

Regulated Infectious Waste

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Medical Waste aka Regulated Infectious Waste

A subset of waste
generated at health
care facilities

Healthcare waste that
may be contaminated
with blood, body fluids,
or other potentially
infectious materials

Who regulates infectious waste?



North Dakota Department of Environmental
Quality

North Dakota Administrative Code
Chapter 33.1-20-12



North Dakota Health and Human Services



Centers for Disease Control (CDC)



Occupational Safety and Health Administration (OSHA)



U.S. Food and Drug Administration (FDA)

EPA has not
had
authority
since 1991

Who do the regulations apply to?

Waste Generators:

- Hospitals
- Clinics
- Nursing homes
- Home care providers
- First aid stations in schools and industries
- Veterinarians
- Tattoo parlors
- Dentists
- Laboratories
- Health units
- Research facilities
- Emergency medical service providers

Who do the regulations apply to?



Waste Handlers

- Anyone who handles, transports, stores, processes, treats, or disposes of infectious waste

**What is
considered
regulated
Infectious waste?**

NDAC Chapter 33.1-20-12

Cultures and Stocks

Pathological Waste

Human Body Fluids

Human blood or blood products

Sharps

Animal Waste

Isolation waste

Unused sharps



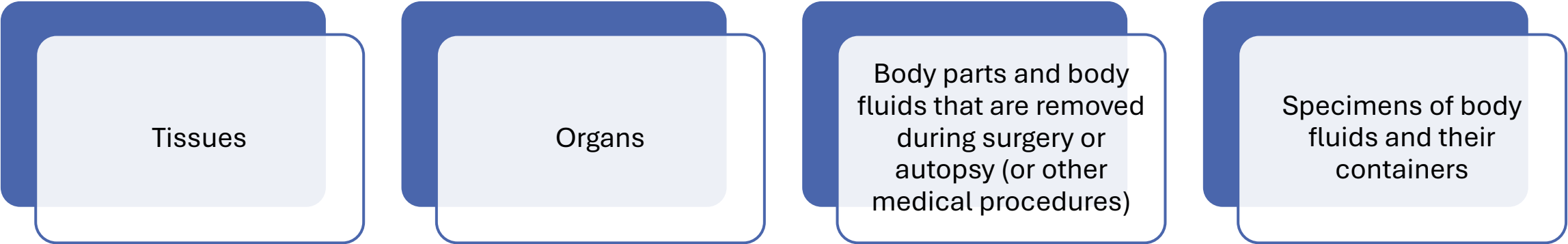
Cultures and stocks



Cultures and stocks of infectious agents and associated biologicals including those from:



Pathological Waste



Tissues

Organs

Body parts and body fluids that are removed during surgery or autopsy (or other medical procedures)

Specimens of body fluids and their containers

Human blood or blood products

Liquid waste human blood

Products of blood

Items saturated or dripping with human blood

Items that are saturated or dripping with human blood that are now caked with dried human bloods and can release these materials during handling

OSHA Bloodborne pathogen standard – Regulated Waste



Liquid or semi-liquid blood or other potentially infectious materials



Contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed



Items that are caked with dried blood or other potentially infectious materials and can release these materials during handling



Contaminated sharps



Pathological and microbiological wastes containing blood or other potentially infectious materials

Human Bodily Fluids

Any bodily fluid
that is visibly
contaminated
with blood

Cerebrospinal
fluid

Semen and
vaginal
secretions

Synovial fluid

Pleural fluid

Pericardial fluid

Peritoneal fluid

Amniotic fluid



Is mother's milk considered a human bodily fluid?

Sharps



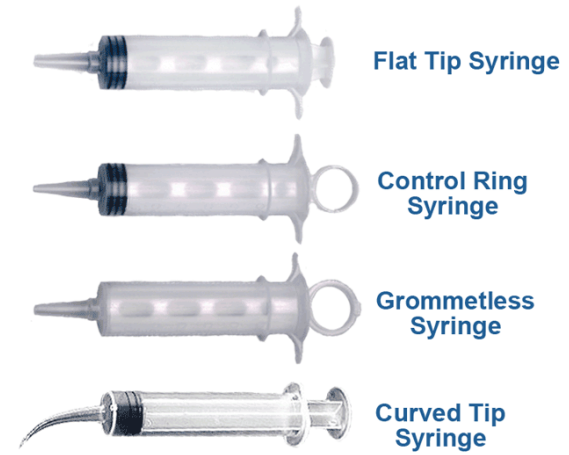
- Hypodermic needles
- Syringes (with or without attached needles)
- Pasteur pipettes
- Scalpel blades
- Blood vials
- Needles with attached tubing
- Culture dishes (regardless of infectious agents)
- Exposed ends of dental wire



