures previously outlined in this module. Instruments must be sterilized.

Sharps and biomedical wastes (e.g. blood) are to be disposed of safely and properly in a puncture resistant container. Sharp wastes include, but are not limited to: needles, re-sheathing needles, scalpel blades, lancets, and broken pipettes. Seal all non-sharps, disposable tools in a bag. Seal the bag inside a second sealable bag (double bag), place the bag in the trash can, immediately dispose of the trash can's contents in the outside garbage bin.

Linens contaminated with blood and / or body fluids can be cleaned through the regular laundry process. At the site of contamination, place linens in a plastic bag and label the bag with the contents; empty the bag into the washing machine; wash linens as noted in Objective Four. Place plastic bag in the trash can, immediately dispose of the trash can's contents in the outside garbage bin.

EST 9, Safety – Part 1, contains information regarding hazard control programs and exposure control plans.

# **Objective Eight Self-Test**

1)	Which pathogens can be in blood or body fluid?
2)	What should always be assumed regarding blood or body fluids?
3)	What is the purpose of an 'Accidental Exposure to Blood and Body Fluid Protocol'?
4)	What is done during a contamination, after the client has been taken care of?
5)	How are contaminated linens transported from the site of a contamination to the washing machine?

# **Objective Eight Self-Test Answers**

- 1) Hepatitis B (HBV), Hepatitis C (HCV), and Human Immunodeficiency Virus (HIV).
- 2) Assume that the blood or body fluids contain pathogens.
- 3) Its purpose is to allow estheticians to safely respond to a contamination.
- 4) The contamination site is remediated.
- 5) At the site of the contamination, linens are placed in a plastic bag and transported to the washing machine.

## **Objective Nine**

When you have completed this objective, you will be able to:

Describe best practices for salon sanitation.

#### **General Practices**

Wash hands prior to initiating any procedures and between tasks if interrupted while performing a personal service; wear single use gloves for procedures that may result in contact with blood or body fluids or non-intact skin; and conduct a thorough evaluation of the site to which the personal service will be administered (e.g. scalp, fingers, toes, nails, skin) prior to commencing.

Depending on the type of personal service to be provided, give clients appropriate PPE such as eye protection or coverings.

Refuse service to a customer affected by an infection or condition such as fungus, nail bacteria, weeping lesions, weeping dermatitis, eczema, broken skin, inflamed skin, infected skin or any other evidence of infection or irritation. Advise the client to consult their health care provider. Consult EST 22 for more information.

All instruments, equipment, devices or tools are to be of durable construction, maintained in a clean and sanitary condition, and in good repair. Instruments should be stainless steel or glass.

Credo blades are never reused. They are sharps, and must be new and unused (direct from the manufacturer) at the point of use and discarded immediately and appropriately after each client use. For proper disposal refer to EST 9.

Products such as wax, pigment, creams, lotions, and cosmetics are to be kept in clean, closed containers and dispensed by:

- a single service spatula or sterilizable spatula to remove a portion of the product from its container; or,
- a tube or pump container to ensure the remaining portion does not become contaminated.

Except for service or hearing dogs that assist persons with impairments, animals are not permitted in areas where esthetic services are provided.

#### **Sanitation Between Clients**

Before commencing, all instruments and/or equipment should be laid out on the work station. Any instruments and/or equipment that were laid out but not used are considered contaminated and are discarded if single-use, or cleaned and disinfected or sterilized.

Clean and disinfect environmental surfaces and non-clinical devices (e.g. manicure/pedicure tables, trays, and magnifying lamps) between uses if they are not protected by coverings or sleeves during the service.

Surfaces that directly contact the client's skin are to be either cleaned (water and detergent) and disinfected with a LLD between uses or covered with a single-use cover. Covers are to be discarded after each client. If surfaces have been covered all day and were unused, clean the surfaces and disinfect them with a LLD at the end of the day.

Items that cannot be effectively cleaned and disinfected or sterilized (e.g. emery boards, pumice stones and makeup applicators) are considered single use and disposable.



