

# Surgical Aseptic Technique and Sterile Field

---

## Recommendations for Asepsis for Invasive Surgical Procedures Conducted Outside of Operating Rooms or in Community-Based Healthcare Settings





Version	Date (YYYY-MM-DD)
Created	2013-01-31
Updated	2019-06-30
Revised	2020-06-30

*Alberta Health Services Public Health and Infection Prevention and Control jointly updated these recommendations which replaces the 2013 version Surgical Aseptic Technique and Sterile Field: Guideline for asepsis for invasive surgical procedures conducted in Community-based Health Care Settings.*

The **surgical aseptic technique** and **sterile field** recommendations provide information, support and evidence-based practices to health care professionals performing invasive surgical procedures outside of operating rooms or in community-based health care settings, such as dental clinics, podiatry clinics and medical clinics. Infection prevention and control is a continually evolving discipline which is based on research and evidence-based practice.

**Note:** If specific program protocols vary from the general recommendations provided in these recommendation, refer to, and follow department specific recommendations.

**Legend:**

Not Acceptable / Not Sterile	Acceptable / Sterile
	

---

Version	Date (YYYY-MM-DD)
Created	2013-01-31
Updated	2019-06-30
Revised	2020-06-30

## TABLE OF CONTENTS

SURGICAL HAND ANTISEPSIS.....	1
<b>GENERAL CONSIDERATIONS</b> .....	1
<b>SURGICAL HANDRUB</b> .....	2
<b>SURGICAL HANDSCRUB</b> .....	3
<b>HAND HYGIENE TIPS</b> .....	4
GOWNING AND GLOVING .....	5
GENERAL CONSIDERATIONS .....	5
<b>GOWNING AND CLOSED GLOVING</b> .....	5
<b>GOWNING AND OPEN GLOVING</b> .....	8
STERILE FIELD.....	9
<b>GENERAL CONSIDERATIONS</b> .....	9
<b>ESTABLISHING THE STERILE FIELD</b> .....	10
<b>DISPENSING STERILE SUPPLIES</b> .....	11
<b>MAINTAINING A STERILE FIELD</b> .....	12
<b>STERILE TECHNIQUE WITHOUT CIRCULATING PERSONNEL</b> .....	13
DEFINITIONS .....	14
REFERENCES.....	16

Version	Date (YYYY-MM-DD)
Created	2013-01-31
Updated	2019-06-30
Revised	2020-06-30

## SURGICAL HAND ANTISEPSIS

- Objective of surgical hand antiseptics is to reduce the transient and resident flora. Skin can never be rendered sterile. It can be made surgically clean by reducing the number of organisms present with the mechanical action associated with scrubbing. Surgical hand antiseptics are only effective if all surfaces of the hand are exposed to the mechanical cleaning and chemical antiseptics.
- Process of removing as many microorganisms as possible from the hands and forearms by mechanical washing and chemical antiseptics before participating in a surgical procedure.
- Performed prior to donning sterile gloves or sterile gowns and gloves for surgical or other invasive procedures.
- Achieved with either an antimicrobial surgical scrub agent (*surgical hand scrub*) or an alcohol based antiseptic surgical hand rub (*surgical hand rub*) with documented persistent and cumulative activity.<sup>1,2</sup>
- Follow manufacturer's instructions for use for the **product for surgical hand antiseptics**.



### GENERAL CONSIDERATIONS

- Refer to the AHS Hand Hygiene [Policy and Procedure](#) or organization/department specific protocols for general hand hygiene information, including recommendations for fingernails, e.g., clean, short, natural nails
- [Wash hands](#) with soap and water if hands are visibly soiled or as required by the product manufacturer's instruction for use.
- Remove all rings, wrist watches and bracelets prior to starting **surgical hand antiseptics**. (Figure 1)
- Don** hair covers, protective eyewear and surgical mask prior to initiating the surgical hand antiseptics. (Figure 2)
- Keep hands above the level of the elbow so that water flows down during the surgical hand scrub and rinsing process. Avoid contact with the faucet or other potential contaminants. (Figure 3)
- Dry hands thoroughly using a sterile towel following a surgical hand scrub. Thorough drying is essential as moist surfaces allow pathogens to multiply.