Bulb Type Syringes



Piston Type Syringes



Animal Waste



Contaminated
animal carcasses

Body parts

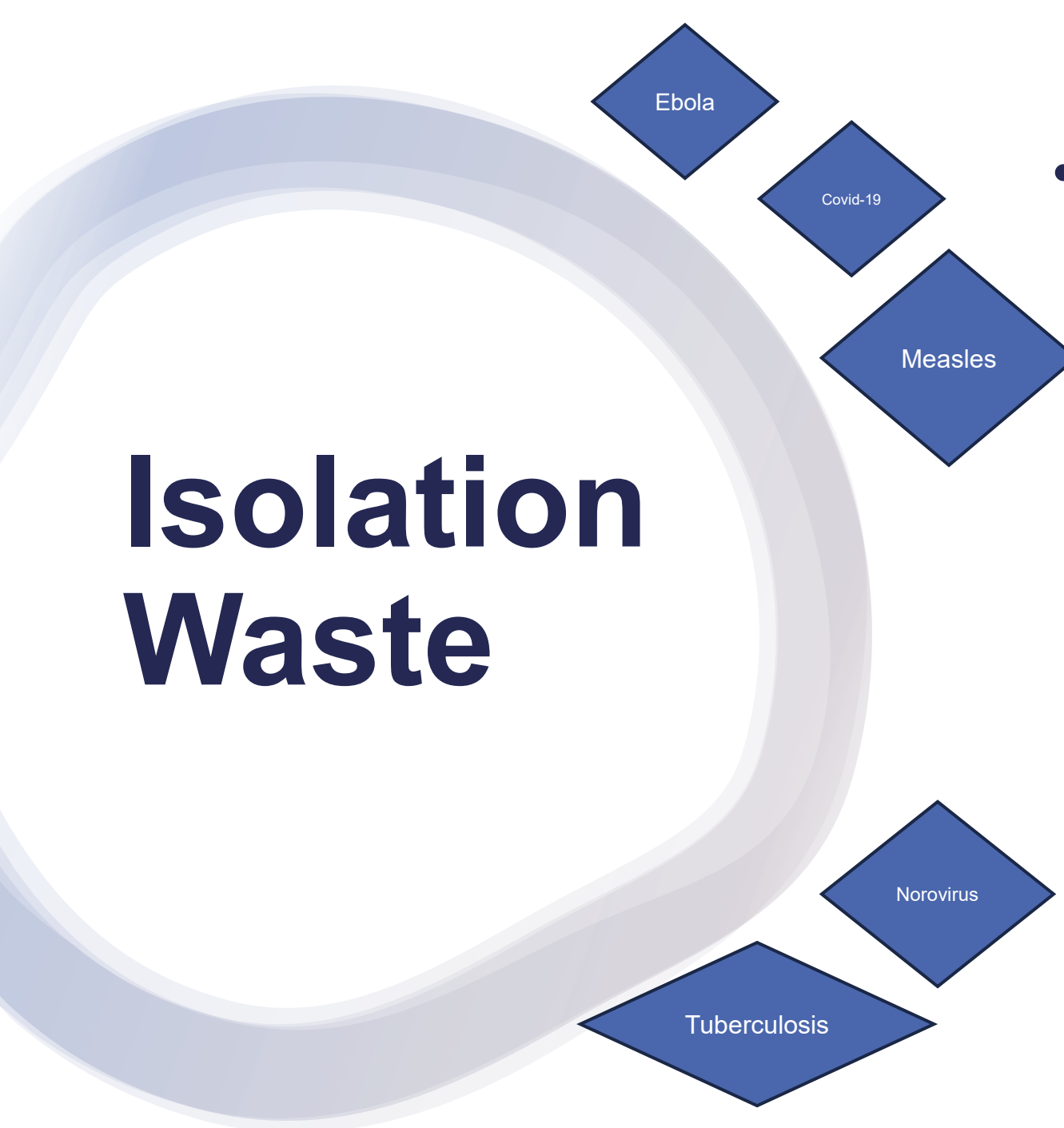
Bedding of animals
that were known to
have been exposed to
infectious agents



During research

Production of
biological or testing
of pharmaceuticals

Isolation Waste

A diagram featuring a large, light blue, stylized circular shape on the left side. To its right, five blue diamond shapes are arranged in a curved path, each containing the name of a disease. The diseases listed are Ebola, Covid-19, Measles, Norovirus, and Tuberculosis.

