

# Surgical Site Verification & Marking Frequently Asked Questions



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# Introduction

This procedure will provide guidance to health care teams and standardize surgical intervention verification and site marking expectations across the province. It will support health care providers to involve patients or their caregivers in site verification and marking, and extends to all AHS settings (beyond operating rooms) where surgical interventions are performed.

## Purpose

The purpose is to clearly identify that verification is required for all surgical interventions and identify the mandatory steps for site marking in surgical interventions involving right/left distinction or multiple structures (e.g. fingers, toes, limbs, eyes). Surgical site verification and marking are complimentary and together prevent wrong site, wrong side, or wrong patient surgery from occurring.

## Goals and objectives

- To require surgical site verification for all surgical interventions.
- To clearly identify mandatory steps for surgical site marking in surgical interventions involving right/left distinction or multiple structures (e.g. fingers, toes, limbs, eyes).

## Guiding principles

- Active involvement and effective communication among all members of the surgical team is critical to prevent wrong patient, wrong procedure, or wrong site surgeries.
- To the fullest extent possible, the patient should be involved in the process.

## Is this a new practice?

- The practice of marking and verification most likely is occurring already, however, there may be some changes to be aware of that will ensure standardization across the province.

## When is this procedure applicable?

- Both surgical site **verification and marking** procedures are applicable in all AHS settings where a patient will undergo a surgical intervention (e.g. outpatient clinics, emergency dept. and operating rooms).
- Surgical site **verification** shall be completed and documented for every patient undergoing a surgical intervention in any AHS setting.
- Surgical Site **marking** shall be completed and documented for every patient undergoing a surgical intervention involving right/left distinction or multiple structures.

## What might be different from current practices?

The standardized practice of marking and verification is:

- to verify all surgical procedures
- marking the operative side only
- using initials, arrows, small dot or the word “yes” to mark
- involving the patient to the fullest extent whenever possible
- NOT marking with an “X” as it is ambiguous and may be misinterpreted

## What is verification?

**Verification** involves the MRHP performing the surgical intervention by verbally confirming:

- the patient identity
- the procedure to be performed
- the location on the body where the patient understands the procedure will take place
- consent for the procedure

## What is marking?

**Marking** indicates the surgical site:

- using of a single use indelible marker (Reusable markers containing alcohol may be used and shall be disinfected between each patient use)
- in close proximity to the surgical site as possible
- and will withstand prepping agents
- and must be visible on the patient after draping

## What are acceptable alternatives for marking patients with skin conditions or pigmentation that may make marking difficult?

- Silver marker
- Arm bands
- Suture/suture ties
- Other alternatives may be considered
- All alternatives used must be documented

## How do you mark a dental procedure site?

- The operative tooth (teeth) name(s) or number(s), when known in advance, shall be indicated on documentation, or the operative tooth (teeth) should be marked on the dental odontogram.

## Who completes the marking procedure?

- The MRHP who is performing the surgical intervention, in collaboration with the patient;
- OR
- Pre marking may be completed by another **health care professional** member of the surgical team or the **patient** when there is an approved program/service process (e.g. stoma nurse, ophthalmology nurse, resident/fellow).

## Can a patient mark their own surgical site?

- Yes, a patient can mark their own surgical site.
- The MRHP shall ultimately verify the correct surgical site marking.
- It must be document in the patient health care record.

## When is the marking procedure completed?

- As close to the time of the procedure as possible,
- When possible before the patient enters the operating theatre or procedure area where the surgical intervention is to be performed,
- Before sedative premedication on a patient who is awake and conscious, and
- Before general, spinal or local anesthetic, regardless of where it is provided.

## What are the exceptions to this procedure?

- A surgical intervention not involving right/left laterality distinction (e.g. Cesarean section, cardiac surgery, gastrectomy, cystectomy).
- Patient care during an unscheduled visit to an Emergency Department or Urgent Care Centre.
- A surgical intervention involving obvious wounds or lesions (e.g. suturing, debridement of laceration).
- A surgical intervention where marking may cause permanent tattooing (e.g. premature infants and laser skin procedures).
- A surgical intervention where it is anatomically or technically difficult to mark the site (e.g. acute burns, endoscopic and other procedures performed through the mouth, perineum/urethra, or anus).
- Emergency situations which require health care that is necessary to preserve life, prevent serious physical or mental harm, or alleviate severe pain.
- Surgical interventions where:
  - The site is not pre-determined (e.g. cases where the laterality must be examined or confirmed under anesthesia)
  - Several site options are available (e.g. ostomy creation)
  - Intra-procedure imaging for site localization will be used (e.g. radiological, MRI)
  - Sites are marked by means of ultrasound or guide wire
- Cases of bilateral simultaneous organ surgery (e.g. bilateral tonsillectomy).

## What if a patient refuses to be marked?

- The MRHP shall discuss the importance of surgical site marking with the patient.
- Alternative means of identifying the surgical site shall be discussed.
- The patient's refusal to have the surgical site marked shall be documented in the patient health record and the surgical intervention may proceed.

## Resources and References

[Safe Surgery Checklist Policy \(ahsnet.ca\)](#)

AHS Provincial Surgical Site Verification and Marking Procedure

[ORNAC Standards 15th Edition PDF copy.pdf](#)

[Infection control cleaning standard](#)

[Putting on \(Donning\) Personal Protective Equipment \(PPE\) \(albertahealthservices.ca\)](#)

[Storage of Clean and Sterile Supplies in Clinical Areas \(albertahealthservices.ca\)](#)

CSA Standard Z7000-18 General requirements for quality management and safety in perioperative settings

CSA Standard Z305.0-13 Safety of personnel in perioperative environments

[Comparing the sterility and visibility of surgical marking pens available in Australia - PubMed \(nih.gov\)](#)

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