Version	Date (YYYY-MM-DD)
Created	2013-01-31
Updated	2019-06-30
Revised	2020-06-30

**SURGICAL HANDRUB**

# Surgical Handrubbing Technique

- Handwash with soap and water on arrival to OR, after having donned theatre clothing (cap/hat/bonnet and mask).
- Use an alcohol-based handrub (ABHR) product for surgical hand preparation, by carefully following the technique illustrated in Images 1 to 17, before every surgical procedure.
- If any residual talc or biological fluids are present when gloves are removed following the operation, handwash with soap and water.



1 Put approximately 5ml (3 doses) of ABHR in the palm of your left hand, using the elbow of your other arm to operate the dispenser.



2 Dip the fingertips of your right hand in the handrub to decontaminate under the nails (5 seconds).



3



4



5



6



7

Images 3-7: Smear the handrub on the right forearm up to the elbow. Ensure that the whole skin area is covered by using circular movements around the forearm until the handrub has fully evaporated (10-15 seconds).



8



9



10



11



12

Images 8-10: Now repeat steps 1-7 for the left hand and forearm.

Put approximately 5ml (3 doses) of ABHR in the palm of your left hand as illustrated, to rub both hands at the same time up to the wrists, following all steps in images 12-17 (20-30 seconds).

Cover the whole surface of the hands up to the wrist with ABHR, rubbing palm against palm with a rotating movement.



13



14



15



16



17

Rub the back of the left hand, including the wrist, moving the right palm back and forth, and vice-versa.

Rub palm against palm back and forth with fingers interlinked.

Rub the back of the fingers by holding them in the palm of the other hand with a sideways back and forth

Rub the thumb of the left hand by rotating it in the clasped palm of the right hand and vice versa.

When the hands are dry, sterile surgical clothing and gloves can be donned.

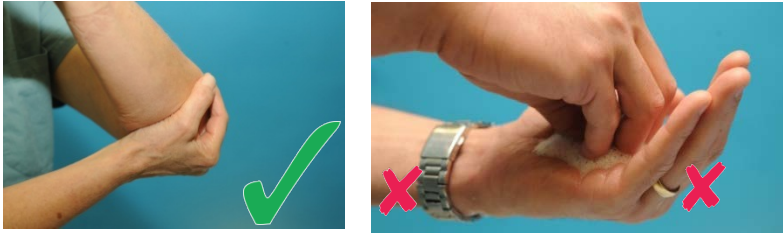
Repeat this sequence (average 60 sec) the number of times that adds up to the total duration recommended by the ABHR manufacturer's instructions. This could be two or even three times.

<https://www.who.int/infection-prevention/countries/surgical/NewSurgicalA3.pdf>

Version	Date (YYYY-MM-DD)
Created	2013-01-31
Updated	2019-06-30
Revised	2020-06-30

## SURGICAL HANDSCRUB

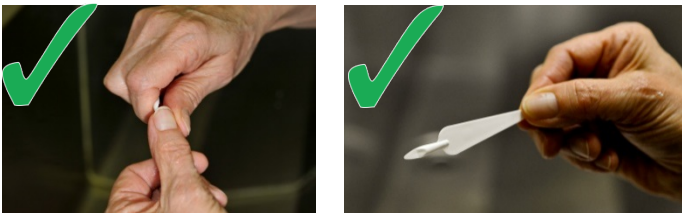
1. Remove hand and arm jewelry including rings, watches and bracelets.



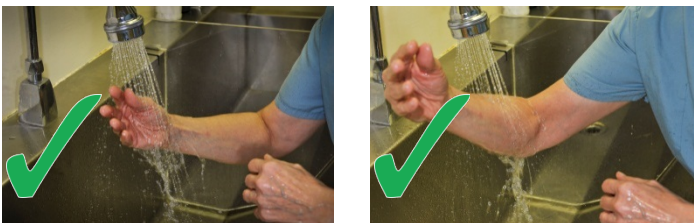
2. With clean hands don hair cover, surgical mask and eye protection.



