



Infusion Errors Top ECRI's 2017 List of Health Technology Hazards

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Infusion pump errors are the number one health technology safety concern to watch out for in 2017, according to an annual report published by experts at the ECRI Institute. The report, *Top 10 Health Technology Hazards*, warned against placing too much trust in advanced infusion pump safety features, which the report warned can erode simple and previously commonplace safety practices by clinicians, such as checking for unexpected IV flow.

“ECRI Institute continues to learn about and investigate incidents of infusion errors involving pump or administration set failures, staff unknowingly defeating a safety mechanism, or incorrect infusion programming,” the report said. “Such errors—particularly those that result in the uncontrolled flow of medication to the patient, known as ‘IV free flow’—can lead to patient harm and even death.”

The inadequate cleaning of reusable instruments, such as duodenoscopes, moved to the number two spot after topping the list in 2016, with the report citing an “inattention to the cleaning steps within the reprocessing protocol” as a contributing factor. That was followed by missed ventilator alarms and undetected opioid-induced respiratory depression.

The AAMI Foundation is working to address these patient safety issues through its [National Coalition for Infusion Therapy Safety](#), [National Coalition for Alarm Management Safety](#), [National Coalition to Promote Continuous Monitoring of Patients on Opioids](#), and [Home Health Infusion Initiative](#). The Foundation shined a spotlight on the issues of infusion errors, alarm management, and opioid monitoring [at a regional meeting](#) in Chicago, IL in September. The alarm management coalition expanded its scope of work [during a meeting in Annapolis, MD](#) this summer.

“ECRI’s list of health technology hazards highlights several critical issues that affect patients’ lives, and it’s no surprise that infusion errors are at the top of that list,” said Marilyn Neder Flack, senior vice president of patient safety initiatives at AAMI and executive director of the AAMI Foundation. “The AAMI Foundation is working with its partners in industry, with clinicians, and with regulators to reduce these risks and ensure that the technology works in a way that improves patient care and outcomes. Over the next few months we are issuing four Quick Guides to assist clinicians and hospital senior leadership to address the most pressing of the infusion safety issues.”

The list, which was developed by ECRI engineers, scientists, clinicians, and safety experts, identifies problems that can be avoided through careful technology management. It provides strategies for

reducing risks. ECRI's full list of the top health technology hazards for 2017 follows:

1. Infusion Errors Can Be Deadly If Simple Safety Steps Are Overlooked
2. Inadequate Cleaning of Complex Reusable Instruments Can Lead to Infections
3. Missed Ventilator Alarms Can Lead to Patient Harm
4. Undetected Opioid-Induced Respiratory Depression
5. Infection Risks with Heater-Cooler Devices Used in Cardiothoracic Surgery
6. Software Management Gaps Put Patients, and Patient Data, at Risk
7. Occupational Radiation Hazards in Hybrid ORs
8. Automated Dispensing Cabinet Setup and Use Errors May Cause Medication Mishaps
9. Surgical Stapler Misuse and Malfunctions
10. Device Failures Caused by Cleaning Products and Practices

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