

Medical Sharps Disposal from Livestock Operations

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This NebGuide explains how to properly dispose of medical sharps (hypodermic needles and scalpel blades) for livestock operations. Understanding this is critical for employee safety and environmental stewardship.

Disposing livestock medical sharps presents two concerns. The first is human safety. Handling livestock medical sharps presents a potential employee safety concern and as such is addressed within the United States Occupational Safety and Health Administration (OSHA) regulations. Second, the disposal of livestock medical sharps presents an environmental hazard and as such is addressed within the United States Environmental Protection Agency (EPA) regulations.

Improperly handling livestock medical wastes can lead to dangerous working conditions and OSHA fines. Although very few viral diseases in livestock can cause disease in humans, many of the bacteria found in livestock operations can cause disease in humans. The common link between bacteria in livestock operations and human disease caused by these bacteria is careless handling of items potentially contaminated with these bacteria and lack of proper hygiene.

Land contamination from improperly disposing livestock medical waste can result in expensive cleanup operations and EPA fines. In addition, the EPA has the authority to block the sale or transfer of ownership of environmentally contaminated land.

Safety precautions for handling livestock medical sharps:

- Workers must be trained in safe handling techniques of livestock medical wastes, including medical sharps.
- Label the disposal container with a “Sharps Disposal Container” label. The label used for livestock medical sharps containers must include a biohazard emblem (*Figure 1*).
- Keep medical sharps containers out of the reach of children and animals.



Figure 1. An appropriate Sharps Container label.

- Store medical sharps by placing them in a rigid, puncture-resistant, leak-proof container that is properly labeled.
- Tightly close the lid of the medical sharps container when not in use.
- Workers should wash their hands after handling medical sharps.
- Dispose of livestock medical sharps containers properly.

Two legal options are available for livestock medical sharps disposal:

- Encase livestock medical sharps in a rigid mass such as “Portland Cement” or “Sharp-Seal”^a. Seal in a properly labeled rigid container and send to an approved landfill.

- Heat until melted and then bury in an identified location on the operation. **Medical sharps, such as disposable hypodermic needles and scalpel blades should never be discarded loosely into the trash. Do not discard sharps in containers that are easily punctured or containers that are not labeled with a “BIOHAZARD” warning.**

Livestock medical sharps intended to be delivered to an approved landfill can be properly encased using:

- a hard plastic or metal container with a screw-on or tight fitting lid (plastic laundry detergent container or coffee can);
- portland cement or Sharp-Seal^a,
- duct tape; and
- “Sharps Disposal Container” label (*Figure 1*).

When the livestock medical sharps container is half-full, sift dry Portland Cement throughout the sharps, fill with water, and rotate container until the cement is mixed and sharps have been distributed throughout the cement mixture. Let cement dry for 24 hours. Seal the lid of the container tightly and tape the lid with duct tape. Check the container label to ensure it properly identifies the contents of the container.

Heating livestock medical sharps until all sharps are melted into a solid mass is a difficult procedure to accomplish. Aluminum needle hubs melt easily, but the stainless steel needle shafts are very hard to melt without additional oxygen. For this reason it is more efficient to encase sharps in a solid mass such as Portland Cement or Sharp-Seal^a.

Disposal Options

Livestock medical sharps that have been encased in Portland Cement or Sharp-Seal^a, sealed in a rigid container, and properly labeled may be disposed of in an approved landfill. The operators of the landfill must be informed of the contents of the container and approve the disposal of the medical sharps at their site.

The solid mass resulting from melted livestock medical sharps can be buried on the livestock premise. A record including date buried, amount buried, and exact location of burial is required.

^aSharp-Seal is available from Earth-Shield, Inc. Bakersfield, California. (661) 322-0300. <http://www.earth-shield.com/>

EPA approved. SHARP-SHIELD is a registered Pesticide No. 71946-1. Note: Sharp-Seal is a system that provides an approved container, label and sharps encasing epoxy. No biohazard permits are required for livestock medical sharps if encased in Sharp-Seal.

This publication has been peer-reviewed.

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**Index: Animal Diseases
General Livestock**
Issued January 2002

Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska–Lincoln cooperating with the Counties and the United States Department of Agriculture.

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