3. Perform surgical handscrub.
  - a. Clean under the nail (subungual areas) of both hands under running water using a disposable nail cleaner.



- b. Rinse hands and forearms under running water.



4. Use an approved scrub solution according to the manufacturer's written instructions.

- a. Apply the scrub solution to wet hands and forearms. Sponges, if used, are soft and non-abrasive.



Version	Date (YYYY-MM-DD)
Created	2013-01-31
Updated	2019-06-30
Revised	2020-06-30

- b. Time the application of the scrub solution according to the manufacturer's written directions to allow adequate product contact with skin.
- c. For each hand visualize each finger, thumb, hand and arm as having four sides. Wash all four sides effectively, keeping the hands elevated.
- d. Avoid splashing surgical attire.
- e. Discard used sponges.
- f. Rinse hands and arms under running water in one direction from the fingertips to elbows as often as needed to remove soap. Take care to ensure fingers, hands and arms do not touch the faucet and the hands remain above the level of the elbows. If the water is controlled with hand control levers then the water is turned off by **circulating personnel**.



- g. Ensure hands are held away from the body with hands and forearms held higher to prevent contamination by allowing the water to run from the clean to less clean area. Keep the surgical attire dry as the sterile gown cannot be donned over wet or damp attire without potential contamination of the gown by **strike-through** moisture.
- h. Dry hands with a sterile towel.

5. Don sterile gown and gloves.<sup>1</sup>

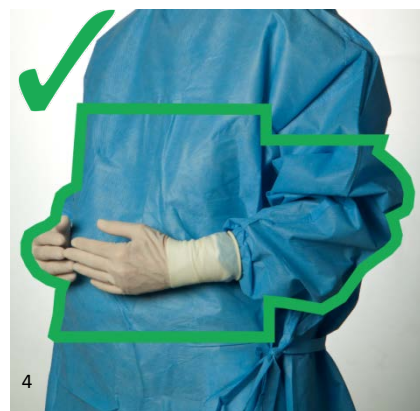
## HAND HYGIENE TIPS

1. Keep nails natural, clean, short and healthy<sup>3</sup>.
2. Adhere to facility or organization policies on use of nail polish. Refer to the AHS Hand Hygiene [Policy and Procedure](#) or organization/department specific protocols for general hand hygiene information.
3. Do not wear artificial nails or nail enhancements.
4. Remove all hand and arm jewellery for invasive surgical procedures.
5. Do not scrub if you have cuts, abrasions, weeping dermatitis or fresh tattoos on exposed skin.

Version	Date (YYYY-MM-DD)
Created	2013-01-31
Updated	2019-06-30
Revised	2020-06-30

## GOWNING AND GLOVING

- Following completion of the surgical hand antisepsis, it is important to correctly don a sterile surgical gown and sterile gloves.
- Gowns are only considered sterile in the front from the axilla (armpit) to the level of the sterile field and sleeves from 5cm (2inches) above the elbow to cuff. The neckline, shoulders, under arms, sleeve cuffs and the back are considered unsterile<sup>4</sup>. (Figure 4)

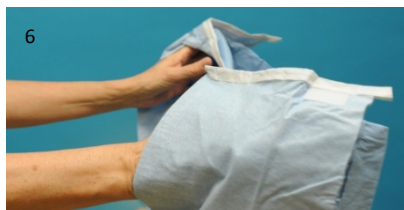


### GENERAL CONSIDERATIONS

- Gowns are donned before gloves.
- The **scrubbed personnel** gowns and gloves from a separate table or surface that is waist height, away from the main sterile field (to avoid any chance of contaminating the sterile field) using the “closed gloving” technique.
- The scrubbed personnel gowns and gloves the dentist/surgeon (and other sterile team members) using the assisted “open gloving” technique.
- Sterile gowns are:
  - a. Made of a material that is resistant to penetration of blood and other fluids.
  - b. Folded to allow the gown to remain sterile during donning and large enough to adequately cover the scrubbed personnel.
  - c. Gown cuffs are considered unsterile and are to be covered by sterile gloves because they:
    - i. tend to collect moisture,
    - ii. are not an effective barrier and,
    - iii. become contaminated when the scrubbed person’s hands pass through the cuff.<sup>1</sup>