Begin by removing all linens and placing them in the dirty laundry hamper. Discard all single-use tools. Disinfect the surface of the workstation, all equipment, furniture, and instruments. Use a fresh cloth with soapy water to wipe the desk, inside of lamps, and the chairs. Allow the water to dry, then use a surface disinfectant and paper towel to wipe down these areas and ensure that they remain wet for the required contact time. Bring instruments to the sink and sanitize them according to the manufacturer's specifications. Sweep the floor. Replace the linens.

It is a good practice to indicate when a station has been disinfected. Why? Some apprentices use a written sign or special lamp to indicate that the station is disinfected and ready for the next client. Others prefer creative or 'atmosphere enhancing' methods such as laying a flower on the station.

#### Linens

Care for linens as per the instructions in Objective Four.

### **Daily Sanitation**

Regularly clean environmental surfaces such as flooring, walls, windows, tables, and chairs not in the personal service work area. Keep these areas in a visibly clean condition.

Environmental surfaces such as fixtures, counters and floors in washrooms are to be cleaned at the end of the day and when visibly soiled.



This bed is made of a smooth, plastic-like material that is easier to clean than a more-porous cloth.

Mop water and other liquids are to be disposed of in a manner that prevents the contamination of personal service equipment, surfaces, and supplies. Mops and similar floor cleaning equipment are cleaned in a manner that does not to contaminate instruments, equipment, and items.

After services have been performed on the final client of the day, stations must be sanitized as noted above. All workspaces should be swept and free of debris. Applicable surfaces such as floors and staff-room countertops should be washed. Make sure to disinfect things that are touched during the day: chairs, remote controls, etc. Waiting clients often look at corners, nooks, and crannies. They do not want to see dust and lint. As clients walk through salons, they observe the areas and rooms around them. Keeping the entire salon clean and tidy will increase the image of the workspace.

As an apprentice and journeyperson, it is important to maintain a high standard and differentiate yourself. Good hygiene practices can be used to separate salons. Hygiene relies on education, training, and good salon management. High quality salons hire educated, responsible staff, and they spend the money needed to maintain hygiene. Make sure to bring respect to the trade.

### **Records and Logs**

Documentation of safety procedures and maintenance of client records demonstrate owner/operator duediligence in operating and maintaining the personal service facility. Written procedures should be in place to record the details of any complaints received with regard to personal services provided within the facility. Accurate client records should include:

Full client name Address Driver's License number (if available)

Telephone numbers Birthdate Medical conditions/concerns

Date of service Type of service Concerns/Issues regarding service

Name of esthetician

This information is necessary for follow-up by the AHJ in the event that a client or esthetician has or is suspected of having acquired a communicable disease or infection through the salon.

All personal service records are confidential client information; however details related to accidental exposures may be released to a health authority upon request. Records are to be kept on-site for a minimum of two years and be available for review by the AHJ.

#### **Autoclave Records**

Records for autoclaves are more detailed. They should include:

- daily disinfection test results, e.g. test strips or documentation indicating when disinfection solutions were changed;
- details of each sterilization load including the temperature, duration, pressure, load identification number (for tracking sterilization history if necessary), date, and initials of the individual responsible for sterilization of the instruments and equipment. Some autoclaves are equipped with print-out capability that records these details. This information should be reviewed, dated and signed by the owner/operator;
- chemical monitoring records for each sterilizer load;
- biological monitoring test results. The results of autoclave spore testing should be retained in a logue within the facility.