- Biological waste and discarded materials contaminated with blood, excretion, exudates, or secretions from humans who are isolated to protect others from highly communicable diseases, or isolated animals known to be infected with a highly communicable disease

Highly Communicable Diseases



Caused by organisms classified by the CDC as biosafety level IV organisms



Biosafety level IV organisms' merit special precautions to protect staff, patients, and other persons from infection



Highly communicable diseases
does not include

Common cold

Influenza

Other diseases not representing a significant danger to non-immunocompromised persons

Unused Sharps

Hypodermic needles

Intravenous or other needles

Hypodermic or intravenous syringes

Suture needles

Scalpel blades

The background features a large, light blue circle in the center, surrounded by several concentric circles of varying shades of blue and white. Additionally, there are curved, overlapping lines in shades of blue and white that sweep across the corners of the image, creating a dynamic, modern feel.

Management Standards

Management Standards



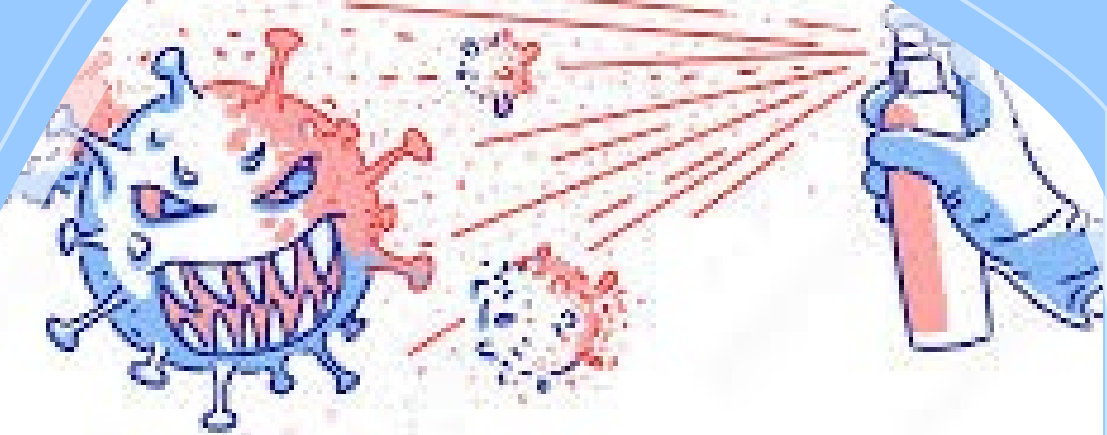
Exposure to employees, transporters, and the public **must** be minimized

Recycled containers **must** be disinfected after each use

Incinerated or disinfected

What does Disinfect and Disinfection Mean?

- Treatment or processing of infectious waste so that it poses no risk of infection or other health risk to individuals handling or otherwise contacting the waste.
- Terms include autoclave, chemical disinfection, radiation and irradiation, and incineration



To Incinerate or Disinfect?

- Sharps - If not incinerated **must** be rendered not sharp before disposal
- Blood & blood products – Discard without incineration or disinfection through municipal sewage disposal systems that meet requirements of NDAC Article 33.1-16



Infectious waste must be separated from other wastes and placed in distinctive containers.

- Do not leak
- Are impervious
- Puncture resistant
- Tear resistant
- Contain obvious markings

Bags and containers of regulated waste must be tied, closed, or sealed securely to prevent leakage.

If the event of contamination or puncture: placement into a second biohazard bag is required