### GOWNING AND CLOSED GLOVING

1. Reach and lift the folded gown directly upward. Do not touch the wrapper and ensure the gown remains folded until after stepping back from the gown table into an unobstructed area. (Figure 5)
2. Holding the folded gown like a book by its binding, carefully locate the neckline and armholes. (Figure 6)



Version	Date (YYYY-MM-DD)
Created	2013-01-31
Updated	2019-06-30
Revised	2020-06-30



3. Hold the inside front of the gown just at the armholes with both hands, let the gown unfold, keeping the inside of the gown toward the body and the hands in the armholes. Do not touch the outside of the gown with bare hands. If the top of the gown drops inadvertently, consider it contaminated. Discard and have a new gown pack opened. (Figure 7)
4. Extend both arms into the armholes simultaneously as the gown and its sleeves unfold.



5. The circulating personnel, stands behind the scrubbed personnel and brings the gown over the shoulders by reaching inside to the shoulder and arm seams. (Figure 8) The gown is pulled on, leaving the cuffs of the sleeves extended over the hands. Do not push the hands through the cuffs. The back of the gown is securely tied at the waist first, followed by the neckline. (Figure 9) If the gown is a wrap-around style, the sterile flap to cover the back is not touched until the scrubbed personnel has donned gloves or by use of a sterile item handed to circulating personnel.



6. Using gown cuff covered hands take the sterile gloves from the circulating personnel. Do not touch the external wrapper of the gloves when taking the gloves out of the wrapper and keep hands inside the cuff at all times during the gowning and gloving procedure. (Figure 10)



7. Using gown cuff covered hands place the gloves in the paper wrapper on the surface that held the gown. Place the glove paper in front of you like a book. Open the two sides like a book by grasping the lower inner corners of the bottom fold. Lift both corners open and fold under at the same time to keep the wrapper open and prevent it from falling closed during the gloving process. (Figure 11)



8. Extend the dominant forearm with the palm upward.
9. With the covered non-dominant hand, pick up the glove for the dominant hand from the inner wrap of the glove package by grasping the glove cuff, lifting straight up, place it on the dominant palm thumb side down. The glove fingers will be pointing toward the body. (Figure 12)



Version	Date (YYYY-MM-DD)
Created	2013-01-31
Updated	2019-06-30
Revised	2020-06-30

10. Grasp the upper glove cuff with the cuffed non-dominant hand while holding the underside of the cuff with the cuffed dominant hand. Peel the cuff of the glove over the dominant cuffed hand, over the end of the sleeve. Hold the sleeve and glove cuff with the non-dominant hand and pull back the sleeve while wiggling the fingers of the dominant hand to extend them into the glove. The glove covers the entire gown cuff. (Figure 13)
11. Using the gloved hand, pick up the remaining glove and place it with the palm of the glove against the palm of the non-dominant hand. Grasp the back of the cuff of the glove above the palm in the gloved hand and turned over the sleeve and hand. (Figure 14)
12. The cuff of the glove is now over the gown cuff of the sleeve with the hand still in the sleeve.
13. Grasp the top of the glove and underlying gown sleeve with the gloved hand and pull the sleeve allowing the glove to be pulled onto the non-dominant hand. (Figure 15)
14. Grasp the tie and protector. Remove one tie from the protector. Hand the protector to the circulating personnel. Turn to wrap the back panel of the gown around the scrubbed personnel, covering the previously tied inner waist ties. Carefully pull the tie out of the protector held by the circulating personnel and tie to secure the gown. (Figure 16-18) The ties are not dropped below waist level before it is tied. If ties drop the circulating personnel ties the gown at the back.<sup>5</sup>



Version	Date (YYYY-MM-DD)
Created	2013-01-31
Updated	2019-06-30
Revised	2020-06-30

