

Best Practices for Small Spaces

This document contains a compilation of practices for materials collection for recycling in small spaces. One of the biggest challenges hospitals face is to avoid contamination in their waste streams. In order to avoid such contamination, materials need to be properly segregated, but space is often a limited factor. While sorting and organizing in small spaces can be difficult, using small spaces more efficiently can decrease costs, increase recycling productivity, and simplify the recycling process for hospital staff members. This guide outlines the best practices for organizing recycling in small spaces.

Some general practices for a successful recycling program and proper use of small spaces from 14 hospitals surveyed are listed below:

1. Training

Train Environmental Services (EVS) staff on how to move materials from clinical areas to soiled utility rooms, and then to the loading dock, as well as how to properly segregate materials. Engage specialized waste vendors (e.g. Stericycle) to provide training on regulatory compliance. Frequent education is crucial due to staff turnover and competing priorities. One thing that should remain constant is leadership: and leadership must be supportive of education programs and should provide recommendations for improvements.

Always keep in mind: What is and is not recyclable with plastics? This information changes frequently and is driven by local waste hauler capabilities, state and local regulations and contracts.

2. Partnership

Partner with the EVS group in communicating the program and monitoring the process. Engage waste vendors in the recycling program and maintain open conversations among the interested parties – EVS, EHS, administration, etc. Open communication can help you find problems with your recycling program and solve them. If you are concerned about sharing confidential information about your waste streams, sign confidentiality agreements with your partners. It is important to note that recycling programs are mainly managed by EVS and/or Green Teams, not the hospital, so working with them to adjust your plan is essential.

3. Identification

Properly identify all containers with easy-to-read labels and signs, and color code the bags to differentiate between waste streams. Use one container with divisions to collect different types of materials, but ensure that the divisions are properly labeled or color-coded to avoid confusion.

4. Design

Include requirements to allocate space for waste accumulation, including recyclables, into the hospital design phase for new facilities, expansions, and significant renovations. Some hospital space design changes are discussed below.

Identify space at the docks for recycling and separate from space used for other purposes. Verify soiled utility rooms to ensure waste containers fit in determined spaces; for new spaces, select the appropriate size of waste containers for multiple stream segregation, or consider a container with divisions for multiple streams.

Include the EVS and waste management vendors in the planning meetings for hospital expansions and/or significant renovations. Consider Leadership in Energy and Environmental Design (LEED) certification if possible on new construction, expansions, or renovation projects, to utilize sustainable design practices.

When the design of a space changes, your team should reconsider and rethink proper identification of recyclable material and receptacles and fits into the new design.

5. Logistics

Locate trash and recycle compactors closest to each other for efficiency – make sure to reinforce good segregation practices to avoid contamination issues between the two compactors. Then, locate the nearest Regulated Medical Waste storage room adjacent to the trash and recycle compactors. The trash compactor could be outdoors, but with direct access from the dock.

There are a few logistics considerations that can impact your space organization, one being that many of the recyclable items (plastics and packaging) are large/bulky, and do not fit well in standard recycling containers. This requires forethought on what types of containers can be used in specific settings. Organizing your dock and outdoor areas in a way that fully supports your recycling program can also help mitigate any logistics issues. If you are looking into logistics planning for the first time or have major issues with your current process, consider performing a value stream mapping analysis or flow diagram of your process.

Compact materials whenever possible to reduce space needed and frequency of pick-ups from the waste vendor. Tying in with design, make sure to plan storage and work flow to keep trash and recyclable waste streams segregated. There are many ways to simplify the process of keeping the waste streams segregated: one is providing easy access to containers from inside the hospital, another is to collect trash and recycling in a dual bin cart, with one bin for trash and the other for regulated medical waste.

Depending on your needs to can also utilize any or all of the following methods to keep trash and regulated medical waste streams separated:

- a. Open top on ramp and automatic doors ease segregation on dock.
- b. Separate dumpsters one for Municipal Solid Waste and one for single stream recycling.
- c. Utilize the trash chute system collect everything from centralized locations. Then take to the dock where compactors are located. Segregate there based on liner color.

- d. Allow space to maneuver carts through corridors and in and out of storage rooms, soiled utility rooms, and dock spaces.
- e. Plan traffic and work flow for the efficiency of the EVS staff.

For a successful recycling program, it is beneficial to consider the following space utilization practices and methods:

- a. Work with Interiors Team for recycling of large items like metal and furniture, and coordinate with Materials Management for items that can be donated and not disposed. This can minimize the amount of waste that needs to be sorted through and clear up space.
- b. Color code bags in the soiled utility room to save space. This way, several waste streams can go into one collection container and transported together to the dock.
- c. Use smaller bins to accommodate in small spaces; however, these containers fill quickly and require more frequent service.
- d. Remove air from blue wrap collection bags to maximize the amount of blue wrap that can be stored in a Gaylord or container. The waste management fee is priced per pickup, so it is critical to put as much in each load as possible.
- e. In the ORs, to save on space in some rooms, hang bags off of existing trash hampers.
- f. Use outdoor adjacent buildings to segregate waste if space in dock is limited.

Overall, many of these practices center around streamlining the collection process to free up space in other areas of operation. By accomplishing this you can save money, make the workload easier for employees, and utilize your space to its fullest capacity. To evaluate the effectiveness of your program with an established frequency, utilize lean methodologies including the PDCA model (Plan – Do – Check – Adjust).

Summary

Redesigning and reconsidering your plastics recycling workflow within small spaces is an iterative process. Noting what works and what doesn't is essential to figuring out the right methods for your hospital -- you can do this by mapping decisions and their impacts over time, creating diagrams to represent waste flow, and understanding your process as a whole through communication and evaluation of costs and staff feedback.

For questions and comments, please contact HPRC, or read more on <u>our website</u>.