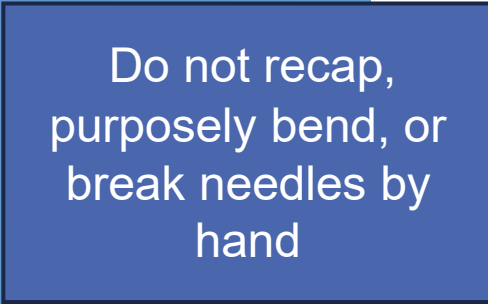
- Generally, but not always followed

Medical Waste Segregation Chart 			
SHARPS Red Sharps Container	BIOHAZ Red Container or Red Liner in Container	TRACE CHEMO Yellow Container	RCRA HAZ EPA RCRA Hazardous Black Container
- Needles - Ampules - Broken glass - Blades - Razors - Staples - Trocars - Guide wires - Other sharps	- Infectious waste - Blood products (albumin, etc.) - Contaminated Personal Protective Equipment (PPE) - IV tubing - Cultures, stocks	- Empty vials, ampules - Empty syringes, needles - Empty IVs - Gowns - Gloves - Tubing - Aprons - Wipes - Packaging	- Hazardous meds (RCRA) - Half/partial doses (RCRA) - Hazardous bulk meds - P-listed drugs, packaging - Bulk chemo - Pathological waste*  * Incineration only
  			PHARM Blue/White Container - Pills - Injectables - Antibiotics 
Medasend Biomedical, Inc. - 1-800-200-3581 - Visit us online at www.medasend.com			

+ • Sharps ◦ Management

A blue starburst graphic with a black outline, containing text about OSHA standards.

29 CFR
1910.1030 is
an OSHA
standard

A blue rectangular box with a black outline, containing text about handling sharps.

Do not recap,
purposely bend, or
break needles by
hand

At the point of origin

-Placed in containers
that are

- Closable
- Puncture resistant
- Leak-proof on
sides and bottom
- Labeled or color
coded in
accordance with
29 CFR 1910.1030



Generators

Infectious waste generators are responsible for

- Storage
- Collection
- Disposal of their infectious waste

Generators are responsible for ensuring that infectious waste is transported off-site for treatment by a permitted transporter and disposed at a site or facility which has all applicable permits required to manage infectious waste.



Health Care Facilities are instructed to dispose of medical wastes regularly to avoid accumulation

Wastes that must be stored are to be kept in containers that are leak proof, puncture resistant, and labeled containers.

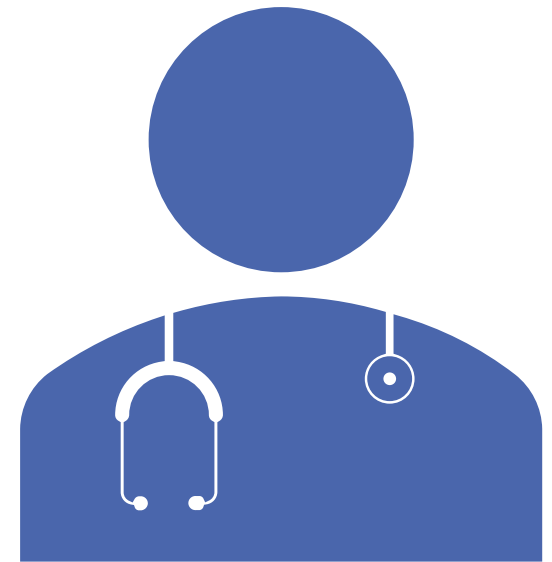
Wastes should be stored in an area that is well ventilated and inaccessible to pests

Record Keeping Requirements

Records are
required to be kept
for a period of 3
years

Generators shall keep records of the amount of regulated infectious waste sent off site for treatment

- Copies of waste manifests
- Invoices
- Records received from the regulated infectious waste facility
- Logs
- Any other written documentation



Waste Haulers

Need to be a permitted waste hauler with the NDDEQ

Vehicles used for commercial collection and transportation of regulated infectious waste must be

- Fully leakproof
- Fully enclosed or covered

Regulated Infectious Waste may not be subject to mechanical stress or compaction during loading, unloading, and transit

Regulated Infectious Waste must not be allowed to become putrescent during transportation

Regulated Infectious Waste must be immediately returned to the transport vehicle or container and (if necessary) the area must be cleaned and decontaminated.

Infectious Waste Haulers

Healthcare Environmental
Services LLC (WH-0377)

Medi-Waste Disposal LLC (WH-
2476)

Medi-Waste Transport Inc. (WH-
0588)

Stericycle Inc. (WH-0738)

Who accepts infectious waste?

Healthcare
Environmental
Services LLC

- Fargo, ND

Stericycle Inc.

- Fargo, ND
- Bismarck, ND

Non- Infectious waste

Noninfectious Waste





**Knowledge
Check!**



1. Which of the following is considered regulated infectious waste?
- a. Blood contaminated flexible tubing
 - b. A bloody urine cup
 - c. Needles
 - d. Heavily soaked bloody dressing**
 - e. Saliva in a cup



2. Which of the following are examples of regulated infectious waste?

- a. A drop of blood on a cotton ball
- b. 4X4 dressing that is **heavily** soaked in blood and bodily fluids
- c. Bloody vinyl gloves
- d. Sterile tubing

A photograph showing a collection of medical waste, including white gloves, syringes, and clear plastic tubing, all contaminated with blood and yellowish fluid. The waste is placed on a red plastic bag, which is a common method for disposing of infectious waste. The scene is a close-up, focusing on the various pieces of medical equipment and the visible contamination.

