Welcome to the on-line training course for Waste Management!
The course will take approximately 15 minutes to complete. If you have questions about this course, please contact the Subject Matter Expert listed on this screen. If you have any technical problems or questions, please contact the help desk at 610-402-8303.

This course does not contain audio narration, please review the notes tab for more course information. To review the navigational features of the course, click on the Navigation tab at the top of the screen.
Lehigh Valley Health Network is committed to protecting and improving the environment. This is done by ensuring that municipal waste, hazardous waste and recycled materials are disposed of and/or recycled in a manner that is compliant with the requirements of the following regulatory agencies: PA Department of Health, PA Department of Environmental Protection, Centers for Disease Control and Prevention, the Joint Commission, US Environmental Protection Agency, and the US Occupational Safety and Health Administration.
Course Objectives

Upon completion of this course, you will be able to:

- Know how to properly separate waste streams
- Understand LVHN’s colored bin system
- Understand proper procedures for different levels of waste
- Know the proper steps to take when dealing with containerized waste

By the end of this course, you will know how to properly separate waste streams, understand LVHN’s colored bin system, understand proper procedures for different levels of waste, know the proper steps to take when dealing with containerized waste.
LVHN has designed a color coded waste management system to help us easily identify the proper waste receptacles and have consistent procedures for managing regulated medical waste and recycling efforts throughout our organization. Click each color-coded waste receptacle below to learn more about what waste is collected in each.
LVHN has up to five main waste streams. These graphs show the totals from 2015 in RMW, sharps, autoclave, municipal (clear bag) trash, and recycling. It’s great to see such progress and we look forward to seeing decreases in for costly forms of disposal, like red bag waste, through proper waste separation.
Regulated Medical Waste (RMW) is also known as red bag waste, bio-hazardous waste or infectious waste.

Infectious waste, which is hazardous waste with infectious characteristics, also includes the following:
- Pathological Waste
- Chemotherapeutic Waste
- Sharps
Regulated Medical Waste (RMW) means liquid or semi-liquid blood, Other Potentially Infectious Materials (OPIM), caked with dry blood, micro-wastes containing blood, contaminated.

For example, a patient has blood drawn and the nurse puts a Band-Aid on their arm. That Band-Aid gets a drop of blood on it. Is this RMW? No. It is not saturated or dripping with blood. However, if a patient came in and had a large wound and the gauze got saturated, is this RMW? Yes.

What if, for whatever reason, the gauze that was dripping and saturated with blood gets dried, so it is no longer dripping. Is that RMW? Yes. If it was saturated, when it dries, it could flake off and potentially infect someone. It is true that bloodborne pathogens, the hazard inherent in RMW, is most easily transmittable in liquid form, but it can be spread in other ways. Such as a crack in dry skin. Also, if the dried saturated bandage is included in the regular trash, other trash items that contain liquid such as a soda container may reconstitute the blood and make it liquid again. Feces and Urine are not included in regulated medical waste.

<table>
<thead>
<tr>
<th>Regulated Medical Waste</th>
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<tbody>
<tr>
<td>According to OSHA regulations, RMW is:</td>
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<tr>
<td>- Liquid, or semi-liquid blood, or Other Potentially Infectious Materials (OPIM)</td>
</tr>
<tr>
<td>- Caked with blood</td>
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<tr>
<td>- Microbiological waste containing blood</td>
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<tr>
<td>- Contaminated sharps (exposed to blood or OPIM)</td>
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How do you know an item is contaminated?

It can release blood or OPIM in a liquid or semi-liquid state if compressed.

This includes an item saturated with dried blood or OPIM.

Feces and Urine are not included in regulated medical waste.
What items belong in an infectious waste bag or red bag? Many times we see gloves, wrappers, cups, and more in the RMW bin. This items add to the tonnage and increase costs of disposal. Please remember to not place these items in a red bag.