## GOWNING AND OPEN GLOVING

1. Sterile gowns for each member of the team are handed to the scrubbed personnel in a manner which maintains sterility. The gown is then placed on the sterile field.
2. The scrubbed personnel picks up the gown and holds it away from the sterile field and allowing it to unfold with the inside of the gown held toward the individual being assisted with gowning and gloving. <sup>(Figure 19)</sup> The scrubbed personnel protects their gloved hands by holding the gown with a cuff over the glove and allows the individual being assisted to reach into the sleeves of the held gown. <sup>(Figure 20)</sup> The circulating personnel reaches to grasp the inside of the gown and carefully bring it up and over the shoulders being sure not to touch the outside of the front of the gown. The inside ties of the gown at the neck and waist are tied by the circulating personnel. The individual being gowned allows their hands to extend beyond the cuffs of the gown and ensure their hands remain above waist level not touching the gown.



3. Once the gown is on, the scrubbed personnel picks up the right glove and holds it with the cuff (to protect the gloved hands from touching the bare hand of the individual being assisted with gowning and gloving). The palm of the glove is turned toward the ungloved individual's hand with the glove directly opposed to the thumb of the individual's hand. Using fingers stretch the cuff to open the glove. <sup>(Figure 21)</sup> The individual being assisted with gloving will place their hand in the glove and the cuff will extend up the sleeve to cover the stockinette of the sleeve. <sup>(Figure 22)</sup>



4. The scrubbed personnel repeats this process. With the second glove the individual being assisted can help to open the glove by placing the gloved hand under the cuff of the glove to increase the opening while inserting the ungloved hand. Again the cuff will be pulled up to cover the entire stockinette cuff of the sleeve.



5. Once gloving is completed the wrap around tie can be handed to the scrubbed personnel to allow the gown to be closed<sup>5</sup>. <sup>(Figure 23-24)</sup>



Version	Date (YYYY-MM-DD)
Created	2013-01-31
Updated	2019-06-30
Revised	2020-06-30

# STERILE FIELD

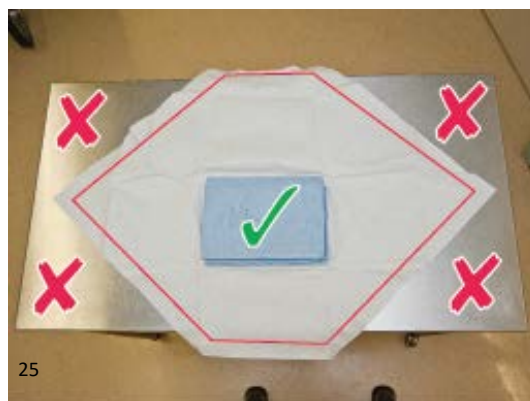
## GENERAL CONSIDERATIONS

1. Only sterile items are used within the sterile field.
  - a. Prior to items being dispensed to the sterile field check the external and internal chemical indicators on and in the package, check for package integrity, and package expiration (if appropriate).
2. Items which display a manufacturer's expiry date are considered unsafe for use after that date. (Rationale: Expiry dates do not guarantee either sterility or lack of sterility<sup>1</sup>. Frequently expiry dates refer to the degradation of the product or a component of the product after the specified date.)
3. If in doubt about the sterility of the packaged item, it is not considered sterile. This includes:
  - a. items found in unmonitored areas,
  - b. any indication of the package being wet (e.g., water stains, dampness or condensation in package),
  - c. any package without chemical indicator (CI) showing a "pass" result,
  - d. any package that has been dropped or,
  - e. any package that shows evidence of crushing, perforations or holes.
4. Whenever a sterile item has been compromised, the package contents, gown or the sterile field involved are considered contaminated. This may happen when:
  - a. non sterile items contact sterile items;
  - b. liquids or moisture soak through a drape, gown, or package (strikethrough).
5. Single-use medical devices are used on an individual client for a single procedure and then are discarded<sup>6</sup>.
6. Reusable medical devices are reprocessed according to the manufacturer's directions for use and in accordance with current Alberta Health Standards<sup>7</sup>.
7. Refer to IPC recommendations on [Storage of Clean and Sterile Supplies in Clinical Areas](#) for details on storage and handling sterile supplies such as temperature and humidity requirements.