Regulated Infectious Waste?



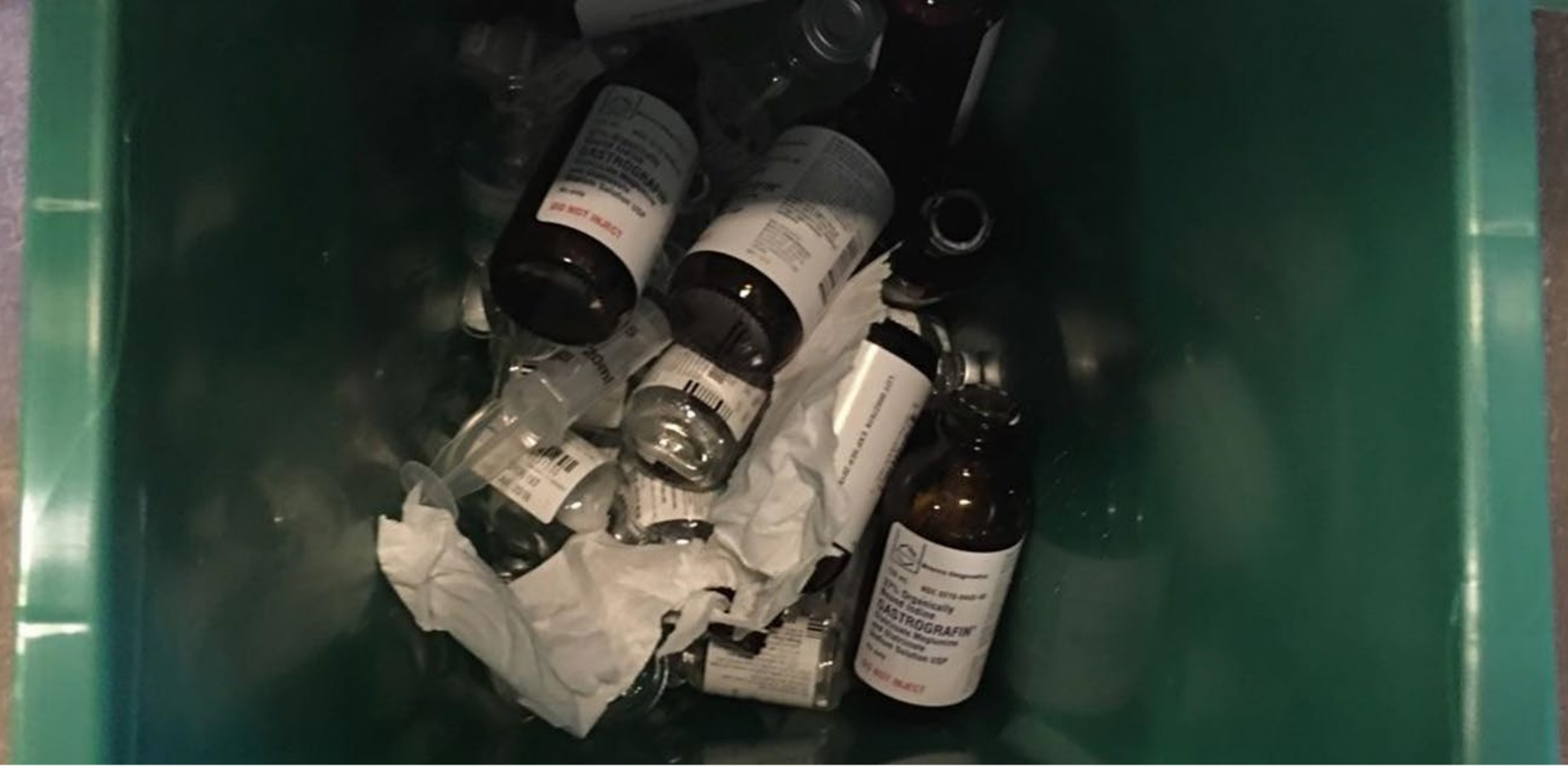
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Waste?**



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Regulated Infectious Waste?



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Questions?

NORTH
Dakota Be Legendary.™
Environmental Quality

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- <https://www.deq.nd.gov/WM/>