### Medical Waste Management

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Safety Plan Review Sign-In Sheet

For: Medical Waste Management

Our Plan has been reviewed by:

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<th>Title</th>
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<table>
<thead>
<tr>
<th>Signature of Reviewing Manager</th>
<th>Date</th>
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By signing below all employees have read and reviewed the plan listed above and employees were given the opportunity to ask questions to management to ensure a complete understanding of the employer's plan:

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A sign-in form for the Safety Plan Reviews can be found in the MASTER FORMS section.
OSHA is not the only government agency concerned about bloodborne pathogens. The U.S. Department of Transportation (DOT) is also concerned about what happens to infectious materials once it is packaged and transported on public highways.

DOT Pipeline and Hazardous Materials Safety Administration (PHMSA) is responsible for the protection of public safety in all areas of transportation, including interstate and intrastate transport of all hazardous materials. Healthcare facilities may use or produce many hazardous materials: radioactive materials, hazardous waste, compressed gases, cultures and stocks and Regulated Medical Waste.

In this manual, we’ll focus on Regulated Medical Waste (RMW). RMW is considered a hazardous material as defined under 49 CFR 171.8. Most people understand the hazards associated with bloodborne pathogens. These same risks are inherent in regulated medical waste.

DOT requires proper identification, packaging, labeling, manifesting, transportation and training when hazardous materials such as RMW are present. As the shipper, you are responsible for knowing the associated regulations and implementing a compliance and training program to address these requirements at your facility. Anyone who offers or ships RMW or discarded, untreated cultures and stocks of infectious substances must comply with DOT regulations.

DOT uses Risk Groups (RG) as defined under the World Health Organization guidelines for degree of hazard associated with the potential pathogen. DOT has adopted these RGs to identify the handling of these materials. There are both civil and criminal penalties if you fail to comply with the DOT regulations.

Below you’ll find the DOT regulations regarding shipping of RMW. However, you may have additional state and local regulations which you’ll need to follow.

Definitions:

Regulated Medical Waste means a waste or reusable material known to contain or suspected of containing an infectious substance in Risk Group 2 or 3 and generated in the diagnosis, treatment, or immunization of human beings or animals; research on the diagnosis, treatment or immunization of human beings or animals; or the production or testing of biological products.

Culture: A laboratory test involving the cultivation of microorganisms or cells in a special growth medium. Used extensively to study antibiotics.

Hazmat Employer: A person who employs or uses a hazmat employee, to transport hazardous material in commerce, or causes a hazmat to be transported in commerce.

Hazmat Employee: A person who, in the course of employment directly affects hazardous material transportation safety; loads/unloads hazardous material; prepares hazardous material for transportation.

Large Packaging: Consists of an outer packaging which contains articles or inner packaging; is designated for mechanical handling; exceeds 118.9 gallons.

Bulk Outer Packaging: A packaging, including transport vehicle, in which hazardous materials are loaded with no intermediate form of containment and which has a maximum capacity greater than 882 pounds and 119 gallons as receptacle for a solid.
**Infectious substance:** Materials known to contain or suspected to contain a pathogen with the potential to cause disease upon exposure.

**Risk groups:** Categories for infectious substances based on pathogenicity, mode, ease of transmission, degree of risk to individuals and communities, and reversibility of the disease through known and effective preventative agents and treatment. Least dangerous Risk Group 1; greatest danger Risk Group 4.

<table>
<thead>
<tr>
<th>RISK GROUP</th>
<th>PATHOGEN</th>
<th>RISK TO INDIVIDUALS</th>
<th>RISK TO THE COMMUNITY</th>
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<tr>
<td>4</td>
<td>A pathogen that usually causes serious human or animal disease and that can be readily transmitted from one individual to another, directly or indirectly, and for which effective treatments and preventive measures are not usually available.</td>
<td>HIGH</td>
<td>HIGH</td>
</tr>
<tr>
<td>3</td>
<td>A pathogen that usually causes serious human or animal disease but does not ordinarily spread from one infected individual to another, and for which effective treatments and preventive measures are available.</td>
<td>HIGH</td>
<td>LOW</td>
</tr>
<tr>
<td>2</td>
<td>A pathogen that can cause human or animal disease but is unlikely to be a serious hazard, and, while capable of causing serious infection on exposure, for which there are effective treatments and preventive measures available and the risk of spread of infection is limited.</td>
<td>MODERATE</td>
<td>LOW</td>
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<tr>
<td>1</td>
<td>A micro-organism that is unlikely to cause human or animal disease. A material containing only such micro-organisms is not subject to the requirements of this subchapter.</td>
<td>NONE OR VERY LOW</td>
<td>NONE OR VERY LOW</td>
</tr>
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</table>

