

# Idaho Department of Environmental Quality

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## Medical Waste Best Management Practices

Many types of facilities can generate medical waste: hospitals, clinics, physicians' offices, dental practices, blood banks, veterinary hospitals/clinics, medical research facilities, and laboratories. Medical waste may be classified as either non-infectious or infectious.

### Non-Infectious Medical Waste

This includes all non-infectious waste materials generated at health care facilities, such as:

- IV bags, tubing, foley bags
- non-bloody gloves
- packaging
- urine-soaked waste, feces, vomit
- blood-tainted waste (materials with minor blood contamination that, if squeezed, would not drip even one drop of blood or other potentially infectious material)

#### Disposal of Non-Infectious Waste

Non-infectious waste does not need to be disinfected and can be discarded with solid waste. It is recommended that staff who come into contact with both infectious and non-infectious medical waste receive adequate training to successfully identify both.

### Infectious Medical Waste

This is waste that may be contaminated by blood, body fluids, or other potentially infectious materials. It is likely to transmit infection and endanger human health, agriculture, and the environment. Infectious medical waste is also known as biohazardous waste or regulated medical waste. Examples include:

- Blood-Saturated Waste. Contaminated items that, if compressed, would drip or release blood or other potentially infectious materials in a liquid or semi-liquid state. (Blood-saturated waste is considered infectious; blood-tainted waste is not.)
- Pathological and Anatomical Waste.
   Tissues, organs, body parts, and body fluids removed during surgery and autopsy.
- Human Blood and Blood Products. Also known as *liquid medical waste*. Includes waste blood, serum, plasma, blood products, and other potentially infectious materials.

- Cultures and Stocks of Infectious Agents. Also called *microbiological waste*. Includes specimens from medical and pathology laboratories; culture dishes and devices used
- to transfer, inoculate, and mix; and discarded live and attenuated vaccines.

   Sharps. Contaminated hypodermic needles,
- Sharps. Contaminated hypodermic needles, syringes, scalpel blades, Pasteur pipettes, and broken glass.
- **Isolation Waste.** Generated by hospitalized patients who are isolated to protect others from communicable disease.
- Contaminated Animal Carcasses,
   Body Parts, and Bedding. Also includes
   related wastes that may have been exposed
   to infectious agents during research or
   pharmaceutical testing.

#### Disposal of Infectious Waste

Infectious medical waste should be disinfected before disposal in a properly permitted landfill. *Disinfected* means the waste has been treated by any method used to destroy or kill infectious microorganisms with a potential to cause disease. Effective treatments include:

- Incineration in a facility approved and permitted in compliance with the current requirements of the Idaho air quality rules. The facility should provide temperatures and residence time necessary to destroy all pathogenic organisms. While incineration is an effective treatment, it can expose the public to toxic chemical emissions and endanger human health. It also produces ash that must be disposed of.
- **Sterilization** by heating in a steam sterilizer, such as an autoclave, at time lengths and temperatures necessary to kill infectious agents within the waste.
- Other methods include chemical disinfection, thermal inactivation, irradiation, and gas/vapor sterilization.

#### Infectious Waste Disposal Services

Infectious medical waste disposal services are also available through private companies. (Contact DEQ for more information.) These companies pick up infectious medical waste and, before disposal, safely use one of the treament methods described. To make sure that the infectious medical waste is disposed of safely, it is important to verify that the facility in which the waste is disinfected is a permitted facility for that activity.

Additionally, it is recommended that generators of infectious medical waste require companies or persons collecting and disposing of the waste to supply the generator with certified forms documenting proper management and disposal of the waste.

## Best Management Practices for Infectious Waste Disposal

The following practices are recommended when disposing of infectious medical waste. If contracting with a medical waste disposal service, it is a good idea to inquire about its practices.

#### **Containers**

During storage, handling, and transport, infectious medical waste (except for sharps) must be contained in disposable containers or bags that are moisture-resistant and strong enough to prevent leakage or expulsion of solid or liquid waste. Sharps must be disposed of in impervious, rigid, puncture-resistant containers immediately after use.

All bags used for the containment of infectious medical waste must be clearly identified by label or color, or both. Rigid containers of discarded sharps must be labeled in the same way or placed in disposable bags used for other infectious waste.

#### **Vehicles**

Vehicles transporting infectious waste should meet all requirements of the U.S. Department of Transportation, and transporters must be knowledgeable in the handling of infectious waste. It is recommended that transporters use equipment that will contain all the waste to avoid releases of infectious waste to the environment and receive training in waste handling and spill cleanup methods.

## Idaho Hospitals

Hospitals are required to comply with all applicable requirements in the Rules and Minimum Standards for Hospitals in Idaho (IDAPA 16.03.14). Questions should be directed to the Idaho Department of Health and Welfare.

### For More Information

#### Idaho Department of Health and Welfare

Rules and Minimum Standards for Hospitals http://adm.idaho.gov/adminrules/rules/idapa16/0314. pdf (Navigate to Section 550)

## U.S. Department of Labor Occupational Safety and Health Administration

http://www.osha.gov/pls/oshaweb/owadisp.show\_document?p\_table=STANDARDS&p\_id=10051&p\_text\_version=FALSE

Hospitals for a Healthy Environment www.h2e-online.org

Health Care Without Harm www.noharm.org

U.S. Environmental Protection Agency www.epa.gov/epaoswer/other/medical/

## Idaho Department of Environmental Quality

http://www.deq.idaho.gov/multimedia\_assistance/hospitals/h2e.cfm

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