

Infection Prevention & Control (IPC) Best Practice Guideline: Cleaning and Disinfection of IT Equipment

| TITLE: Cleaning and Disinfection of Information Technology (IT) Equipment | | |
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| FINAL DRAFT | DATE: August 2010/ June 2016 | |

If you have any questions or comments regarding the information in this Best Practice Guideline, please contact Infection Prevention & Control at infectionpreventioncontrol@albertahealthservices.ca.

PURPOSE

• To provide information on cleaning and disinfection of IT equipment (including telephones) used in clinical and non-clinical areas.

Note: Televisions, remote controls, and client telephones are not within the scope of these guidelines.

APPLICATION

 This guideline should be followed by all Alberta Health Services (AHS) staff, medical staff, volunteers, students and other persons acting on behalf of AHS.

Note: For reasons of safety and liability, AHS environmental service staff do not clean IT equipment. The user/owner is responsible for routine cleaning and disinfection.

IPC PRACTICES

Routine Practices help prevent the spread of infections.

- Routine Practices are used at all times, including Point Of Care Risk Assessment, Hand Hygiene and Personal Protective Equipment.
 - Follow Manufacturer's Instructions for Use (MIFU) when selecting cleaning/disinfection products.
 - Follow MIFU and Material Safety Data Sheets (MSDS) to select appropriate personal protective equipment for use during cleaning and disinfection.
- Hand hygiene is the most important factor in preventing transmission of microorganisms.
 - Access IT equipment with clean hands. Convenient access to alcohol-based hand rub products has been shown to increase hand hygiene compliance.
 - Staff should not routinely wear gloves when using IT equipment.
- In rooms with Additional Precautions (e.g. isolation) in place:
 - Follow posted signage.
 - Dedicate equipment to a single client* or clean and disinfect shared equipment after each use.
 - Consider:
 - Use of barriers.
 - Leaving mobile equipment outside the room.

^{*}Client refers to clients, residents or individuals receiving health care

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GUIDELINES

The following recommendations provide detailed guidance. For a summary of these recommendations, refer to Table 1 Cleaning and Disinfection of IT Equipment.

1. General Recommendations for Cleaning and Disinfection

IT equipment in both clinical and non-clinical areas becomes contaminated with microorganisms, which are transmitted via contaminated gloves or hands. Take these steps when cleaning and disinfecting equipment:

- 1.1 Follow MIFU for both the IT equipment and the cleaner or disinfectant.
- 1.2 Use a soft, non-abrasive, lint free cloth. Avoid abrasive cloths, towels, paper towels, and similar items that may cause damage.
- 1.3 Do not use cloths saturated with liquid. For example, use ready to use (RTU) disinfectant products with excess moisture squeezed out of the wipe or a cloth dampened with disinfectant.
- 1.4 Never spray or pour disinfectant directly onto IT equipment. Do not get moisture into openings. Keep liquids away from the equipment.
- 1.5 Clean IT equipment prior to disinfection.
- 1.6 Allow surfaces to dry before reuse.
- 1.7 Do not use compressed air to clean IT equipment e.g. keyboards. Keyboards are cleaned and disinfected in the same manner as other IT equipment. Replace keyboards with visible soil that cannot be removed by cleaning.

2. Recommendations for Clinical Areas

IT equipment in clinical areas may pose an infection risk to clients.

- 2.1 Clean and disinfect IT equipment regularly and if it becomes contaminated.
 - Use established cleaning and disinfection frequencies and processes. Generally, the frequency for cleaning and disinfection is determined by the risk of cross contamination, the proximity of the equipment to the point of care and the usual amount of soiling (dust, etc). Refer to <u>Infection</u> <u>Prevention And Control Guideline for Cleaning And Disinfection</u> <u>Principles</u>.
 - Refer to <u>Table 1</u>: Cleaning and Disinfection of IT Equipment Guidance
- 2.2 Consider all areas used for client care as clinical areas (e.g. Telehealth rooms used by clients).
- 2.3 Choose equipment for purchase that is easily cleaned and disinfected with AHS-approved products.
- 2.4 Do not take equipment into clients' rooms if it cannot be cleaned and disinfected.
 - A waterproof or water-resistant barrier may be used to limit soiling and make cleaning easier.
- 2.5 Position any mobile equipment taken into a clients' room at least two metres away from the client.
- 2.6 Use a surface disinfectant with a Drug Identification Number (DIN) or Natural Product Number (NPN) from Health Canada and an MSDS sheet.

