

RECYCLING IN HEALTHCARE

FACT SHEET

▶ CORRUGATED CARDBOARD DISPOSAL BAN

Corrugated cardboard is not garbage. Starting **April 1, 2018**, the landfill will **not accept** clean and dry corrugated cardboard.¹ It must be reused or recycled. Corrugated cardboard (pictured below) is defined as three or more layers of paper with the middle layer rippled or corrugated.



▶ CHALLENGES TO RECYCLING IN HEALTHCARE FACILITIES

This fact sheet provides useful information to help healthcare companies keep corrugated cardboard out of the landfill and overcome typical recycling challenges, including: infrastructure limitations/hindrances, managing subscription and recycling container costs, training employees, patients and visitors on how and what to recycle, addressing multilingual barriers, and minimizing contamination in recycling containers.

▶ VALUE OF HEALTHCARE RECYCLING

- **Cost Savings.** For every ton of garbage diverted from the landfill, \$34.75 in disposal costs is avoided. Collection fees must still be paid when recycling, but the tipping fee is often less than landfilling or non-existent. Sometimes recycling high-value, clean materials, such as cardboard and metal, earn businesses extra revenue.
- **Save Energy and Protect the Environment.** The energy spent to recycle materials like aluminum, plastics and paper is far lower than the amount of energy it takes to produce these products from raw materials.
- **Enhance Your Facility's Image.** Implementing a successful recycling program will show patients, visitors, and employees that your healthcare facility has a desire to align its healthcare mission with environmental responsibility.
- **Community Benefits.** Recycling helps delay the need for a landfill expansion, strengthen the local economy and protect the environment. For example, for every 1000 tons of material recycled, two local jobs are created.

▶ OVERCOMING RECYCLING CHALLENGES IN HEALTHCARE

- **Develop a Plan for Cardboard.** If your business does not currently recycle corrugated cardboard, begin planning as soon as possible (corrugated cardboard disposal ban effective as of April 1, 2018). Discuss convenient options to contract on-site recycling with your current garbage or recycling collector, or search for better services by contracting a new collector.

¹ LMC 8.32.040, Sect. C / Recyclable cardboard* shall not be accepted by the City for disposal in the City's public sanitary landfills effective April 1, 2018. (*Clean and dry corrugated cardboard.)

Every [garbage collector](#) is required to offer recycling services to their commercial customers at least twice per year. You may also choose to self-haul cardboard to a recycling processor (see Links & Resources below). Public recycling sites are provided for **residential** use and should not be used by commercial establishments.

- **Inspect Your Garbage.** Assess your garbage and make a list of recyclables, organic and landfill items that are being generated in your facility. If you already have a recycling program in place, inspect recycling for contamination (the presence of garbage in recycling bins). Inspect all areas of your building, noting where certain types of recyclables are generated. Speak with experts (garbage and recycling collectors, Lincoln Solid Waste staff, and other professionals) on recycling options.
- **Focus on Identified Products and Garbage Streams.** Implementing a garbage reduction plan for a hospital or healthcare facility can be daunting. Consider first focusing on recycling one or two products that are most noticeable in your garbage stream. When your facility can consistently recycle these products, begin focusing on other materials.
- **Assess Bin and Labeling Needs.** Walk through your facility and assess your needs for recycling and garbage bins and labels. It is sometimes convenient to mark up a copy of your floor plan with the needed locations for bins. The best practice is to have one recycling bin for every garbage bin. It should be just as easy for someone to recycle an item as it is to throw it in the garbage.
- **Place Containers Strategically.** Place recycling bins next to garbage cans throughout the building. For healthcare facilities, it helps to have small recycling bins at every work station, as well as central garbage/recycling areas for visitors. It should be just as easy for people to recycle as it is for them to throw items away.
- **Label Containers.** Use clear signage for collection containers and use images of the materials that go inside the containers. Images communicate across languages. Communicate using color -- make sure recycling containers are a different color than garbage containers. Blue is recommended for recycling containers, and black or brown for garbage. [Recycle Across America](#) is a non-profit that offers effective, standardized signage. Click [here](#) to get additional information on signage and labels.
- **Have a Plan for Medical Waste.** Hazardous medical waste, including corrugated cardboard with the universal BIOHAZARD symbol, must be disposed of separately from recyclables and garbage. Clearly label recycling and hazardous medical waste bins with images of what is recyclable. Even if biohazard-marked materials did not contain medical waste, recycling



The universal BIOHAZARD symbol (left) designates medical waste and biohazard materials. Materials with this symbol, including corrugated cardboard boxes (center) and recyclable bags (right) must be separated from other recyclables and sent to a facility that is equipped to handle the risk level of these materials.

processors are unable to determine the level of biohazard exposure to their employees and will reject loads with these materials. Shredding these materials does **not** eliminate the risk level of a biohazard exposure. Options include mailing in medical waste (for smaller facilities), or having a medical waste collector regularly pick up the waste.