Version	Date (YYYY-MM-DD)
Created	2013-01-31
Updated	2019-06-30
Revised	2020-06-30

## ESTABLISHING THE STERILE FIELD

1. Use sterile drapes to cover surfaces or operative fields and provide a barrier against micro-organisms, liquids, and particulate matter<sup>2</sup>.
2. **Surgical drapes** are only sterile at table level.
  - a. The drape below the working surface is not under direct vision of the surgical team and is not considered sterile. The edges of the table top serve as a demarcation line between sterile and non-sterile.
  - b. Any item that falls below the table level is considered unsterile. This applies to the edges of the drape and portion of suction and irrigation tubing that is handed off the sterile field.
3. If the drape does not cover the entire surface, a 1-inch margin around the edge of the drape is considered unsterile. (Figure 25)
4. The edges of packages are considered unsterile. When opening packages for a sterile procedure prevent the wrapper from touching the sterile field or package contents.
  - a. Control all flaps of non-woven wrap to prevent them from touching the sterile field. (Figure 26)
  - b. The sterile boundary of a peel-open package is the inner edge. Peel pouches are peeled back not ripped or torn when opening. Do not push devices through the peel pouch. The inner edge of the seal is the demarcation for sterile and non-sterile. (Figure 27)
  - c. Do not flip or drop items onto the sterile field. (Figure 28)

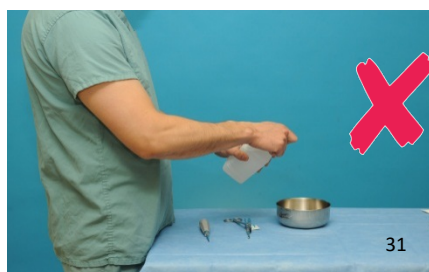


5. Clean and dry flat surfaces before placing a sterile bundle or drape on them. (Rationale: moisture may cause strike-through and contaminate the sterile field. Dust may become airborne and land on the sterile field.)

Version	Date (YYYY-MM-DD)
Created	2013-01-31
Updated	2019-06-30
Revised	2020-06-30

## DISPENSING STERILE SUPPLIES

1. Open supplies as close to possible to the surgical start time. (**Rationale:** the potential for contamination increases with time and particles stirred up by movement of personnel which can settle on horizontal surfaces.<sup>5</sup>)
2. Handle sterile supplies as little as possible. (**Rationale:** increased handling increases the potential for contamination and prolongs set-up time.)
3. Assess all items added to sterile field prior to opening for sterility by checking package integrity, and chemical indicators for a “pass” result.
4. Open large bundles or packages on a flat surface. (**Rationale:** large and/or heavy items are difficult to open aseptically while being held in the circulating personnel’s hand.)
5. Maintain sterility and integrity of items introduced onto a sterile field as they are opened, dispensed, and transferred<sup>1</sup>.
6. Methods of transfer include, but are not limited to the following:
  - a. Place the item on the edge of the sterile instrument table with the inside of the wrapper covering your hand. Never reach over a sterile field and shake an item from its package.
  - b. Expose the contents so the scrubbed personnel can remove the item from the wrapper or package using a forcep or by grasping the item. (Figure 29)
  - c. Do not flip items onto the sterile field. (**Rationale:** flipping creates air turbulence. It also creates the potential for contamination or damage.<sup>5</sup>).
7. Pour sterile solutions into a sterile receptacle. The scrubbed personnel holds the receptacle away from the table or places it on the edge of the draped surface eliminating the need for the circulating personnel to reach across the sterile field. (Figure 30, 31)



8. Discard any remaining solution once the contents (sterile solution) of the bottle have been dispensed into the sterile receptacle. (**Rationale:** re-application of caps is a questionable technique as the pour spout and cap may have been contaminated. The edge of a container is considered contaminated after the contents have been poured; therefore, the sterility of the contents cannot be ensured if the cap is replaced.<sup>1</sup>)
9. Discard or dismantle supplies that have been opened once a patient has entered the operatory in the event the procedure is cancelled or if they are not used. (**Rationale:** potential for cross-contamination will be prevented).

