

# Handling, Cleaning and Disinfecting Mobile Diagnostic Imaging Devices Used for Patients on Additional Precautions

**Note:** These best practice recommendations were developed from materials provided by Dr. I Ma, Dr. E. Rennert-May, Dr. R. Somayaji, Dr. A. Lam, Dr. M. Haager and the University of Alberta.

## Best practice recommendations

Refer to [Spaulding Classification](#) for reprocessing details about non-critical, semi-critical and critical devices.

These infection prevention and control (IPC) recommendations are for handling, cleaning and disinfecting non-critical mobile devices used on intact skin of patients on [additional precautions](#). This document does not cover semi-critical devices which require use of sterile sheaths and high-level disinfection.

## 1. Recommendations for handling mobile devices in the room

### Considerations

- Limit evaluations to those that will benefit the patient, e.g., inform diagnosis or treatment.
- Limit the number of staff entering the room, e.g., integrate ultrasound evaluation with concurrent patient care tasks.
- Limit supplies taken into the patient room:
  - Take only the equipment needed for the procedure into the patient room. Remove all unnecessary equipment from the mobile device such as transducers, trays, baskets and brackets prior to use.
  - Consider using a hand-held device as these devices are easier to clean and disinfect.
  - The Canadian Internal Medicine Point-of-Care Ultrasound (CIMUS) team has [education for disinfection](#) and additional information on [devices and compatible disinfectants](#).

### Before entering the room

- Gather necessary supplies:
  - Take only clean devices into the room. If the device may be contaminated, e.g., not stored in a clean location, clean and disinfect the device before taking it into the room. Once the device is clean, maintain it as clean, e.g., do not allow it to touch contaminated surfaces. Specific questions can be addressed by local IPC.
  - Obtain a protective cover if it will be needed, i.e., device may come into direct contact with blood and body fluids, and non-intact skin.
  - If medical gel is required for the procedure, select a single-use gel or the smallest suitable size multi-use gel. If a multi-use gel is used, leave it in the room and discard when the patient is discharged. Refer to IPC [medical gels](#) for more details.

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- Check that compatible ready-to-use (RTU) disinfectant wipes are available upon entry and exit from the room.
- Obtain clean hand towels if required.
- If specimen collection is required, have sufficient patient labels ready for specimen containers.
- Perform hand hygiene and [don](#) the personal protective equipment (PPE) required for additional [precautions](#), e.g., gown, N95 respirator/mask, face shield/eye protection, and gloves.
- Bring the hand-held or mobile device into the patient room.

### While in patient room

- Perform the procedure.

### After procedure is completed

Note: IPC protocols for [doffing PPE](#) and cleaning and disinfecting devices within the patient room or outside of the patient room vary depending on unit, e.g., anteroom or no anteroom, main corridor, outside patient area etc. Follow established IPC protocol for the site. Examples of cleaning protocols include:

- Remove and discard disposable supplies e.g., ECG electrode patches, protective covers.
- Wipe off all gel and visible soiling from the device with an [RTU disinfectant wipe](#) or towel.
- If a specimen has been obtained, place labelled specimen container into a specimen bag and place this bag into another specimen bag outside the room, e.g., ask helper or nurse outside of the room to hold the second specimen bag.
- Move the device to an area where cleaning and disinfection can be performed, at least 2m away from the patient. Place soiled hand-held devices on a solid surface to prevent damage, e.g., on a tray, in a basin or directly onto a countertop.
- Clean the hand-held or mobile device following instructions on [Section 2](#).
  - Place the clean hand-held device on a clean surface or pass to a helper/nurse.
- Exit room with the device.
- Store the device in a clean location.

## 2. Instructions for cleaning and disinfecting

### a. Steps for cleaning and disinfecting a hand-held device

Use a [RTU disinfectant wipe](#) to clean and disinfect the device. If there is a risk of exposure to blood or body fluids gloves are required.

- Inspect the device for damage such as cracks.
- Clean the device with special attention to the probe head.

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- Wipe all device surfaces from the least-soiled to the most-soiled areas.
- Keep the surfaces wet for the contact time recommended by the manufacturer, i.e., the minimum time that the disinfectant must remain wet on the surface for it to be effective.
- Put the hand-held device on a clean surface.
- Allow the device to dry completely.
- Remove gloves and perform hand hygiene.
- Store the device in a clean area according to the manufacturer’s instructions for the device.

### b. Steps for cleaning and disinfecting a mobile device

Use a [RTU disinfectant wipe](#) to clean and disinfect the device. If there is a risk of exposure to blood or body fluids gloves are always required.

- Inspect the device for damage such as cracks.
- Wipe all surfaces from the least-soiled to the most-soiled areas including:
  - power cord;
  - stand;
  - lid;
  - screen, keyboard and control panel, e.g., exposure switches etc.;
  - components such as transducer cord, holder, and head;
  - ECG components such as trunk cables, leads and electrodes or imaging receptors.
- Keep the surfaces wet for the contact time recommended by the manufacturer, i.e., the minimum time that the disinfectant must remain wet on the surface for it to be effective.
- Allow the device and surfaces to dry.
- Remove gloves if worn.
- Perform hand hygiene.
- Store the device in a clean area and according to manufacturer’s instructions for the device. Refer to [IPC Storage of Clean and Sterile Supplies in Clinical Areas](#) for more details.

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## References

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Version	Revision date	Revision Description/Comment
V1	2024-11-20	This replaces Doc. No/file name: hi-ipc-covid-handle-cln-disinfect-mobile-device-bpr. Specific reference to COVID-19 and manufacturer's instructions for use of diagnostic imaging and disinfectant wipes are removed.



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