

Date: September 10, 2021
To: ECC & ZEOCs
From: ABHR / Disinfectant Working Group
RE: UPDATE: Equipment damage due to improper cleaning and disinfection

Issue:

Equipment damage and malfunctions are increasing due to improper cleaning and disinfection techniques, leading to patient safety risks and increased costs.

Key messages:

Previous ECC and ZEOC communications about this issue (Nov. 2020, May 2021) resulted in fewer malfunctions, but this trend is reversing and must be corrected.

Examples:

- [Electronic ear thermometers](#): Potential for overheating as a result of fluid ingress that has not completely dried, which may burn the user or the ear canal of the patient;
- IV pumps: [Baxter Sigma Spectrum 8 Infusion Pump](#) and [BD Alaris Infusion Pump System](#).

Contributing factors include:

- Delicate components and complex instructions, e.g., multiple steps such as disassembly and rinsing, and requiring more than one disinfectant.
- Increased frequency and rigor of cleaning, and/or improper processes, e.g., over-saturation and fluid ingress into electrical components and connectors; lack of removal of cleaning products and/or lack of rinsing after the required contact time.

Background:

- Manufacturers' instructions for use (MIFU) define acceptable cleaning and disinfection products, tools, and processes for each device. Cleaning or disinfecting differently from the MIFU can lead to damage and malfunction, and is considered 'off-label'.

- Cleaning and disinfection according to the MIFU is a shared responsibility between clinical unit staff and Environmental Services. Staff may use different products for cleaning and disinfecting devices as long as the products follow the MIFU.

Recommendations:

Ensure unit/department cleaning and disinfection products and processes are based on the MIFU, including ready-to-use and pre-moistened disinfectant wipes.

- See cleaning process instruction documents for some equipment are available on Insite e.g., [infusion pumps](#) and [shared patient equipment](#).

Ensure the required products and tools are available in each location a device is cleaned and disinfected.

Post easy-to-understand instructions and illustrations in the cleaning and disinfecting locations, and include:

- **Avoid over-saturation** of the device.
- **Do not spray or pour** products directly onto any medical or electronic device.

Train staff and/or consider assigning specific staff trained to clean and disinfect complex medical equipment, e.g., IV pumps, ECG carts and touch screens.

Apply the correct principles:

- Follow the correct **process**;
- Use the correct **product**;
- Allow for the correct **contact time** (and rinsing if needed); and,
- At the correct **frequency**.

Report all medical device incidents and problems as per the [Medical Device Incident and Problem Reporting](#) process.

Consult with Biomedical and Clinical Engineering, if needed.

Resources:

For more information, refer to the following resources:

- [Key Points for Ready-to-use Disinfectant Wipes](#);
- [Handling, Cleaning and Disinfecting Mobile DI Devices](#).