COMPLIANCENEWS



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ECRI INSTITUTE LISTS 2013'S TOP 10 HEALTH TECHNOLOGY HAZARDS

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TheECRIInstituterecentlypublished a 25-page special report entitled "ECRI Institute 2013 Top 10 Health Technology Hazards" - available at www.ecri.org/2013hazards. In its introduction, ECRI encourages facilities to use the list of generic hazards as a "starting point for patient safety discussions and for setting their health technology safety priorities." This report is comprehensive with a multitude of useful recommendations along with exhaustive lists of further reference publications. We recommend that our readers use the link above to acquire their own copies of the ECRI publication for review and possible action.

ECRI stated that it considered a number of factors in determining which hazards actually made it to the top 10 list, including potential for harm, frequency/likelihood of

the hazard, how widespread is the hazard, whether the problem is difficult to recognize or challenging to rectify, and whether the hazard has a high profile in the media.

The hazards discussed by ECRI are listed below, and a few of them are further discussed in this article. Several of the hazards on the 2013 list have been listed by ECRI in previous years. Most of these hazards are also receiving attention from The Joint Commission and other authorities having jurisdiction.



- 1. Alarm hazards
- 2. Medication administration errors using infusion pumps
- 3. Unnecessary exposures and radiation burns from diagnostic radiology procedures
- 4. Patient/data mismatches in EHRs and other health IT systems
- Interoperability failures with medical devices and health IT systems
- 6. Air embolism hazards
- 7. Inattention to the needs of pediatric patients when using "adult" technologies
- 8. Inadequate reprocessing of endoscopic devices and surgical instruments
- 9. Caregiver distractions from smartphones and other mobile devices
- 10. Surgical fires

ECRI is not alone in highlighting the problematic issue of medical device alarm fatigue. The Association for the Advancement of Medical Instrumentation (AAMI) Foundation's Healthcare Technology Safety Institute also tackled this issue in 2012, building on priorities identified at the high level multiorganization Fall 2011 Medical Device Alarms Summit. The Joint Commission surveyed its accredited organizations in 2012 to assess its own future activities, and the US Food and Drug Administration is also addressing challenges related to medical device alarm fatigue.

Medication administration errors using infusion pumps can be reduced, according to ECRI, by "integrating infusion pumps with electronic ordering, administration, and documentation systems." (Continued on page 2)





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ECRI further cautions that this will "require considerable involvement from clinical engineers, IT staff, and other technology managers." The report also addresses other recommended activities.

In its discussion of unnecessary exposures and radiation burns from diagnostic radiology procedures, ECRI goes beyond earlier discussions regarding CT procedures to any diagnostic imaging procedure. In the report, ECRI recommends attention to staffing; quality assurance and quality control procedures with peer review; attention to installation, acceptance testing, commissioning and maintenance of systems; and several other areas.

The issue of inadequate reprocessing of endoscopic devices and surgical instruments has been an ECRI focus in past years as well. This issue is also

targeted by TJC and has been one of the commonly-cited areas during 2012 TJC surveys. Although not mentioned in the ECRI report, even reprocessing area ventilation pressure relationships have been cited by TJC.

ECRI stated that surgical fires are on its 2013 top 10 list because ECRI receives at least one report of a surgical fire each week despite previous focused attention. TJC's Sentinel Event Alert Issue 29 entitled Preventing Surgical Fires also addressed this topic in detail. ECRI states that "virtually all surgical fires can be avoided" and recommends enhanced training and communication about the risks and roles of oxidizers, ignition sources and fuels in the OR. ECRI's report also has additional recommendations for changes in practices to reduce or eliminate the risk of surgical fires moving forward.

HOLIDAY DECORATIONS

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questions concerning holiday decorations. The Joint Commission's

2012 Hospital Accreditation Standards, Standard LS.02.01.70 EP-1 states: "The hospital prohibits all combustible decorations that are not flame retardant. (For full text and any exceptions, refer to NFPA 101-2000: 18/19.7.5.4.)"

