

# Infectious waste for generators

## What is infectious waste?

**Infectious waste**, sometimes incorrectly referred to as *biohazardous waste*, *hospital waste*, *medical waste*, or *red bag waste* is waste that poses a human health and environmental risk due to its biological characteristics.

Infectious waste is not the same as **hazardous waste**, which instead poses an environmental risk due to its chemical or physical characteristics and has separate, different management requirements. The Minnesota Pollution Control Agency (MPCA) regulates both infectious waste and hazardous waste in Minnesota. For more information on hazardous waste requirements, see MPCA fact sheet #w-hw1-00, Summary of hazardous waste requirements, at: <https://www.pca.state.mn.us/sites/default/files/w-hw1-00.pdf>

Infectious waste in Minnesota includes:

- Liquid human blood and other *regulated human body fluids*, including any containers of such fluids and solids that will release such fluids when compressed during normal waste handling. Fluids that are not normally released from the human body are regulated human body fluids and are infectious wastes. Liquids that are normally released from the body are not infectious wastes unless overtly contaminated with regulated human body fluids.

Regulated human body fluids	Non-infectious liquids, unless overtly contaminated
amniotic fluid	breastmilk
blood, including serum and plasma	feces
cerebrospinal fluid	mucus
pericardial fluid	saliva
peritoneal fluid	tears
pleural fluid	urine
synovial fluid	vomit

- Contaminated sharps* from human or animal care, including needles, scalpel blades, lancets, pipettes, and Sharps with Engineered Sharps Injury Protection (SESIPs), whether or not decontaminated, unless the decontamination process has been approved by the MPCA. See MPCA fact sheet #w-sw4-33, On-site treatment of infectious waste, at: <https://www.pca.state.mn.us/sites/default/files/w-sw4-33.pdf>
- Live or attenuated human or zoonotic veterinary vaccines.  
Inactivated, subunit, toxoid, and viral vector vaccines are not infectious waste.
- Cultures or other agents infectious to humans and related contaminated laboratory items.
- Pathological waste*, including human tissue and body parts, except [teeth](#), that will not be managed as human remains under Minnesota Department of Health (MDH) Mortuary Science requirements. Pathological waste is defined separately from infectious waste in Minnesota, but is subject to the same requirements as infectious waste. For questions on mortuary science requirements, contact MDH. See [More information](#) on page 5.
- Research animal waste*, including carcasses, body parts, and blood from animals intentionally exposed to agents infectious to humans for research, testing of pharmaceuticals, or production of biologicals.

## What is not infectious waste?

- Blood-stained items that will not release blood or other regulated human body fluids when compressed during normal waste handling, such as unsaturated dressings, bedding, or furniture. Such items may be managed as normal solid waste with the approval of your solid waste hauler.
- Teeth. Both the U.S. Occupational Safety & Health Administration (OSHA) and the American Dental Association have clarified that teeth may be returned to patients. However, if not returned, teeth containing amalgam fillings must be managed by mercury reclamation. For more information on mercury reclamation, see MPCA fact sheet #w-hw4-62, Managing Universal Wastes, at <https://www.pca.state.mn.us/sites/default/files/w-hw4-62.pdf>
- Organs or other tissue returned to patients for cultural, religious, or other reasons. To protect public health, the MPCA recommends informing patients about potential risks before return.
- *High-Consequence Infectious Disease (HCID)*-related wastes identified by the MDH; *Category A Infectious Substances (Category A)* regulated for transport by the U.S. Department of Transportation (DOT); or *Tier 1 Select Agents or Toxins* identified by the Centers for Disease Control and Prevention (CDC), unless they meet the description of [infectious waste](#) on page 1. However, disposal may be subject to liability under the Minnesota Environmental Response and Liability Act (MERLA). To limit your liability and to protect public health, the MPCA recommends disposal of all of these equivalent to infectious waste. For questions on HCID and Category A, contact the MDH. See [More information](#) on page 5.
- Diseased animal carcasses, such as wild deer with chronic wasting disease (CWD) or poultry with avian influenza that are not [research animal waste](#). Manage instead under any applicable requirements of the Minnesota Department of Natural Resources (DNR), for wildlife, or the Minnesota Board of Animal Health (BAH), for livestock. For questions, contact the DNR or BAH. See [More information](#) on page 5.
- Diseased animal or plant materials or other contraband subject to the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS), the Minnesota Department of Agriculture (MDA), or the DNR. However, such wastes may voluntarily be managed equivalent to infectious waste.
- Pharmaceuticals, also often called drugs or medications. All business waste pharmaceuticals in Minnesota must be assumed to be regulated hazardous waste and may not be managed as, or with, infectious waste unless affirmatively evaluated as non-hazardous. See MPCA fact sheet #w-hw4-45a, Evaluating pharmaceutical wastes, at: <https://www.pca.state.mn.us/sites/default/files/w-hw4-45a.pdf>

## Who is a regulated infectious waste generator?

**Fully regulated:** Any business or government agency whose business activity generates infectious waste is a regulated *infectious waste generator* and must follow all requirements discussed in this fact sheet, unless partially or fully exempt. Examples include: hospitals, medical clinics, dentists and dental clinics, veterinarians and veterinary clinics, tattoo and piercing studios, aestheticians that provide injections, mortuaries, residential care facilities with a capacity >6 residents, research animal laboratories, and trauma cleanup services.