Drag and drop all items that DO belong in an infectious bag to the red step-on container and click Submit to check your answer. You may also view why other things don't belong in this container by clicking on Feedback.
Knowledge Check

What items belong in an infectious waste bag (red bag)? Drag and drop all items that DO belong in an infectious bag to the red step-on container and click Submit to check your answer. You may also view why other things don't belong in this container by clicking on Feedback.

Why other items don’t belong:
- Patient information is shredded and recycled; this will go into the Blue Recycling Container
- Needles are considered sharp, therefore would be placed into the sharps container
- Glass bottles
- All syringes including oral and needle syringes are to go into the sharps container regardless if it has been used or not
- Feces and Urine soaked items go into clear bag, municipal waste.

NOTE NEW PROCEDURE: Non-bloody tubing does NOT go in the red bag waste!!
Click each tab below to learn more on the Do's and Don'ts of RMW Handling Procedures.

**Do's**
- Practice standard precautions by:
  - Wearing Gloves
  - Wearing Goggles
  - Washing hands frequently
  - Asking questions when you are unsure
- Keep bags away from your body
- Tie bag using a "goose-neck" style
- Always place the bag in the red waste container only

**Don'ts**
- NEVER handle waste without the appropriate Personal Protective Equipment (PPE)
- NEVER push down on a bag or force waste into a bag
- NEVER commingle your waste; infectious waste is to be handled separately from the trash—never place trash bags and infectious waste bags together
- NEVER commingle your regulated medical waste with other waste streams
- NEVER place the bagged regulated medical waste onto the floor
Sharps are defined as needles, syringes, scalpel blades, broken ampoules, tweezers, scissors, razors, etc. Anything in a hospital or clinic which has been used on patients, and which may be contaminated with infectious material, and is deemed to puncture through a bag should be discarded into special containers for disposal without any risk to disposal personnel.

Please note: In Pennsylvania, a syringe with or without a needle is considered a sharp. Therefore, all syringes should go in the sharps container.
Sharps are placed into rigid puncture proof containers. To reduce the risk of a needle stick injury from an over-filled container, sharps containers should be emptied when they are three quarters full! Click on the sharps container to view what types of waste go in that receptacle. Once waste items are revealed, click on them to learn more.
What Goes in the Sharps Container?

Sharps are placed into rigid puncture proof containers. To reduce the risk of a needle stick injury from an over-filled container, sharps containers should be emptied when they are ¾ full! Click on the sharps container to view what types of waste go in that receptacle. Once waste items are revealed, click on them to learn more.

Things that can go in the Sharps Container?

- Scalpels
- Tweezers
- Scissors
- Needles
- Glass Specimen Containers
- Syringes
Pathological waste is defined as all human or animal anatomical wastes including human tissues, organs, or body parts removed by trauma, during surgery, autopsy, studies, or another hospital procedure, which is intended for disposal.

Pathological waste is collected and at times sent to the lab for testing. Where does that waste go after testing? All pathological waste must be incinerated before it can be landfilled. So the process is as follows:

• Cardboard boxes for pathological waste are obtained from the General Services Department
• The box is then opened and lined with a red bag. The waste is then placed into the box, tied and the box is closed and sealed with clear packing tape. Specific transportation labels must be placed in designated areas on the box.
• Our contracted regulated medical waste hauler will pick up the boxes to be transported to an off-site processing facility for incineration.
• Each box is labeled and the handling, transportation and disposal is carefully tracked through a waste manifest.
Containerized waste includes suction canisters, pleurovacs, hemovacs, wound vags, etc. Containerized waste can NOT be autoclaved. **If these items are placed into the autoclave there is a risk of explosion.** Due to the risks involved the following protocols have been put into place:

Click each box below to learn more about the Containerized Waste Protocols process.

1. Containerized waste is double red bagged, usually 2 items to a bag
2. The waste is then placed into a rigid grey biohazard container that is lined with a red bag
3. When the container is full General Services will remove the waste and bring it down to the specified location where it will be labeled appropriately for disposal
4. Our contracted regulated waste hauler will generate a manifest and transport the waste for processing
5. When brought to their facility for processing they autoclave the waste and then send a destruction copy of the manifest to the Safety Department
6. No other waste should be placed into these containers such as trash, paper, etc.

