



## IC.09.04 Electronic Devices in Health Care Settings

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### STANDARDS:

- All electronic devices that come in direct contact with the patient or the patient environment or that are handled by the health care worker (HCW) while providing direct care must be cleaned and disinfected regularly and between patients.
- Electronic devices should also be cleaned between users (e.g., at the end of each shift and between HCW).

### DESCRIPTION:

Electronic devices (e.g., cellular phones, pagers, portable phones (e.g. vocera; cell phones), tablets, laptops, games, portable computers e.g., work stations on wheels, fixed computers) are increasingly important in health care for a myriad of functions and are classified as non-critical medical devices. Most are at risk of becoming fomites for the transmission of microorganisms. Electronic devices must be cleaned and disinfected appropriately to minimize the risk.

Electronic devices referred to in this standard include (but are not limited to) portable and fixed electronic equipment or devices that:

- Stay with the health care worker (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, games, TV screens, computers)
- Move from patient to patient in clinical areas (e.g., computers on wheels)
- Fixed computers located in patient rooms
- Fixed computers located in common-use unit areas (e.g., hallway cubicles, nursing stations).

### INTERVENTIONS:

The following are the Infection Prevention and Control (IPAC) practice recommendations for electronic devices:

#### o Hand hygiene

- Per Routine Practices, hand hygiene is required to prevent the transmission of microorganisms in the health care setting.
- Electronic devices should be approached with clean hands – hand hygiene should be performed between patient/patient environment contact, and before and after accessing a device. Do not wear gloves unless using for cleaning or handling contaminated equipment. Clean hands before donning and after doffing gloves.
- Consider placing alcohol-based-hand rub (ABHR) in a convenient location within reach of the device.
- Perform hand hygiene after cleaning and disinfecting electronic equipment.
- Patients, families, and visitors should be encouraged or assisted to clean their hands with ABHR or soap and water before and after using electronic devices.

#### o Selection of Products

- Prior to selection and purchase of electronic devices, manufacturer's guidelines for use, cleaning, disinfection and maintenance should be reviewed. These guidelines should meet the hospital standards for cleaning and disinfection.
- Always follow hospital grade cleaner-disinfectant manufacturer's guidelines for use.
- Consideration should be given to selecting electronic devices that can withstand frequent



cleaning and disinfection and are immersible and/or fluid resistant. Plastic

- skins/sleeves/covers/screen protectors made of a material that can be cleaned and disinfected are recommended and will allow for ease of cleaning. Covers should be discarded after use, and when soiled, if they cannot be cleaned and disinfected.

#### o **Cleaning and Disinfection**

- Additional Precautions (AP): Wherever possible, portable electronic devices should not be taken into the room of a patient on AP. If the device is necessary for patient care, then it should be dedicated to the patient and covered in a protective barrier. Upon discharge of patient or when AP are discontinued, the cover should be discarded if it cannot be cleaned and disinfected, and the device should be thoroughly cleaned and disinfected.
- Items that cannot be adequately cleaned (with or without a cleanable cover) should not be used OR should be designated as “clean” and not be accessed in patient rooms or be touched by patients.
- Replace keyboards that cannot be cleaned and are visibly soiled.
- The surface components of the computer components 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.
- If an item cannot be cleaned with a hospital-grade disinfectant and is necessary for patient care, the risk assessment done should include IPAC to determine the best approach to mitigate the risk of transmission of microorganisms.
- Areas must assign responsibility and accountability for scheduled and documented routine cleaning (e.g., daily), that is clearly communicated.
- Patient-care areas and individual departments should develop detailed cleaning instructions for the user. Devices should always be cleaned from clean to soiled areas in a single motion using friction. Repeat wiping as required to remove contamination (e.g., if soiled this will be a two-step process – one pass to clean soil, the other to disinfect). Ensure contact times with cleaning solution are adhered to as per manufacturer’s instructions.
- Cleaning should be done more frequently when equipment becomes visibly soiled, and as directed by IPAC (e.g., during outbreaks).
- Remove item if no longer can be cleaned (e.g., if damaged/chipped).
- **Note**: Housekeeping does not clean portable electronic devices or computers.

#### **SPECIAL CONSIDERATIONS:**

##### o **Fixed computers in patient rooms (patient areas designated for diagnosis, therapy and treatment):**

- Always use a clean hands approach.
- Locate the computer as far away from the patient as possible (e.g., minimum two metres to minimize the risk of splashes and sprays).
- Clinical areas must assign responsibility and accountability for scheduled and documented regular cleaning (e.g. daily), when AP have been discontinued and on discharge.

##### o **Portable electronic devices:**

###### **General**

- Always use a clean hands approach.
- All touch surfaces of electronic devices and storage bins and charging stations used at, or near, point-of-care must be cleaned and disinfected regularly according to an established schedule (e.g., daily), between users, when visibly soiled and when potentially contaminated.



The surface of all components and pagers 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.

o **Computer or Work station on Wheels (WOW):**

- Always use a clean hands approach.
- Clean and disinfect the WOW regularly every shift, when visibly soiled, or if cross contamination occurs between patient care areas.
- Avoid taking WOW into patient rooms on AP, if this cannot be avoided, clean and disinfect between patient care areas.
- Clean and disinfect the computer on wheels/cart from top to bottom in a vertical fashion, per the above guidelines.

Related policies

IC 03.10 Environmental cleaning Equipment cleaning

IC 03.11 Patient Care Equipment & Reprocessing

IC 03.03 Hand Hygiene

## REFERENCES

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