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Table 1: Cleaning and Disinfection of IT Equipment Guidance

| Equipment | Minimum Frequency | Product |
|--|------------------------|--|
| Portable IT equipment taken into the client's room, but not directly in the client environment (point of care), for activities, such as | Daily | Follow manufacturer's instructions for use (MIFU) for specific equipment recommendations. |
| charting in an electronic health record, order entry, or data collection (e.g. computer or workstation on wheels, tablets, wireless laptops) | | Use a disposable damp cloth or wipe, pre-moistened with a ready to use (RTU) facility approved cleaner/disinfectant. Squeeze out excess liquid before use. Never spray |
| Fixed IT equipment used at point of care (e.g. PCIS computers wall mounted in client rooms) | Daily and at discharge | products directly on to IT equipment. Examples of Disinfectant Products |
| ŕ | | that may be indicated in the MIFU: |
| IT equipment used near the point of care (e.g. systems that remain in the hallway outside the client's room) | Daily | Alcohol – swabs and wipes (sometimes used for telephone equipment, mouse, pagers) Combination Products such as |
| All other fixed IT equipment located in clinical areas (e.g. nursing station) | Daily | alcohol/quaternary ammonium (e.g. CaviWipes®) • Hydrogen peroxide – such as accelerated hydrogen peroxide |
| IT equipment in public areas for client use | Daily | (AHP) products (e.g. Virox RTU [®] , Accel [®] , Oxivir [®] , Percept Wipe [®]) |
| | | Notes: |
| Personal IT equipment (e.g. pager, smart phone, cell phone, personal digital assistant) and hard plastic casings | Daily | Sodium hypochlorite (bleach) – such as Clorox[®]. These products are not usually recommended for IT equipment. AHS IPC does not endorse any particular product brand. |
| Desk phones | Daily | Use Alcohol – swabs and wipes. Other cleaning wipes may leave a residue that can compromise the keys and affect the internal electronics. Examples of products that leave a residue include (but are not limited to): Caviwipes™, Lysol™ liquid wipes, and Green Works™ cleaning wipes. |

Note: Table 1 adapted from Calgary Health Region, 2007 Northeast Community Portfolio, Infection Prevention and Control Cleaning and Disinfection Standards: Information Technology (IT) Devices in Health Care Settings and Clinical Technology and Services 2013 and AHS Telecom Memo regarding Cleaning and Disinfection of IT and Telephony Equipment

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3. Recommendations for Non-clinical Areas

While IT equipment in non-clinical areas can become contaminated, it does not pose the same risk to clients as in clinical areas (e.g. office areas and Telehealth rooms never used by clients).

- 3.1 Clean IT Equipment in non-clinical areas weekly or as required.
- 3.2 Use IT-approved screen cleaning products, if compatible with MIFU.

4. Education and Training

Equipment damage and staff injury can result from improper cleaning and handling of IT equipment. Refer to the following resources for further information and training:

- Hand Hygiene Policy and Procedure
- IPC Guidelines for the Use of Stationary Computers in Patient Care Areas
- <u>Infection Prevention And Control Guideline for Cleaning And Disinfection Principles</u>

DEFINITIONS

Barrier means a waterproof or water-resistant cover or case that can withstand regular cleaning and disinfection (e.g. plastic or immersible) over the equipment (e.g. keyboards, monitors, keypads, etc.). Barriers may be complex or simple (e.g. clear, disposable plastic bag).

Cleaning means the physical removal of foreign material (e.g., dust, soil, organic material such as blood, secretions, excretions and microorganisms). Cleaning physically removes rather than kills microorganisms.

Disinfectant means a product used on inanimate objects to reduce the quantity of microorganisms to an acceptable level. Hospital-grade disinfectants need a Drug Identification Number (DIN) for sale in Canada.

Disinfection means the inactivation of disease-producing microorganisms with the exception of bacterial spores.

Drug Identification Number (DIN) means the number disinfectant manufacturers must obtain from Health Canada prior to marketing, which ensures that labelling and supporting data have been provided and that it has undergone and passed a review of its formulation, labelling and instructions for use.

IT Equipment means all electronic equipment including, but not limited to: computers, keyboards, accessories and peripherals (e.g. cables, ties, zip ties, wall mounts, and brackets), telephones, Telehealth equipment, smart phones and pagers. Televisions and remote controls, and client telephones are excluded.

Natural Health Product Number means the product and site license numbers manufacturers must obtain from Health Canada. To be legally sold in Canada, all natural health products must have a product license, and the Canadian sites that manufacture, package, label and import these products must have site licences. To get product and site licenses, specific labelling and packaging requirements must be met, good manufacturing practices must be followed, and proper safety and efficacy evidence must be provided.

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RESOURCES

- Cleaning and Disinfection of IT Equipment Guidance Poster
- Clinical Telehealth: Best Practices Guidelines: Cleaning and Disinfection of Telehealth Equipment and Peripheral Devices
- Telehealth Poster: Steps for Disinfecting Telehealth Equipment and Peripheral Devices

REFERENCES (complete list of references available on request)

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