

Publication: New World Health
Release Date: 2000

Technology drives waste reduction

By Stephen Walsh

Changing attitudes to the way hospital waste is disposed of is a huge task. Tracking and reporting incidences of incorrect waste disposal will not only set this process in motion, but also lower the rate of such incidences and reduce costs.

Stephen Walsh, Walsh Integrated Environmental Systems, Inc.

Healthcare facilities routinely produce two to ten times more medical waste than is necessary. Studies have shown that improper material segregation is the leading contributor to excessive volumes, environmental compliance problems and increased safety risk.

Based upon these studies - carried out in over 300 North American hospitals - improved tracking and reporting have emerged as the most important factors in solving these problems.

Excess Cost and Non-compliance

Medical Waste typically costs four to 20 times more than regular rubbish. Therefore, producing too much medical waste significantly increases cost. These costs can be reduced dramatically by segregating the rubbish and recyclables into the appropriate streams.

Medical waste mistakenly disposed of with regular rubbish is the most common form of non-compliance. This unsafe and unhealthy practice may result in a warning, a fine, or worse. Tracking the source of non-compliance within hospitals is the first step towards correcting the problem. Walsh Integrated Environmental Systems has found that those hospitals with a strong definition of medical waste and an active tracking and reporting system commit fewer of these environmental infractions.

Safety Risk and Technology

Each year, hundreds of thousands of used needles end up in red bags or on hospital floors due to inattention or outright carelessness. These needles often injure and even kill unsuspecting housekeepers, nurses and patients. Tracking these incidents, reporting back to those departments involved and promoting safe handling practices are the way in which these problems are solved.

In 1993, the Walsh Waste Tracker system was developed to help hospitals manage their waste more effectively. This system uses a handheld computer expert system with an

integrated digital camera to record comments about the waste stream. So, the camera takes a digital photograph of the waste as irrefutable proof of the safety or segregation problem. The information is then automatically formatted as an e-mail and sent to the department head.

While tracking and reporting on infractions are good practices, they are not common; they are difficult to maintain and require plenty of attention and follow-up. Automated tracking systems are effective because they leverage technology in such a way as to complete the tedious part of the task and focus the effort on in-services and ongoing communications.

Recycling management is also a key function of the Walsh Waste Tracker System. Government regulators and the general public are demanding environmental leadership from hospitals more and more. The Waste Tracker helps hospitals track recycling by department, target system improvements and report on performance automatically.

Adding Up the Advantages

Applying technology to the ongoing problem of medical waste management has delivered impressive results in a very short space of time. Reduced cost and improved health and safety are just two of the benefits of the structured approach that technology delivers. Using digital photos as e-mail reminders to non-compliant departments has proven tremendously valuable to hospital in their ongoing efforts to track and reduce waste and costs.