Guide for Reducing Red Bag Waste

What is red bag waste?
Red bag Waste, also known as regulated medical waste (RMW), is biohazardous waste that is capable of producing an infectious disease in humans. RMW includes, at a minimum, blood, body fluids, discarded sharps, inoculated culture media, tissues, and slides.¹

10 Steps for Reducing Red Bag Waste

1. Define Regulated Medical Waste
RMW is defined by each state, but hospitals must also be in compliance with OSHA and US Department of Transportation regulations. Ensure that RMW policies are in line with both state and federal regulations.

2. Assess the Situation and Scope the Problem, Analyze Costs and Benefits
Scope the issues within your RMW streams and perform a cost/benefit analysis in order to deploy a targeted solution and track results.

3. Create a Team, Set Goals, Develop an Action Plan
Establish a multidisciplinary team that includes representatives from Environmental Services, Infection Control, Nursing, Safety, Facilities, Employee Education, Employee Health, Laboratory, and clinical staff. Delegate a leader, review processes in each department, and designate a point person for each department or ward to educate staff.

4. Simplify Waste Segregation
Provide the proper tools for employees to easily implement waste segregation. Work with department heads and nurse managers in each area to determine the types and volumes of wastes generated. Work with communications department to develop educational information including posters, receptacle labels, newsletters, and employee training.

5. Determine Optimal Container Placement/Size and Use Good Signage
Proper container size, placement, and signage are critical to the success of any waste segregation program. Establish centralized bin locations or remove containers from areas where they are unnecessary, such as patient rooms.

6. Educate and Incentivize Best Practices
Include RMW training in new employee orientation. Work with executive team to hold department heads accountable for RMW generation and associated disposal costs, tracking disposal rates within departments. Consider developing incentives or competitions to involve all staff.

7. Review Your Specialty RMW Streams
Critically examine sharps management, prioritizing safety. Consider a reusable sharps container program. Also assess the flow of liquid waste and “trace” chemotherapy waste to ensure efficient and safe practices.

8. Communicate with Waste Management Vendor
Develop a good working relationship with anyone handling your organization’s waste. Compile a written protocol for any segregation issues with waste treatment facilities and landfill operators. Develop a contamination response plan, a waste monitoring form, and a mechanism to report concerns and appropriate solutions swiftly back to staff.

9. Choose RMW Disinfection Method
RMW must be “disinfected” before disposal, destroying or killing infectious microorganisms with a potential to cause disease. Requirements and acceptable treatment methods vary by state. Treatment technologies rely on two approaches to sterilization: excessive heat or chemical agents. Weigh options according to cost, energy usage, and practicality.

10. Track Progress, Report Successes, Reward Staff
Track the positive changes in your waste volumes and celebrate these waste reductions and cost savings. Reward staff for their efforts! Let the community know about your successes. Inform hospital administrators about cost savings.

Unnecessary Waste²

| 32 lbs | Average amount of total waste generated per hospital bed per day |
| 30%    | Estimated amount a typical hospital can reduce its RMW |

Avoidable Costs

| 5x      | Increase in cost of RMW disposal for organizations putting incorrect items in red waste bags compared to costs of properly segregated RMW³ |
| 13x     | Increase in cost of disposing RMW compared to cost of disposing regular trash⁴ |
| $200K   | Amount saved annually by 900-bed Inova Fairfax Hospital by reducing red bag waste⁵ |

Average Annual Savings Potential

$50K–$300K

32 lbs

Average amount of total waste generated per hospital bed per day

5x

Increase in cost of RMW disposal for organizations putting incorrect items in red waste bags compared to costs of properly segregated RMW³

13x

Increase in cost of disposing RMW compared to cost of disposing regular trash⁴

$200K

Amount saved annually by 900-bed Inova Fairfax Hospital by reducing red bag waste⁵

256x551
Avoidable Costs

188x487
Amount saved annually by 900-bed Inova Fairfax Hospital by reducing red bag waste⁵

30% Estimated amount a typical hospital can reduce its RMW

Average Annual Savings Potential

$50K–$300K
Identifying Red Bag Waste

Types of Waste to Place in Red Bag

- Blood
- Blood-saturated items
- Intravenous bags and tubing
- Suction canisters
- Chest drainage units
- Hemodialysis products

Types of Waste to Not Place in Red Bag

- Garbage
- Sharps
- Pathology specimens
- Hazardous waste
- Medication
- Gloves (no blood)

Reducing Misuse of Red Bag Waste Containers

Process of Removing RMW from a Patient’s Room

1. Nurse places RMW in individual red bag
2. Nurse immediately removes red bag from room

Other To-Dos

1. Size red bag containers at eight gallons or less
2. Place signage directly on the lid and display biohazard label clearly
3. Ensure solid waste receptacles are emptied regularly

Case in Brief: University of California, San Francisco Medical Center

- 600-bed teaching hospital in San Francisco, California
- To eliminate overuse of red bags, UCSF removed red bag bins from patient rooms and instead placed a small roll of red bags in a drawer of each patient’s room
- Nurse is responsible for immediately taking red bags to soiled utility room

Have a sustainability tactic you want to share? Want to learn more about how the Advisory Board is serving our members’ sustainability needs? Email sustainability@advisory.com to speak with one of our experts.