**NOTICE:** Be advised that regulations change regularly. Currently DOT posted new regulations June 2, 2006. The voluntary compliance date is 30 days post publication of the new regulations and will become effective on October 1, 2006. The new regulations are available to view via: [http://hazmat.dot.gov/regs/notices/rulemake.htm](http://hazmat.dot.gov/regs/notices/rulemake.htm).

Changes to the regulations will be the change in categorization of infectious substances and regulated medical waste, shipping document changes, and clarification on sharps containers. For continued updates and inserts, please refer to the Steri-Safe reference website at: [http://www.stericycle.com/services_sterisafe_updates.htm](http://www.stericycle.com/services_sterisafe_updates.htm)
### STERICYCLE WASTE ACCEPTANCE POLICY CHECKLIST

**ACCEPTED WASTE:**
- **Sharps** – Needles and syringes, scalpel blades, glass pipettes, slides, etc.
- **Regulated Medical Waste** – A waste or reusable material known to contain or suspected of containing an infectious substance in Risk Group 2 or 3 and generated in the diagnosis, treatment, or immunization of human beings or animals; research on the diagnosis, treatment or immunization of human beings or animals; or the production or testing of biological products.

**ACCEPTED WASTE WHICH MUST BE IDENTIFIED AND SEGREGATED FOR INCINERATION:**
- **Trace- Chemotherapy Contaminated Waste** – RCRA Empty drug vials, syringes and needles, spill kits, IV tubing and bags, contaminated gloves and gowns, and related materials as defined in applicable laws, rules, regulations or guidelines.
- **Pathological Waste** – Human or animal body parts, organs, tissues and surgical specimen (decanted of formaldehyde, formalin or other preservatives).
- **Non-RCRA Pharmaceuticals** – Must be characterized and certified as non-RCRA hazardous material by the generator. Consult Stericycle Representative for specific requirements.

**WASTE NOT ACCEPTED BY STERICYCLE:**
- **RCRA Hazardous Pharmaceutical Waste**
- **Chemicals** – Formaldehyde, formalin, acids, alcohol, waste oil, solvents, reagents, fixer, developer
- **Hazardous Waste** – Drums or other containers with a hazard warning symbol, batteries and other heavy metals
- **Radioactive Waste** – Any container with a radioactivity level that exceeds regulatory or permitted limits; lead-containing materials
- **Complete Human Remains**
- **Bulk Chemotherapy Waste**
- **Compressed Gas Cylinders, Canisters, Inhalers and Aerosol Cans**
- **Any Mercury Containing Material or Devices** – Any mercury thermometers, sphygmomanometers or lab or medical devices
- **Mercury-Containing Dental Waste** – Non-contact and contact amalgam and products, chairside traps, amalgam sludge or vacuum pump filters, extracted teeth with mercury fillings and empty amalgam capsules

*Additional waste acceptance policies may apply based on state or permit specific requirements. Hazardous waste transportation services may be offered in certain geographical locations, under separate contract. Please refer to your local Stericycle Representative for additional information. For additional information on container and labeling requirements contact our Stericycle Customer Service Department at (866) 783-7422.*
DOT determines packaging requirements based on the hazard class, or degree of hazard presented by the waste material and the potential danger presented if the material is released during transportation. These include:

- Containers used for the transport of RMW may be fiberboard boxes or drums, reusable plastic containers or specialty roll off containers. All require the use of a plastic bag.
- The Packaging Group certification is required by DOT based on the degree of hazard of the hazardous material contained in that packaging. (PGI most hazardous, PGII moderate hazard, PGIII least hazardous). However, when using a private carrier, using a vehicle dedicated to the transportation of regulated medical waste, such as Stericycle, certain packaging requirements are no longer in effect. This includes the requirement that waste must be transported in certified packaging. Private carriers using a vehicle dedicated to transporting RMW are required to meet the general packaging requirements under DOT 49 CFR 173.24 and DOT 49 CFR 173.24a as well as packaging requirements in OSHA 29 CFR 1910.1030.
- Packaging must be designed to resist leaks, spills and damage, and constructed to keep contents limited and closed.
  - For bulk or large outer packaging there must be absorbent material placed in the container
  - All bags must be tied off prior to closing the lid of the container.
  - Bags for large bulk outer packaging must be marked and certified by the manufacturer as having passed the ASTM D 1709-01, impact resistance test and ASTM D 1922-009, tear resistance test.
- In addition, OSHA requires sharps containers be closable, puncture resistant and leakproof on the sides and bottom and labeled.

Packaging requirements for RMW are as follows:

- Containers must be:
  - Rigid
  - Leak Resistant
  - Impervious to moisture
  - Able to prevent tearing or bursting under normal use and handling
  - Sealed to prevent leakage
  - Puncture resistant for sharps
  - Free of any residue on the outside

Remember that your contracted RMW hauler and disposal facility may be restricted as to the type of waste they can accept from your facility. Never mix wastes and segregate according to your waste acceptance protocol or as your contract specifies.
Labeling and Marking Requirements

Outer packaging is required to have the following markings:

- Regulated Medical Waste
- UN 3291
- The biohazard symbol
- The word “BIOHAZARD”
- Directional up arrows

The marking on the package must comply with 49 CFR 172.304 which states that the marking must be:

- Durable
- In English
- Printed on or affixed to the surface of a package or on a label tag or sign
- Displayed on a background of sharply contrasting color
- Unobstructed by labels or attachments and located away from any other markings (such as advertising) that could substantially reduce its effectiveness

Remember: There may be additional requirements by your state to include the name and address of the generator, emergency phone numbers etc. Be sure to contact your local regulators to find out the specifics.

RMW is exempt from placarding requirements but must be marked when transporting full containers under certain circumstances. Many states require transporters to be registered. Check with your local hauler.

In Summary REMEMBER, prior to offering RMW containers for shipment:

- Do not overfill.
- Inspect outside of container for contamination, residue, and objects protruding from container or any other damage. Repackage any compromised containers prior to transport.
- Liquids must be placed in containers designed for liquids and that can be closed or sealed to prevent spills or leaks.
- Absorbent material is required for large or bulk outer packaging with liquids.
- Bags must be tied prior to placing the lid on the container.
- The container must be closed and secured prior to transport.
- Containers may only contain items defined as regulated medical waste.
- All markings must be on the container as described in the regulations.
DOT requires that all hazardous materials be accompanied by shipping documents, sometimes called bills of lading or manifests. The purpose is to provide clear communication in the event of an emergency, to serve as a compliance document, and to record the type and quantity of waste offered for transport. Shipping documents must be:

- Complete
- Correct
- Contain emergency response contact information
- Certified. You must certify that the materials listed on the shipping document are properly classified, identified, packaged, marked and labeled for transport. This certification holds you responsible for the waste.

The shipping document contains key information important in the event of an emergency. In accordance with 49 CFR 172.200 shipping papers must include:

- Proper Shipping Name: “Regulated Medical Waste”
- Hazard Class: “6.2”
- Identification Number: “UN3291”
- Packaging group: PGII and DOT-SP# where applicable
- Quantity of material in the shipment from your facility (weight or volume)
- Number and type of packages must be indicated
- Emergency response telephone number that is manned 24/7 by a person who has specific and detailed information on how to handle an emergency.
- Shipper’s Certification – must be printed (manually or mechanically) including the declaration statement:

  “This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.”
  OR
  “I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.”