Version	Date (YYYY-MM-DD)
Created	2013-01-31
Updated	2019-06-30
Revised	2020-06-30

## MAINTAINING A STERILE FIELD

1. Circulating personnel do not touch or reach over sterile items or areas. **(Rationale:** invisible shedding of skin laden with micro-organisms may contaminate sterile items or areas.) <sup>(Figure 32)</sup>
2. Scrubbed personnel do not touch or reach over unsterile items or areas. **(Rationale:** contamination of sterile gown or gloves may occur.)
3. When a scrubbed personnel opens a sterile table cover or drape it is opened first toward the sterile individual. This minimizes the chance of the scrubbed personnel becoming contaminated by contacting a non-sterile surface. <sup>(Figure 33)</sup>
4. If the circulating personnel opens a sterile pack, the wrap is opened first away from the circulating personnel to prevent contamination of the pack. <sup>(Figure 34)</sup>
5. Ensure movement within the sterile field does not contaminate the field. Sterile personnel stay close to the sterile field. If sterile personnel change positions during the procedure they can move face to face or back to back. They never turn their back on the sterile field.<sup>8</sup>
6. Do not leave open/set-up sterile supplies unattended and monitor them continuously for possible contamination. **(Rationale:** sterility of unattended items cannot be ensured without direct observation. Event-related sources of possible contamination can occur at any time.)
7. Do not cover the sterile set-up. **(Rationale:** removing a table cover without contaminating the sterile area cannot be achieved. The drape below the level of the tabletop is considered contaminated, and the cover would touch the table top during removal.<sup>4,5</sup>)



Version	Date (YYYY-MM-DD)
Created	2013-01-31
Updated	2019-06-30
Revised	2020-06-30

## STERILE TECHNIQUE WITHOUT CIRCULATING PERSONNEL

This section outlines basic sterile technique when performing a minor invasive procedure outside of operating rooms or in community based health care settings without the assistance of circulating (non-scrubbed) personnel, e.g., surgical removal of ingrown toenails, joint injections. It was adapted from Lippincott Procedures. 2018. Sterile Technique, Basic.

1. Follow [routine practices](#) including hand hygiene.
2. Prepare a sterile field and then, using **aseptic non-touch technique**, set up the necessary supplies on the sterile field. *See page 16 for information on dispensing sterile supplies.*
3. Don a cap and mask.
4. Perform hand hygiene.
5. Don a gown and gloves.
6. If there is an existing dressing to be removed, gently remove the dressings and discard carefully in an impervious plastic garbage bag.
7. **Do off** your gown and gloves.
8. Perform hand hygiene.
9. Don a sterile gown and sterile gloves. You will need a second person to tie the waist and neck of the sterile gown. *See page 7 for information on gowning and closed gloving.*
10. Perform procedure.
11. Dispose of all equipment in appropriate receptacles.
12. Do off and discard your gloves and other personal protective equipment.
13. Perform hand hygiene.

Version	Date (YYYY-MM-DD)
Created	2013-01-31
Updated	2019-06-30
Revised	2020-06-30



## DEFINITIONS

**Aseptic non-touch technique** means maintaining asepsis by not touching sterile equipment or areas with the intent of reducing the risk of transmission of infection to patients.

**Circulating (non-scrubbed) personnel** means staff that work in the periphery of the sterile field. Circulating personnel wear non-sterile scrubs and cover wear to perform duties such as delivering equipment and supplies to the surgical staff, documentation, and specimen handling.

**Closed gloving technique** means a gloving technique in which the hands are not extended from the sleeves and cuffs when the gown is put on. Instead the hands are pushed through the cuff openings as the gloves are pulled into place.

**Doff** means to take off (an article of clothing or wear).

**Don** means to put on (an article of clothing or wear).

**Open gloving technique** means a gloving technique in which the scrubbed person's hands slide all the way through the sleeves and cuffs when the gown is put on prior to donning gloves.