In NFPA 101-2000®, paragraph "Combustible 18/19.7.5.4 states decorations shall be prohibited in any health care occupancy unless they are flame-retardant. Exception: such Combustible decorations, as

photographs and paintings, in such limited quantities that a hazard of fire development or spread is not present."

If the local or state authority having jurisdiction has adopted



Many of this newsletter's readers are regularly confronted with NFPA 101-2012, there are new provisions that apply to decorations. CMS has also indicated its willingness to allow

> compliance in accordance with the below NFPA 101-2012 wording; however, the organization would have to request a waiver after being cited by CMS. TJC has indicated that organizations may request a traditional equivalency based upon the NFPA 101-2012 decorations NFPA wording. Under 101-2012, 18/19.7.5 Furnishings, Mattresses, and Decorations, paragraph 18/19.7.5.1(b) states "Total area of drapery and curtain panels per room or area does not exceed

20 percent of the aggregate area of the wall on which they are located." In the same section of the 2012 edition, paragraph 18/19.7.5.6 states "Combustible decorations shall be prohibited



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in any health care occupancy, unless one of the following criteria is met:

- 1. They are flame-retardant or are treated with approved fire-retardant coating that is listed and labeled for application to material to which it is applied.
- The decorations meet the requirements of NFPA 701, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films.
- The decorations exhibit a heat release rate not exceeding 100 kW when tested in accordance with NFPA 289, Standard Method of Fire Tests for Individual Fuel Packages, using the 20 kW ignition source.
- 4. The decorations, such as photographs, paintings, and other art, are attached directly to the walls, ceiling, and non-fire-rated doors in accordance with the following:
 - a) Decorations on non-fire-rated doors do not interfere with the operation or any required latching of the door and do not exceed the area limitations of 18/19.7.5.6(b), (c), or (d).
 - b) Decorations do not exceed 20 percent of the wall, ceiling, and door areas inside any room or space of a smoke compartment that is not protected throughout by an approved automatic sprinkler system in accordance with Section 9.7.
 - c) Decorations do not exceed 30 percent of the wall, ceiling, and door areas inside any room or space of a smoke compartment that is protected

throughout by an approved automatic sprinkler system in accordance with Section 9.7.

- d) Decorations do not exceed 50 percent of the wall, ceiling, and door areas inside patient sleeping rooms, having a capacity not exceeding four persons, in a smoke compartment that is protected throughout by an approved automatic sprinkler system in accordance with Section 9.7.
- 5. They are decorations, such as photographs and paintings, in such limited quantities that a hazard of fire development or spread is not present."



Appendix A.18/19.7.5.6(4) The percentage of decorations should be measured against the area of the wall or ceiling, not the aggregate total of walls, ceilings, and doors. The door is considered part of the wall.

PUBLICATIONS AND SEMINARS

Publications

"After the storm - Expanding the concept of emergency power system reliability," *Health Facilities Management*, to be published in January 2013

"Risk and Reward - Assessing the need for electrical system shutdowns," *Health Facilities Management*, August 2012 "Managing Hospital Electrical Shutdowns," *ASHE Monograph*, July 2012

Seminars

- January 18 Arkansas Association for Healthcare Engineering (AAHE), Little Rock, AR, "Continuous Compliance Maintaining Constant Survey Readiness" (David Stymiest, Speaker)
- June 10-13 National Fire Protection Association (NFPA) 2013 Conference, Chicago, IL, "Emergency Power Standards for Health Care Under the 2012 Codes" (David Stymiest, Speaker)



Compliance News is a newsletter dedicated to accreditation, regulatory compliance and facility management issues for healthcare executives and facility managers. For more information, please contact David Stymiest, PE, CHFM, CHSP, FASHE 800-545-6732; dstymiest@ssr-inc.com.