Managing Pharmaceutical Waste

An interview with Dave Swenson, R.Ph., vice president of marketing for Pyxis dispensing technologies at CareFusion

July 18, 2011

Q. How serious is the issue of pharmaceutical waste?

A. Every year, U.S. hospitals purchase more than 4 billion vials, bottles and ampoules containing hazardous materials and generate more than 84,000 tons of hazardous waste.1 The problem of pharmaceutical waste management is likely to reach dangerous levels and is increasingly capturing the attention of hospital administrators, regulatory and environmental agencies, and the public. In response, the U.S. Environmental Protection Agency (EPA) is stepping up efforts to monitor how hospitals manage and dispose of pharmaceutical waste2 to where hospitals that violate RCRA regulations face fines of up to $37,500 per day/per incident. 3

From an environmental perspective, pharmaceutical contaminants were found in 80% of sampled water streams, contaminating drinking water, according to a U.S. Geological survey.4 Many substances found in our waterways, such as chemotherapy molecules, are even more hazardous, and have been linked to wildlife reproduction failures.5

Q. What technology solutions are available to help manage pharmaceutical waste?

A. The Pyxis EcoStation system from CareFusion is an automated pharmaceutical waste management system with scan to dispose technology that generates drug disposal manifests containing data that may be required by EPA and other regulatory agencies. The system helps hospitals identify, classify, sort and segregate pharmaceutical waste and provides pharmaceutical waste records to facilitate tracking and regulatory controls of more than 180,000 National Drug Codes. Helping hospitals better manage the entire lifecycle of a medication, from the point of entry into the hospital to the point of disposal, this system helps improve cost controls, increase regulatory controls of waste tracking and responsibly care for the environment.

Q. What's the value of this type of technology for hospital operations?

A. Using a patent protected "scan to dispose" technology, Pyxis EcoStation system links to the hospital's pharmacy information system and identifies pharmacy-created and manufacturer's package barcodes, extending use to virtually all pharmacy-dispensed medications. By automating the identification and sorting of different types of residual drugs, empty containers and hospital-prepared IV admixtures, the system helps to eliminate human error and potential cross contamination inherent in manual sorting of pharmaceutical waste to reduce negative impact on the environment.

Plus, it is a cost effective alternative to manual sorting methods. By helping ensure regulatory compliance relative to pharmaceutical waste tracking, the system helps hospitals in preventing costly fines. It integrates with the pharmacy information system to enable healthcare facilities to sort pharmacy-compounded waste items such as IV solutions mixed in the pharmacy. The cost-effective system can provide 65 percent in savings versus conventional manual methods, making Pyxis EcoStation system a valued pharmaceutical waste asset.6

References

1 Fein, Adam J., Pembroke Consulting, Inc., 2010-11 Economic Report on Retail and Specialty Pharmacies, December 2010.

2 Donn, Jeff, Mendoza, Martha, and Pritchard, Justin, Pharma Water III, No standards to handle pharmaceuticals in water, Associated Press Investigation, March 9, 2008.

3 EPA Takes Mandatory Increase in RCRA Fines, PharmEcology Associates, January 21, 2009.

4 Kolpin DW, Furlong ET, Meyer MY et al. Pharmaceuticals, hormones, and other

organic wastewater contaminants in U.S. streams, 1999–2000: a national reconnaissance. EnvironSci Technol. 2002;36(6):1202–11.

5 Donn, Jeff, Mendoza, Martha, and Pritchard, Justin, Pharma Water II, Fish, Wildlife Affected By Drug Contamination in Water, Associated Press Investigation, March 9, 2008.

6 Vestara ROI model, 2010. Your facility may or may not achieve these results.

Source URL (retrieved on *05/23/2013 - 11:03am*):
http://www.surgicalproductsmag.com/articles/2011/07/managing-pharmaceutical-waste?qt-recent_content=0&qt-recent_videos=0