**Product for surgical hand antisepsis** means product used for surgical hand preparation with the following characteristics: 1) significantly reduces microorganisms on intact skin, 2) contains a non-irritating antimicrobial preparation with broad spectrum activity and 3) fast acting and persistent. The most commonly used soaps for surgical hand washing contain chlorhexidine or povidone-iodine. Alcohol based products for surgical hand rubs frequently have additional long acting compounds such as chlorhexidine gluconate or quaternary ammonium compounds.

**Scrub (scrubbed) personnel** means staff who work directly in the surgical field. Scrub personnel perform surgical hand antisepsis before donning a sterile gown and gloves. Duties may include establishing and maintaining the surgical field, assisting the surgical team by donning sterile masks, gloves and gowns and passing instruments during surgery.

**Sterile field** means the area around the site of incision into tissue or site of introduction of an instrument into an orifice that has been prepared for the use of sterile supplies and/or equipment.

**Strike-through** means an event whereby sterile drapes or packages become contaminated due to soaking through or forcing through of moisture or air.

Version	Date (YYYY-MM-DD)
Created	2013-01-31
Updated	2019-06-30
Revised	2020-06-30

**Surgical aseptic technique** means “sterile technique” used for invasive procedures including minor surgical procedures that may be performed in community health care setting such as cataract removal; biopsies; laparoscopy; hernia repair, dental implants and foot surgery. The goal of surgical aseptic technique is to maintain the microbial count to an irreducible minimum using sterile medical device; practices such as surgical hand scrub and patient skin antisepsis; and barriers including sterile gloves, sterile gown, masks and sterile drapes to prevent transferring microorganisms for the environment to the patient during the procedure.

**Surgical drape** means material intended for use on a sterile field that provides an adequate barrier to microbes, particulate matter and fluids; and is tear and puncture resistant; flexible; memory free; moisture repellent; low linting; antistatic, flame retardant and free of noxious odors.

**Surgical hand antisepsis** means the process of removing debris and transient microorganisms from the nails, hands, and forearms; reducing the resident microbial count to a minimum; and inhibiting regrowth of microorganisms.

---

Version	Date (YYYY-MM-DD)
Created	2013-01-31
Updated	2019-06-30
Revised	2020-06-30

## REFERENCES

1. Association of perioperative Registered Nurses. 2019. *Perioperative standards and recommended practices*. Available at: <http://aornstandards.org>
2. Canadian Standards Association (CSA). 2018. *Z314-18. Canadian Medical Device Reprocessing*. Available at: <http://shop.csa.ca/en/canada/sterilization/z314101-10/invt/27030452010>.
3. Public Health Agency of Canada. 2012. *Hand Hygiene Practices in Healthcare Settings*. Available free of charge at: <http://publications.gc.ca/site/eng/430135/publication.html>.
4. Operating Room Nurses Association of Canada (ORNAC). 2017. *Standards, guidelines, and position statements for perioperative registered nurses*. Available at: <http://shop.csa.ca/invt/27031122011>
5. Phillips, N. 2017. *Berry & Kohn's operating room technique*. (13<sup>th</sup> ed.) Toronto: Mosby.
6. Alberta Health. 2011. *Standards for Single-Use Medical Devices: As Applied to Critical and Semi-Critical Medical Devices*. Available free of charge at: <http://www.health.alberta.ca/documents/IPC-Medical-Device-Single-Use-2011.pdf>
7. Alberta Health. 2012. *Standards for Cleaning, Disinfection and Sterilization of Reusable Medical Devices for Health Care Facilities and Settings*. Available free of charge at: <http://www.health.alberta.ca/documents/IPC-Medical-Device-Cleaning-2012.pdf>
8. Rothrock, J. 2019. *Alexander's care of the patient in surgery*. (16<sup>th</sup> ed). Toronto: Mosby.

Version	Date (YYYY-MM-DD)
Created	2013-01-31
Updated	2019-06-30
Revised	2020-06-30