- **Consider Compactors or Balers.** For facilities that generate a considerable amount of recyclables, compactors and balers may be worth the investment. These machines compress materials, save space and reduce the need for frequent recycling pickups. This can lower collection service costs and reduce the need to acquire additional dumpsters or roll-offs. Check with local recycling processors to learn how they can help provide baling equipment.
- **Use Reusable Items.** Switch from disposable to reusable items wherever possible. This helps keep material out of the garbage, and reduces collection costs. Reusable items may include washable gowns, linens, mop heads, medical instruments, etc.
- **Continually Communicate with Employees.** Engage all of your staff and train them on how the new recycling program will work. Include recycling rules in new staff orientations and encourage all employees to become familiar with everyday recyclable materials and container locations in their workspace. Regularly update staff on recycling and garbage management in staff meetings. Download and customize this [training poster template](#) from the Healthcare Plastics Recycling Council.
- **Get Financial Assistance.** Take advantage of the [City's Waste Reduction and Recycling Assistance Program \(WRRAP\)](#), which provides rebates of up to \$750 to start a recycling program. Look for local or state grants to help with additional funding if needed, such as those provided by the [Nebraska Recycling Council](#).
- **Celebrate Success.** Create an atmosphere of pride by continually promoting the success of your recycling program. Report the amount of recyclables diverted from the landfill to employees, patients and visitors. Apply to the [Recycle Lincoln Leadership Recognition Program](#) and earn public recognition for your efforts.

LINKS & RESOURCES

- **American Plastics Council Stretch Wrap Recycling Guide**
<https://plastics.americanchemistry.com/Stretch-Wrap-Recycling/>
- **Commercial Recycling Self-Assessment and Waste Diversion Rate Calculator**
<http://recycle.lincoln.ne.gov/commercial/self-assessment.htm>
<http://recycle.lincoln.ne.gov/commercial/waste-diversion-calculator.htm>
- **Corrugated Cardboard Disposal Ban FAQ**
<http://recycle.lincoln.ne.gov/corrugated-cardboard.htm>
- **Guide to Selecting / Contracting for Garbage and Recycling Collection**
<http://recycle.lincoln.ne.gov/commercial/fact-sheets/pdf/collection-contracting.pdf>
- **Healthcare Plastics Recycling Council recycling poster template**
https://docs.wixstatic.com/ugd/49d7a0_0033f4a565584c57a873db3d56590a02.ppt?dn=Poster%20Template.ppt
- **Local Garbage and Recycling Collectors**
<http://recycle.lincoln.ne.gov/collectors.htm>

- **Multilingual Resources**
<http://recycle.lincoln.ne.gov/multilingual-resources.htm>
- **Nebraska Materials Exchange Program**
<http://www.knb.org/exchange.htmls>
- **Nebraska Recycling Council**
<http://www.nrcne.org>
- **Recycle Across America**
<http://www.recycleacrossamerica.org/>
- **Recycle Lincoln Leadership Recognition Program**
<http://recycle.lincoln.ne.gov/wrrap/recognition.htm>
- **Recycling Guidelines by Material**
<http://recycle.lincoln.ne.gov/pdf/guidelines-by-material.pdf>
- **Recycling Processing Centers**
 - Firstar Fiber, 402-894-0003, <https://firststarrecycling.com/>
 - Mid-America Recycling, 402-476-8502, <http://www.midamericarecycling.com>
 - Recycling Enterprises, 402-421-6655, <http://www.recyclelincoln.com/>
- **Recycling Signage and Labels**
<http://recycle.lincoln.ne.gov/commercial/fact-sheets/pdf/recycling-signage.pdf>
- **WasteCare Corporation – Recycling Tips for Hospitals and Healthcare**
https://www.wastecare.com/Articles/Waste_Reduction_Recycling_Tips_Hospitals.htm
- **Waste Reduction and Recycling Assistance Program (WRRAP)**
<http://recycle.lincoln.ne.gov/wrrap/>

For more information about recycling and Lincoln's corrugated cardboard diversion efforts, visit recycle.lincoln.ne.gov, email recycle@lincoln.ne.gov or call the Recycling Office at 402-441-8215.