

Short Guide for Disposal of Healthcare Hazardous Waste (MiniQG and VSQG)

The U.S. Environmental Protection Agency (EPA) defines hazardous waste as *any material which because of its quantity, concentration, or chemical, physical, or infectious characteristics may cause harm to human health or the environment if improperly treated, stored, transported or disposed of.*

Many of the products used in healthcare facilities on a daily basis have the potential to harm the environment and must be disposed of as hazardous waste. This short guide is intended for Minimal Quantity Generators (MiniQG) and Very Small Quantity Generators (VSQG), which are locations that generate less than 220 pounds of hazardous waste per month. You might fall into this category if you are a health clinic (family practice or specialty), nursing home, dental office, or veterinary clinic. If you don't know your generator size, visit MnTAP's Healthcare Hazardous Waste webpage for guidance.

Remember, regulations require that your staff have hazardous waste training. For our free downloadable training program, visit MnTAP's Waste Training Program Designed for Healthcare.

1) Pharmaceutical/Medication Waste

- MnTAP recommends that all **partially used** vials of medications (with the exception of controlled substances) go into a black box (pictured below) or another form of approved containment. This eliminates the need to evaluate each pharmaceutical for hazardous properties and is an efficient and cost-effective solution for smaller sites. It is also environmentally preferred to landfills or sewer.
- It is very **uncommon to see p-listed waste** or **dual waste** in MiniQG or VSQG facilities. To determine whether you generate these wastes, view the definitions on MnTAP's Healthcare Hazardous Waste page.
- **Empty medication vials** are not considered hazardous; they can go into the regular trash. Broken ampoules with jagged edges should be disposed of in a sharps container. You should not attempt to recycle medication vials as they are considered a contaminant at the recycling plant.
- All **expired and unused medications** may be sent back to a reverse distributor to receive credit. For information about reverse distribution, visit MnTAP's Healthcare Hazardous Waste page.
- It is generally **unlawful to accept medications** back from patients. Refer patients to their local county office for resources on household pharmaceutical collection options. MnTAP has some resources available for patients on the Healthcare Hazardous Waste page.

Black box location and disposal when full:

- Containers must be kept in a secure area that is either locked or supervised by staff who can prevent unauthorized access of the container.
- Full containers are to be placed into a secure and central hazardous waste storage area. A designated staff person must monitor the storage area and can use MnTAP's **weekly check-off log** to note any issues in the storage room.



2) Chemical Waste

Unused, unwanted, or outdated chemicals should be placed in the hazardous waste storage area. The hazardous waste vendor will evaluate, sort, and dispose of them correctly (examples include partially full aerosol cans, hand sanitizers, cleaning chemicals, and sterilizer indicator tape). Empty containers can go into the regular trash or recycling. *A tip: When in doubt, let the vendor check it out.*

3) Batteries and Electronics

All batteries (including alkaline and rechargeable) should be collected for proper recycling. Place in an appropriate collection bin at your facility. If you don't have one, you can make one by simply labeling any pail or box to say "waste batteries for recycling."

Anything with a circuit board should also be collected for recycling by placing items in the hazardous waste storage area. For large items (computers or medical equipment), contact your Biomed or IT department for assistance with proper donation or disposal. The U.S. EPA and MnTAP recommend the use of certified electronics recyclers, meaning the recyclers have met specific standards to safely recycle and manage electronics. Currently two accredited certification standards exist: the Responsible Recycling Practices (R2) and the e-Stewards® standards.

4) Infectious (Biohazard) Waste

There are generally three types of infectious waste generated by small healthcare facilities:

- **Sharps waste** is defined as any item with projections capable of piercing the skin. This includes needles, blades, or scalpels. All sharps must be disposed of in properly designated containers.
- **Red bag waste** is defined as any item *saturated* with blood or body fluids or bags and IV tubing containing whole blood products. This does not include gowns or gloves (unless saturated with blood), gauze or band-aids, or garbage. The final disposal method for red bag waste is sterilization.
- **Yellow bag waste** is used *only* when chemotherapy is administered or there is 'large tissue' disposal occurring. For more information, visit MnTAP's Healthcare Infectious Waste webpage.

5) Chemical or Biological Spills

If there has been a chemical or biological spill at your facility, please note the following:

- Do not attempt to clean spills beyond your capability. If the spill is rapidly spreading beyond your control or is an unknown substance, it is beyond your capability. Call for emergency help immediately.
- Do not clean spills without hazard knowledge of the spilled material and proper protective equipment; immediately notify your supervisor if there has been a spill.
- Manage spill response materials (spill kit contents or paper towels) as hazardous. If you do not know where your spill kit(s) are located, contact your supervisor.
- For large spills (typically more than five gallons), call your hazardous waste disposal company or another first responder, as identified on your **emergency contact list**.
- Five general rules to follow in the event of a spill:
 - a. EVACUATE (leave spill area, alert others)
 - b. CONFINE (close doors, isolate the spill with absorbent material)
 - c. REPORT (to your supervisor or facility manager)
 - d. SECURE (until help arrives)
 - e. ASSIST (provide information about the spilled material)

For more information on hazardous, pharmaceutical, and other regulated wastes in healthcare, visit our website at www.mntap.umn.edu and click on the Healthcare Industry Homepage.