**Partially-exempt:** Licensed ambulance services, community health boards or public health nursing agencies in counties with a population <40,000, and public and private school health services must prepare an [infectious waste management plan](#) and [segregate and properly store](#) their infectious waste, but may dispose of their infectious waste at a [hospital in Minnesota](#) instead of at a certified infectious waste facility.

**Fully exempt:** Operators of these sites are not regulated infectious waste generators, and may dispose of their infectious waste in the normal solid waste, with the approval of their solid waste hauler:

- Households and residential care facilities with a capacity of ≤6 residents
- Farms and agricultural businesses, not including veterinarians
- Sites that voluntarily provide sharps collection containers for public or employee use
- Sites that find abandoned infectious waste in or on their property
- Non-health care businesses with infectious waste from an incident

## What are the requirements for infectious waste?

Regulated infectious waste generators must:

- Prepare and maintain an infectious waste management plan
- Segregate infectious waste from other wastes and properly store it
- Dispose of infectious waste using authorized methods and vendors

Hospitals also must also meet the [additional hospital requirements](#) explained on page 4.

## Prepare and maintain an infectious waste management plan

Your infectious waste management plan must be updated at least every two years and must include the:

- Identity of the facility generating infectious waste
- Name of the person responsible for managing infectious waste and implementing the plan
- Types of infectious waste generated at the facility
- Segregation, packaging, labeling, collection, and storage procedures for infectious waste
- Transporters and disposal facilities that will be used
- Decontamination or disposal methods for the infectious waste
- Bloodborne Pathogens (BBP) exposure control plan or its equivalent
- Volume of infectious waste generated in the two years preceding the plan date

Clearly and in detail describe the specific procedures that you will use; do not simply copy generic regulatory requirements or copy text from the Minnesota Rules, Minnesota Statutes, or this fact sheet.

Do not submit your plan to the MPCA or MDH unless requested.

## Segregate infectious waste from other wastes and properly store it

Sort and segregate infectious waste from all other wastes, such as non-infectious solid waste, and hazardous wastes such as pharmaceuticals, at the point where you generate the infectious waste. If you do not completely segregate your infectious waste, you must manage all the comingled waste as regulated infectious waste.

To help ensure proper waste sorting and segregation, your non-infectious, normal solid wastes must be collected, stored, and disposed in transparent bags. Health care facilities and other infectious waste generators may not use black or opaque colored plastic trash bags for their normal solid waste.

Infectious waste containers must be labeled with the biohazard symbol under the BBP and stored in a way that prevents unauthorized access after use, however infectious waste storage areas are not required to be locked. Infectious waste containers may be stored in the same room as containers of non-infectious waste and hazardous waste.

Unlike restrictions on consolidation of hazardous waste, you may consolidate your infectious waste from multiple locations to a central storage site, such as from satellite medical clinics or home-based health care visits. Ensure your waste segregation and storage procedures are explained clearly in your infectious waste management plan and you comply with your planned procedures.

## Dispose of infectious waste using authorized methods and vendors

Regulated infectious waste generators must use one or more of these infectious waste disposal methods:

- [Transport infectious waste](#) to a Certified Infectious Waste Storage or Decontamination Facility themselves or by using a Registered Commercial Infectious Waste Transporter
- [Discharge liquid infectious waste](#) to a publicly owned treatment works (POTW)
- [Decontaminate infectious waste](#) using an on-site treatment process

**Transport infectious waste to a Certified Infectious Waste Storage or Decontamination Facility:**

Transport their infectious waste themselves to an infectious waste storage or decontamination facility in Minnesota certified by the MPCA or to a facility in another state that has equivalent approval from that state, or use a commercial infectious waste transporter registered with the MPCA to transport their waste to one of those facilities. To find a Certified Infectious Waste Storage or Decontamination Facility or a Registered Commercial Infectious Waste Transporter, see MPCA fact sheet #w-sw4-34, Approved infectious waste management vendors, at:  
<https://www.pca.state.mn.us/sites/default/files/w-sw4-34.pdf>

The HMR requires a compliant *hazardous materials shipping paper*, sometimes incorrectly called a manifest, be prepared for shipments of RMW being transported by someone other than the waste generator. The HMR also requires that the person signing the shipping paper for the waste generator must be trained in RMW description, packaging, and marking. Finally, the HMR requires that the waste generator keep a copy of the signed shipping paper before the shipment leaves the generator's site and retain it for at least two years.