Please help reduce costs!

Containerized waste includes suction canisters, pleurovacs, hemovacs, wound vags, etc. containerized waste can NOT be autoclaved. These items are double red bagged and placed in a rigid grey biohazard container. Due to the risks involved the following protocols have been put into place:

Click each box below to learn more about the Containerized Waste Protocols Process.
Click the biohazard container to view what types of waste go in that receptacle. Once waste items are revealed, click on them to learn more. Then you may view what happens next by clicking on the button.
What Goes in the Biohazard Containers?

Click the container to view what types of waste go in that receptacle. Once waste items are revealed, click on them to learn more. Then you may view what happens next by clicking on the button.

What items can go in a biohazard container?

- Suction Canisters and Liners
- Hemovacs
- Heart and Lung Machine – TUBING and Canister Mechanisms
- Pleurovac
- Woundvacs

Click to learn more.
What Goes in the Biohazard Containers?

Click the container to view what types of waste go in that receptacle. Once waste items are revealed, click on them to learn more. Then you may view what happens next by clicking on the button.

What items can go in a biohazard container?

What happens next to the biohazard container?

All items go into a double red bag. Nursing brings bag to soiled utility room, places in gray container with a red bag liner (primary).

A designated cardboard box with a Red Bag liner can be used as a backup (not shown).

Then, General Services transports the gray container or cardboard box from the Soiled Utility Room to the Loading Dock.

Close
Chemotherapy waste is waste that is generated from chemotherapy operations and procedures. Chemotherapeutic waste is to be placed into a disposal box lined with a yellow bag and a CHEMO caution label. The box is sealed and disposed of by incineration. PLEASE NOTE: Chemotherapeutic Waste that has at least 1 ml or 1 cc left in the bag, tube, syringe, etc. should be disposed of in a black Resource Conservation Recovery Act (RCRA) container.

Chemotherapy waste is waste that is generated from chemotherapy operations and procedures. Chemotherapeutic waste is to be placed into a disposal box lined with a yellow bag with a CHEMO caution label. The box is sealed and disposed of by incineration. To avoid expensive cost to the network, only chemotherapy waste should be placed in these containers.
Environment Protection Agency (EPA), State Environmental Agencies (DEP), Department of Transportation (DOT), Drug Enforcement Administration (DEA), The Joint Commission (TJC) are all instrumental in the regulation of proper disposal of Pharmaceutical waste.

Pharmaceutical waste is LEANER or UNUSED medication in:

- Vials
- IV bags, bottles and tubing
- Syringes, ampoules
- Oral medications
- Ointments and Creams
- Physician Samples

There are two primary kinds of pharmaceutical waste:

- Non-Hazardous – BLUE Container
- Hazardous – BLACK Container

Each area will have a list of department specific hazardous and incompatible pharmaceutical waste, and is now written on the pharmacy label as well. But if you are unsure of what waste bin to use, “put in blue, until you are told what to do.”
Hazardous and non-hazardous leftover medication, including vials and syringes, go into the large 18 gallon black container.

Coumadin and nicotine, if applicable to your site, go into the small container with the round white top.

Incompatible medications, such as corrosive (i.e. ammonia inhalant) or flammable (i.e. aerosols), go into the small black with rectangle white top.

When your container is full, call the number on the container for a pick-up, go through the Stericycle online portal, or contact the Sustainability Specialist for assistance at 610-969-4292.

Any one who signs a waste manifest at an off-site location MUST go through the Department of Transportation (DOT) manifest training found on the Stericycle online portal.

Containers MUST have the location label with the start date written on.

For any questions, contact the Sustainability Specialist 610-969-4292.
Recycling is the processing of waste for reuse—the processing of used or waste material so that it can be used again, instead of being wasted.