# **Objective Nine Self-Test**

1)	When would an esthetician refuse service to a client?
2)	How is lotion to be dispensed?
3)	Before commencing performing a service, an esthetician lays out several instruments on the work station. What is done with unused instruments after the service is completed?
4)	A surface directly contacts the skin of a client during a service. How is the surface cleaned?
5)	How is a laundry area designed?
6)	How are mops and similar floor cleaning equipment cleaned?
7)	Identify four pieces of information that are included in a client record:

۱8	W/ho	reviews and	signs the	autoclave	records?
$o_1$	vviic	TEVIEWS allu	סוצווא נווכ	aututiave	TECOLUS:

# **Objective Nine Self-Test Answers**

- 1) If the client has an infection or condition such as fungus, nail 'mould', weeping lesions, weeping dermatitis, eczema, broken skin, inflamed skin, infected skin or any other evidence of infection or irritation.
- 2) With a single service spatula, or a tube or pump.
- 3) Unused instruments are discarded if single-use, or cleaned and disinfected or sterilized.
- 4) Clean the surface with water and detergent, and disinfect it with a low level disinfectant.
- 5) It is designed to prevent cross contamination between clean and dirty laundry.
- 6) They are cleaned in a manner that does not to contaminate instruments, equipment, and items.
- 7) Any of the following: full client name, address, driver's License number (if available), telephone numbers, birthdate, medical conditions/concerns, date of service, type of service, concerns/Issues regarding to service, name of esthetician
- 8) The owner/operator.

## **Objective Ten**

Unanswered questions and contradictions.

When living in a scientific, modern country such as Canada, people tend to believe in the infallibility of science. Science, however, is sometimes contradictory, and new discoveries replace old 'scientific truths'. The trade of Esthetician is relatively new in Canada; it is developing at a fast pace, hand in hand with the associated science, its contradictions, and its new discoveries. This Objective presents some unanswered questions and conflicting information.

#### **Contact Surfaces**

SDS is to be performed on surfaces that directly contact a client's skin (such as client chairs, beds, and work surfaces). The level of SDS is dependent upon the nature of the contact and the condition of the skin. If disposable covers are used, they are to be discarded and the surfaces underneath cleaned. What is to be done with fabric surfaces that are in contact with clients' skin? What is to be done with fabric surfaces that are underneath disposable covers?

### Laundry

Literature states that soiled laundry is to be handled with gloved hands. The definition of 'soiled' is often not present. 'Soiled laundry' frequently refers to laundry that has contacted body fluid(s) and/or chemicals. Under normal circumstances, it is not necessary to handle towels and sheets with gloved hands.

#### Steam Sterilization

Critical items that penetrate a mucus membrane or have contacted blood or live tissue must be sterilized because they have a high risk of spreading infectious diseases.

Steam sterilization is considered by some to be the best type of sterilization for spa instruments. The following information is from:

http://university.steris.com/resources/guide-to-steam-sterilization-cycles-steam-flush-pressure-pulse/

Steam sterilization cycles can be divided into three distinct phases 1) conditioning, 2) exposure, and 3) drying. During conditioning, air is removed from the load and the items in the load are heated to the desired temperature for sterilization. Conditioning is important because if there is any air in the load it may prevent the sterilant from coming into contact with load items, leading to sterilization failure. During exposure, the load is held at a specific temperature for a time known to provide effective sterilization. After exposure, steam is removed from the chamber and the load is dried to prevent recontamination of the instruments through wicking of microorganisms through a wet wrap.

[Several types of steam sterilization are available, but dynamic air removal types seem to be the preferred method]. AAMI recognizes both the pre-vacuum cycle and the steam-flush pressure –pulse (SFPP) cycle as "dynamic-air-removal types." Both AAMI ST8:2013 (Section 3.10) and AAMIST79:2010 (Section 2.25) define

dynamic air removal cycles as "One of two types of sterilization cycles in which air is removed from the chamber and the load by a means of a series of pressure and vacuum excursions (pre-vacuum cycle) or by means of a series of steam flushes and pressure pulses above atmospheric pressure (steam-flush pressure – pulse cycle)." Both conditioning methods provide effective air removal from the load.

Following load conditioning, the sterilization phase of SFPP and pre-vacuum cycles is the same, with exposure times of 4 and 3 minutes for temperatures of 132°C and 135°C respectively. After sterilization, both cycles use a vacuum to remove steam from the load and dry it.

Autoclaves operate similarly to the steam sterilization units described above, yet autoclaves are not considered equal to the steam sterilization units. Is this because the autoclave does not dry the instruments, and/or because the autoclave does not have the same preheating cycle?