The shipping documents must be legibly printed (manually or mechanically) in English. You may not use abbreviations such as RMW in the name. The DOT is only concerned with the shipping documents while the material is in transit. DOT requires that shipping documents be maintained by the shipper for 2 years and be maintained by the transporting company for 1 year. Many states require the shipping documents to be kept for a certain length of time; be sure to contact your Stericycle representative to find out specifics.
DOT requires that both the shipper and the transporter of RMW have emergency response information. The Emergency response includes the following information:

- Basic description and the technical name of the hazardous materials
- Immediate health hazards
- Fire and explosion risks
- Correct accident or incident response measures for spills or leaks
- First aid measures

This information must be printed legibly in English and located away from the hazardous material. The shipping documents and emergency response must be stored in the cab of the transportation vehicle.

**Reporting a spill**

If there is a spill during transport of the medical waste, the transporter is required to file two different types of reports, depending on the severity of the spill.

1) An incident is defined by DOT as the following:
   - A containment failure, which allows the release of package contents. This may be a liquid release, needle protruding outside of a container, or any spillage of container contents.
   - **Incidents must be reported** on U.S. DOT form 5800.1
   - The 5800.1 form must be submitted to the DOT within 30 days of the incident

2) Immediate notice by telephone to the US DOT is required for incidents in which as a result of the hazardous material:
   - A person killed or hospitalized;
   - The general public is evacuated for 1 hour or more;
   - One or more transportation arteries are closed for 1 hour or more;
   - The flight pattern of an aircraft is altered.

The US DOT reporting number is 800-424-8802 and the incident must be reported within 12 hours of occurrence.

All reported information is kept in a database by DOT so it can be used to identify those facilities with repeat problems, and may eventually lead to an investigation. It is crucial that you check all packages before shipping and ensure the waste sent out from your facility is properly packaged and that you be prepared with procedures for spills and emergency response.

**Security Requirements**

As part of the new measures to ensure safe transport of hazardous materials, DOT has adopted security awareness as part of its HAZMAT regulations. These regulations apply to all generators of RMW who meet the requirements under the new regulations. It is important that you understand your obligations under the regulations, since this is one area that DOT is aggressively inspecting. Security requirements cover all hazardous materials and not just regulated medical waste. Security requirements can be found under 49 CFR 172.704. These generally include:

- Notification of Suspicious Activity
- Security Risk Awareness
- Report to Supervisor
- Recognize Security Threats
- Be Alert – Don’t Get Hurt!
Training of employees ensures that hazardous materials are transported in the safest manner possible. It also provides information to help employees understand the specifics of the materials they’re transporting and the importance of their individual tasks.

DOT considers any employee who affects hazardous material transportation safety to be a hazmat employee. These employees:

- Prepare containers for transport
- Complete and sign shipping documents
- Handle containers

Hazmat employees must be trained within 90 days of being assigned tasks which include handling of hazardous materials. This training must be formal, and written documentation of the training must be recorded. Instructors may be employees who have been trained on hazardous material transport or can be non-employees from public or private sources.

**Employers are responsible for:**

- Maintaining training information throughout the hazmat employee’s tenure, or for up to three years if the job function changes and they are no longer a hazmat employee, or up to 90 days after employment ends.
- Recurrent training every three years.
- Whenever a change in the hazmat regulations occur.

**Training must include:**

- A test to confirm knowledge and understanding of the principles in each of the training components.
- Four program elements covering:
  - General awareness/familiarization training – to provide familiarity with DOT requirements and enable employees to recognize and identify hazardous materials.
  - Function-specific training – to explain the specific DOT requirements applicable to the employee’s job function.
  - Safety training – including emergency and spill response, protection from hazardous materials they are dealing with, procedures for avoiding accidents, and exposure reporting.
  - Security training.

**Training records must include:**

- Hazmat employee’s name.
- Most recent training completion date.
- Description or location of the training performed.
- Name and address of the trainer.
- Certification that the employee has been trained and tested.

As you can see there are several factors that affect the safe and proper transport of regulated medical waste. It is important as a generator and shipper of medical waste that you and your employees understand these requirements. The DOT is very active in inspections. Recordkeeping is critical as part of the management of DOT regulated medical waste. On the following page, you will see an outline of the regulations and what sections apply to you, and what is the transporter’s role.
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<th>Action Required</th>
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