At Lehigh Valley Health Network we recycle:

- Cardboard
- Office paper
- Protective Health Information (PHI)
- Blue wrap
- Light bulbs
- Bottles and cans made from glass, plastic or aluminum
- Plastics, 1-7 (except plastic bags and utensils)
- Batteries
- Electronic Waste
- Metals
- Construction Materials

Recycling is the processing of waste for reuse or the processing of used or waste material so that it can be used again, instead of being wasted.

At Lehigh Valley Health Network we recycle Cardboard, Office paper, Protective Health Information or PHI, Light bulbs, Bottles/Cans/Glass, Batteries, Computers, Monitors and TV's, Metals, and Construction Materials.
Commingled Waste Receptacles

Click each waste receptacle below to learn more about what waste is collected in each.

Commingled Waste Receptacles

Paper (all paper and protected health information), such as:

- Office paper*
- Post-it notes
- Stapled paper
- Envelopes*
- Junk mail
- Files
- Folders
- Notepads

*all colors, inter-office and window envelopes

- Glossy paper
- Magazines
- Protected health information
- Calendars
- Brochures
- Spiral notebooks
- Clipped files
Commingled Waste Receptacles

Click each waste receptacle below to learn more about what waste is collected in each.

Commingled Waste Receptacles
The following types of commingled waste gets recycled:

- Bottles
- Cans
- Soup, tuna, etc.
- Glass
- Snapple, Fuze, juice, etc.
- Plastic
  - All plastic numbers 1 through 7; you can find this number on the bottom of the container with a triangle surrounding it
Non-Regulated Waste

Municipal waste, or clear bag trash, is disposed of in the beige containers lined with a clear bag.

In sustainability, we look to reduce usage and responsibly dispose of all items in order to lessen our impact on the environment.

Look first to see if a waste item should be in a red bag, sharps container, or recycled.

At LVHN we are continuously making efforts to reduce the amount of waste that we are placing into the landfills. Our recycling efforts and waste reduction efforts are all focused on environmental sound practice.

However, there are still some items that cannot be recycled or do not fall under the definition of RMW. These items are referred to as non-regulated waste which is also known as municipal trash, clear bag waste or municipal waste.
Some examples of regular waste items that are placed into a clear bag are: Gloves and other personal protective equipment that is NOT visibly contaminated with blood or body fluids, diapers not contaminated with blood, tissues, napkins, paper towels, package/wrapping materials, foam cups, paper cups, food items, non-bloody tubing, etc.
Click each tab below to learn more on the Do's and Don'ts of Non-Regulated Waste Handling Procedures.

Do's

- Always wear the appropriate PPE (gloves, goggles, mask, etc.)
- Always tie the bag using the "goose neck" Method (take two ends of the bag and tie the two ends together)
- Always keep the bag away from your body
Non-Regulated Medical Waste Handling Procedures

Click each tab below to learn more on the Do's and Don'ts of Non-Regulated Waste Handling Procedures.

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**Do's**

**Don'ts**

- NEVER pull trash without the appropriate PPE
- NEVER commingle your waste streams. When collecting regular trash there should only be clear bags on your container
- NEVER place trash bags on the floor.
Everyone is responsible properly separating waste and using the appropriate waste bins. By proper waste separation at the source (units, offices) LVHN saves money on disposal costs. All regulated medial waste, including sharps, need to be placed in the correct receptacles. We welcome all new green ideas! Call Katie Velekei, Sustainability Specialist, at 610-969-4292 or email Katherine.Velekei@lvhn.org with any questions or ideas or to join the Deans of Green.

Keep up the great work!

If you do not have the required receptacles in your area, please call the Safety Department at 610-969-4487 or you may contact General Services at (CC) 610-402-8566/(17th) 610-969-2220/(muh) 484-884-2293/(Haz) 570-501-4088.
Congratulations! You have now completed Lehigh Valley Health Network’s course on Waste Management.

You should now:

- Know how to properly separate waste streams
- Understand LVHN’s colored bin system
- Understand proper procedures for different levels of waste
- Know the proper steps to take when dealing with autoclave waste streams

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