#### **Manicures and Pedicures**

A client should not shave their legs 24 hours before a pedicure. Shaving may create small lesions in the skin that make the client more susceptible to infection. How can estheticians make sure that clients are not shaving within 24 hours of a service?

Client's feet are to be wiped with an antiseptic before pedicure procedures. Is a spray-on antiseptic acceptable?

Clients are to wash their hands before manicure procedures. Can hand sanitizer be used instead of hand washing? Since nail plates absorb water and water interferes with the bonding of artificial nail products to the natural nail fibres, avoiding hand washing can be advantageous.

#### **Warts**

An esthetician may choose to perform services on a client who has warts. Some literature suggests that the warts are to be completely covered during the procedure, and the individuals performing procedure should wear single-use gloves. What can be used to 'cover' the warts? Some suggest nail polish. Is there a 100% safe way to cover warts so that they do not cause infection? Even covered, is it advisable to soak infected areas in water, since could deteriorate the cover?

#### **Blades**

Credo blades are used to remove calluses on the feet. Improper use of this tool may cause deep cuts into healthy skin resulting in bleeding and possibly infection. If a credo blade is used for pedicures, SDS must be performed on the blade holder between clients; a new blade is to be used for every client and the blades are to be disposed of in a sharps container after use.

The risk of infection of the soft tissue surrounding the nails, cuticles, corns and calluses is high; these areas should not be cut but may be treated with an abrasive file or pumice stone. Some literature suggests that a credo blade or corn plane may be used in these areas.

#### **Cuticles**

Due to the risk of invasion of the soft tissue surrounding the nail, cuticles should not be cut. Cuticles are a necessary part of nail anatomy and if cut or separated from the nail may permit bacteria to enter the exposed area. Literature suggests that softened cuticles may be gently pushed back with an orangewood stick wrapped with a piece of cotton. Using an orangewood stick for pushing back cuticles is not practiced. What is the ideal way to push back cuticles?

Literature states that an electric file should not be used on cuticle. Is it acceptable to use an extra fine sapphire bit around the perimeter of the nail for cleaning dead skin?

Can dead skin and callous around the nail base and/or sidewalls be trimmed with cuticle nippers? Technically speaking, this tissue is not living; therefore, it can be argued that its removal is within the scope of an esthetician. The common trade practice is only to remove this tissue if it may catch on something and tear open the living tissue.

#### **Paraffin Wax**

Some literature states that waxing to remove hair is performed with paraffin wax. Paraffin wax is not used to remove hair.

#### **Porous and Non-Porous**

All single-use items are to be discarded at the end of each client's treatment. These items include: buffers, emery boards, filing tools, implements of wood and pumice, toe separators, paraffin wax, and or any other item that cannot be disinfected. What is considered porous? What is considered non-porous? What materials can be reliably sanitized, disinfected, and/or sterilized?

Because the issue of SDS is so important, this module has chosen to err on the side of caution. This module supports the idea that only stainless steel and glass can be reliably sanitized, disinfected, and/or sterilized. Glass has its own problems of scratching, pitting, and breaking, so stainless steel is the recommended material. Manufacturers state that glazed ceramics and some plastics can be disinfected and/or sterilized. These two materials are problematic and therefore are not recommended for use. Glazed ceramics can chip, and the chipped surfaces cannot be reliably disinfected and/or sterilized. Plastics will eventually break down, causing them to scratch, chip, and pit. Deteriorated plastic surfaces cannot be reliably disinfected and/or sterilized.

What about a tool that is part stainless steel with a plastic or wooden handle? If the stainless steel portion contacts the client, is this tool disinfectable and/or sterilizable?

### **Brushes and Applicators**

Some literature states that makeup brushes and applicators are to be single-use. It seems as though the common trade practice amongst estheticians is to reuse makeup brushes. Mascara wands and lip brushes may be the only exceptions, as it seems that they are often disposed of after each client. Under normal operation, a makeup brush only contacts intact skin, and is classified as a non-critical instrument requiring ILD.

