

Cleaning and Disinfection of Portable Electronic Devices - Infection Control

Site Applicability

All PHC Acute and Long Term Care Sites.

Practice Level

Basic: All direct and indirect care staff

Standards

Any item that comes into direct contact with a patient/resident or their immediate environment, or is handled by a health care worker (HCW) while providing direct care, will be dedicated to that patient/resident or [cleaned and disinfected](#) prior to use with another patient/resident.

[Electronic devices](#) that are brought into the patient/resident room but are used only by HCWs (e.g., workstation on wheels, medication delivery cart) and are kept in the [healthcare environment](#) and not in the [patient/resident environment](#) should be approached with clean hands and cleaned and disinfected on a regular schedule and as [per guidelines](#).

All electronic devices brought into the patient/resident room are at risk of contamination and should be amenable to cleaning and disinfection in case of inadvertent contamination.

Responsibility for cleaning and disinfection will be clearly assigned and communicated.

Description

Electronic devices (e.g., cellular phones, tablets, games, portable computers) are increasingly important in health care for a myriad functions, some of which result in their being classified as non-critical medical equipment. Most are at risk of becoming fomites for the transmission of microorganisms. Electronic devices must be cleaned and disinfected appropriately to minimize their risk as a source of transmission of infectious agents.

Interventions

Hand Hygiene

- Hand hygiene is required to prevent the transmission of microorganisms in the healthcare setting.
- Electronic devices should be approached with clean hands – perform hand hygiene between patients/residents and before and after accessing a device.
- Patients and residents should be encouraged or assisted to clean their hands with a PHC-approved hand hygiene product before and after using electronic devices.
- HCWs must perform hand hygiene immediately before patient/resident contact and immediately after contact with the patient/resident or patient/resident environment.

Selection of Products

- Prior to selection and purchase of electronic devices, the manufacturer's guidelines for use, cleaning/disinfection protocols, and maintenance will be reviewed. These guidelines should meet the standards for cleaning and low-level disinfection that are necessary for exposure to Antibiotic Resistant Organisms (AROs), *C. difficile* and non-enveloped viruses (e.g., norovirus).
- Consideration should be given to selecting keyboards/devices that can be cleaned and disinfected, immersed or purchasing covers made of a material that will act as a barrier for the device and can be cleaned and disinfected.

Cleaning and Disinfection

- Electronic devices that cannot be adequately cleaned should not be used or should be designated as "clean" and not be accessed in the patient/resident environment or be touched by patients/residents.
- Electronic devices that remain in the healthcare environment and do not enter the patient/resident environment should be cleaned and disinfected on a regular schedule.
- All touch surfaces of electronic devices used at, or near, point-of-care must be cleaned and disinfected with a hospital-grade disinfectant (per manufacturer's instructions) on a regular schedule and between patients/residents.
- The surface of telephone components, pagers and computer 'mice' should be cleaned in a manner that prevents damage to internal systems from excessive fluid. LCD screens should be cleaned according to manufacturer's instructions.
- The user/owner of the device is responsible for routine cleaning and disinfection of the device and that responsibility must be clearly communicated. The identified staff must follow agency protocols for cleaning and disinfection after each patient/resident encounter in which the device is potentially contaminated.

- If a device cannot be cleaned and disinfected with an approved agent and is necessary for patient/resident care, consider a cleanable cover. Impervious keyboard covers, skins or solid, fluid-resistant keyboards that can be cleaned and disinfected are recommended.
- If a device necessary for patient/resident care cannot be cleaned and a suitable cover is not available, a risk assessment must be done with Infection Prevention and Control (IPAC) to determine the best approach to optimize patient safety and mitigate the risk of microorganism transmission.
- During confirmed or suspected outbreaks of infectious diseases, additional guidance for portable electronic devices being brought into patient/resident environments will be provided by IPAC.

Related Documents

- [B-00-07-13035](#) - Low Level Cleaning and Disinfection
- [Practice Pointer](#) - MDCs/WOWs and Infection Control
- [How to Clean & Disinfect a Workstation on Wheels \(WOW\)/Medication Delivery Cart \(MDC\)](#)

References

- Howell, V., Thoppil, A., Mariyaselvam, M., Jones, R., Young, H., Sharma, S., Blunt, M., & Young, P. (2014). Disinfecting the iPad: evaluating effective methods. *The Journal of hospital infection*, 87(2), 77–83. <https://doi.org/10.1016/j.jhin.2014.01.012>
- IPAC Canada (2018). Practice Recommendations: Infection Prevention and Control Related to Electronic (IT) Devices in Healthcare Settings. Available from https://ipac-canada.org/photos/custom/Members/pdf/18Jan15_Electronic%20Devices.pdf
- Kiedrowski, L. M., Perisetti, A., Loock, M. H., Khaita, M. L., & Guerrero, D. M. (2013). Disinfection of iPad to reduce contamination with *Clostridium difficile* and methicillin-resistant *Staphylococcus aureus*. *American journal of infection control*, 41(11), 1136–1137. <https://doi.org/10.1016/j.ajic.2013.01.030>

Definitions

“Electronic devices” include items that:

- Stay with the HCW in clinical areas (e.g., smart phones, portable phones)
- Are used for patient teaching or that may stay with the patient in clinical areas (e.g., tablets)
- Move from patient to patient in clinical areas (e.g., workstation on wheels)

“Patient/resident environment” is the geographical area that contains the patient/resident and their immediate surroundings (i.e., the area within privacy curtains or at least a 2 metre distance around the patient/resident). Typically, it includes all inanimate surfaces that are touched by or in direct physical contact with the patient/resident such as the bed rails, bedside table, bed linen, infusion tubing and

other medical equipment. It also includes surfaces frequently touched by HCWs while caring for the patient/resident, such as monitors, knobs and buttons, and other “high touch” surfaces.

“Healthcare environment” is the geographic area that contains all surfaces in the health-care setting outside the patient/resident environment.

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