**Discharge liquid infectious waste to a POTW:**

Discharge their liquid infectious waste to a POTW through the sanitary sewer provided they first notify the POTW operator of their intended discharge and then comply with any discharge limits or prohibitions established by the POTW operator. Regulated infectious waste may not be discharged to a subsurface treatment system (SSTS, commonly known as a septic system).

**Decontaminate infectious waste using an on-site system treatment process:**

Decontaminate any of their infectious waste, including sharps, using an on-site treatment process approved by the MPCA, and then dispose of it according to the process approval. To find approved on-site treatment processes, see MPCA fact sheet #w-sw4-34, Approved infectious waste management vendors, at:  
<https://www.pca.state.mn.us/sites/default/files/w-sw4-34.pdf>

Decontaminate only their infectious waste without sharps using any method they can verify will render the waste safe for routine handling as a normal solid waste, and then dispose of it into the normal solid waste. Decontamination must be verified by standard biological indicators, such as *Geobacillus stearothermophilus* or *Bacillus atrophaeus* spores. Simply enclosing an infectious waste within a container or binding it into a matrix is not decontamination and will not allow your infectious waste to be disposed as a normal solid waste.

## **Additional hospital requirements**

Hospitals must accept infectious waste, properly packaged to the hospital's own standards, from: licensed ambulance services, community health boards or public health nursing agencies in counties with a population <40,000, and public school health services.

Hospitals may also, but are not required to, accept infectious waste, properly packaged to the hospital's own standards, from private school health services.

Hospitals accepting such wastes must manage the wastes as their own, but may charge a reasonable fee for accepting and handling the wastes.

## **Who may accept household sharps for disposal?**

Any business or government agency may collect household sharps for proper disposal without MPCA approval. In addition, the MPCA will consider such collectors exempt from potential hazardous waste requirements from pharmaceuticals or other wastes inadvertently collected with the household sharps, provided the collector does not accept sharps from other businesses or government agencies and notifies households that only sharps and no waste pharmaceuticals are accepted, such as by posting a sign at the collection location.

Households and residential care facilities with a capacity ≤6 residents may also be referred to MPCA fact sheet #w-hhw4-67, Managing household needles and syringes, at:  
<https://www.pca.state.mn.us/sites/default/files/w-hhw4-67.pdf>

## What other regulations may apply to infectious waste?

In addition to the requirements in this fact sheet, infectious waste may also simultaneously be regulated as:

- *Regulated waste*, also commonly but incorrectly referred to as *biohazardous waste*, under the Federal BBP Standards administered by (OSHA) and the Minnesota Department of Labor and Industry (DLI), Occupational Safety and Health Administration division (MNOSHA). For questions on regulated waste requirements, contact DLI. See [More information](#) below.
- *Regulated medical waste (RMW)*, under the Federal Hazardous Materials Regulations (HMR) administered by the DOT and the Minnesota Department of Transportation (Mn/DOT). For questions on regulated medical waste requirements, contact Mn/DOT. See [More information](#) below.

Wastes or persons exempt from the MPCA's infectious waste requirements may still be regulated by MNOSHA or Mn/DOT. Generators of infectious waste must meet all applicable requirements of all agencies.

## More information

Guidance and requirements in this fact sheet were compiled from Minnesota Statutes, Chapter § 116, and Minnesota Rules, Chapter 7035, and incorporate regulatory interpretation decisions made by the MPCA on May 21, 2010; September 20, 2010; April 15, 2011; May 3, 2011; March 8, 2012; February 5, 2015; and February 10, 2015. To review statutes and rules, visit the Office of the Revisor of Statutes at: <https://www.revisor.mn.gov/>

The MPCA's Small Business Environmental Assistance Program (SBEAP) offers free, confidential regulatory compliance assistance. The Minnesota Technical Assistance Program (MnTAP) can help reduce your waste.

### Minnesota Pollution Control Agency

Toll free..... 800-657-3864  
Statewide..... 651-296-6300  
<https://www.pca.state.mn.us/>

### Small Business Environmental Assistance Program

Toll free..... 800-657-3938  
Statewide..... 651-282-6143  
<https://www.pca.state.mn.us/>

### Minnesota Technical Assistance Program

Toll free..... 800-247-0015  
Statewide..... 612-624-1300  
<http://www.mntap.umn.edu>

### Minnesota Department of Health

Toll free..... 888-345-0823  
Statewide..... 651-201-5000  
<https://www.health.state.mn.us/>

### Minnesota Board of Animal Health

Statewide .....651-296-2942  
<https://www.bah.state.mn.us/>

### Minnesota Department of Labor and Industry

Toll free .....877-470-6742  
Statewide .....651-284-5050  
<https://www.dli.mn.gov/>

### Minnesota Department of Transportation

Toll free .....800-657-3774  
Hazardous materials .....651-215-6330  
<https://www.dot.state.mn.us/>

### Minnesota Department of Natural Resources

Toll free .....888-646-6367  
Hazardous materials .....651-296-6157  
<https://www.dnr.state.mn.us/>