It is possible that a makeup brush can contact a mucus membrane, thereby making it a semi-critical instrument requiring HLD. HLD cannot be performed on a makeup brush. If a makeup brush requires HLD, it must be discarded, and this can become very expensive. Many estheticians seem to give their brushes an 'extra thorough' cleaning in alcohol. Alcohol is inadequate for ILD or HLD.

# **Module Summary Self-Test**

1)	True / false. An esthetician can diagnose diseases and disorders.
2)	True / false. An esthetician suspects that a client has a disease. The esthetician can inform the client of their opinion.
3)	Who should always be consulted to determine the 'scope of practice'?
4)	What is a semi-critical item?
5)	What is low level disinfection?
6)	True / false. A surface has been disinfected. All manufacturers require that the surface bee rinsed as a final step.
7)	What are the two common methods for sanitizing surfaces?
8)	Consider a circulating foot spa at the end of a day. Which components are disinfected?
9)	Considering instruments, which two types of materials can be disinfected?

10)	How are non-porous instruments disinfected?
11)	True / false. An arbor band can be disinfected.
12)	What temperature setting is used to dry linens?
13)	Why is it recommended to <b>not</b> put marbles in foot baths?
14)	How are all chemicals for disinfecting and sterilizing approved for use in Canada identified?
15)	A high level disinfectant must have three statements on the label. What are they?
16)	Consider a chemosterilant. What is a re-use time?
17)	What must be consulted before working with a chemical?
18)	Why is it recommended to purchase supplies from a salon distributor?
19)	Why are home-use products not acceptable for use by estheticians?

20)	What are the two types of contamination?
21)	What must be consulted when remediating a chemical contamination?
22)	What is the first step in the 'Exposure Protocol' detailed in this Objective?
23)	Why is it important to speak with a client during a contamination?
24)	What must be done with the plastic bag that was used to hold contaminated laundry?
25)	True / false. Credo blades are re-usable.
26)	What type of instrument is a foam 'disinfectable' nail file?
27)	Considering sanitation between clients, what is the first thing done?
28)	When should staff-room countertops be cleaned?

# **Module Summary Self-Test Answers**

1) False.	
2) False.	
3) The authority having jurisdiction.	
4) Any instrument contacting non-intact skin or a mucus membrane, but does not penetrate it.	
5) A process capable of destroying or irreversibly inactivating bacteria that can sit dormant such as tuberculosis; some fungi; enveloped viruses; and some non-enveloped viruses.	
6) False.	
7) Method one: thoroughly wash the surface with a clean cloth and soapy water. Let the surface dry. Methotwo: wipe the surface with a disinfectant wipe.	od
8) The screen, jets, removable parts, and the basin.	
9) Glass and metal.	
10) Once dry after sanitization, non-porous instruments are immersed in commercial grade disinfectant for the minimum contact time stated by the manufacturer. Items are then rinsed, dried, and stored.	
11) False.	
12) The hottest setting.	
13) Marble can chip and cut clients.	
14) They are identified with a Drug Identification Number (DIN).	
15) Sporicidal, tuberculocidal, and fungicidal.	
16) The amount of time the chemosterilant can be used before it must be discarded.	
17) The Material Safety Data Sheet (MSDS) or the Safety Data Sheet (SDS) that was provided by the supplier.	

18)	They have access to a wide variety of professional grade products.
19)	They have not been tested in a commercial setting.
20)	Body fluid and chemical.
21)	Consult the MSDS or the SDS that was provided by the supplier.
22)	Wash hands and put on new single use gloves and other PPE.
23)	To keep the client calm.
24)	Place the plastic bag in the garbage and dispose of the garbage immediately.
251	
23)	False.
·	Single use.
26)	
26) 27)	Single use.
26) 27) 28)	Single use.  Remove all linens and place them in the dirty laundry hamper.
26) 27) 28)	Single use.  Remove all linens and place them in the dirty laundry hamper.  At the end of each day.