

# Managing Excess Vaccines

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## How Should You Manage Excess Vaccines?

Depending on vaccine ingredients, discarded vaccines may be infectious waste, hazardous waste or non-hazardous solid waste (regular trash).



treatment facility for disinfection and subsequent management as regular trash. (Lists of infectious waste transporters are available at <http://dnr.wi.gov>, (search for "infectious waste licenses") or

- Disinfect the live vaccine yourself according to ss. NR 526.11 and .12, Wis. Adm. Code ([www.legis.state.wi.us/rsb/code/nr/nr526.pdf](http://www.legis.state.wi.us/rsb/code/nr/nr526.pdf)). Be sure to keep records. Manage the disinfected vaccine as regular trash unless there is a sharp attached, in which case, it would still be infectious waste.

## Discarded vaccines that may be infectious waste

Vaccines pre-loaded in a syringe with a needle attached are infectious waste due to presence of the sharp.

As of March 2014, the following vaccines that contain live attenuated virus are infectious waste when discarded, according to the Wisconsin Division of Public Health:

- Seasonal Influenza – only FluMist®
- MMR — M-M-R® II
- MMR-Varicella — ProQuad®
- Rotavirus — RotaTeq® and Rotarix®
- Typhoid Fever — only Vivotif®
- Varicella Zoster — Varivax® and Zostavax®
- Yellow Fever – YF-Vax®



Here are your options for managing excess live virus vaccine:

- Contact the manufacturer to see if the live vaccine can be returned for proper management.
- Send the live vaccine to an infectious waste

## Discarded vaccines that may be hazardous waste

Some vaccines are preserved with 1:10,000 or 0.01 percent Thimerosal. Thimerosal contains about 50 percent mercury by weight. Vaccines with 1:10,000 or 0.01 percent Thimerosal have about 50 mg/L mercury, which exceeds the 0.2 mg/L hazardous waste toxicity characteristic regulatory level for mercury. (see the vaccines in the table titled "Thimerosal Content in Some U.S. Licensed Vaccines" at [www.vaccinesafety.edu/thi-table.htm](http://www.vaccinesafety.edu/thi-table.htm) that have .01% in the Thimerosal Concentration column)

According to state and federal hazardous waste management requirements, discarded Thimerosal-preserved vaccines need to be managed as hazardous waste, using the waste code D009 (mercury).

NOTE: Although the amount of mercury in vaccines is extremely small (it would take 20,000 adult doses of Thimerosal-preserved vaccine to equal the amount of mercury, about 1/2 gram, in a mercury fever thermometer), it is important to manage both of these sources of mercury properly.

It is illegal to manage Thimerosal-preserved vaccines as infectious waste or to put them in regular trash. They are hazardous wastes.

NOTE: Live attenuated virus vaccines are never preserved with Thimerosal, as a mercury preservative would kill the virus. Therefore, live vaccines are not considered to be hazardous waste when discarded.

Here are options for managing excess Thimerosal-preserved vaccines:

- Ship *unexpired* vaccines to the manufacturer for use or proper management (with prior permission from the manufacturer),
- Manage the vaccines under the state of Wisconsin hazardous waste management contract,
- Transport the vaccines to a Wisconsin VSQG hazardous waste collection facility, or
- Contract directly with a hazardous waste management company to manage the vaccines.

We provide detailed information on these four options starting in the next column. Please review the details carefully as all of the options have conditions and one option may be **required** for certain generators.

### **Discarded vaccines that are non-hazardous solid waste**

Except for live virus vaccines (listed on page 1) and Thimerosal-preserved vaccines (listed at [www.vaccinesafety.edu/thi-table.htm](http://www.vaccinesafety.edu/thi-table.htm)), all other vaccines should be non-hazardous solid waste when discarded. You may manage these other discarded vaccines with your regular trash.

### **All discarded empty vaccine vials are non-hazardous waste**

Even if the vaccine itself was infectious waste or hazardous waste, you may discard all empty vaccine vials in the regular trash.

## Options for Managing Excess Thimerosal-Preserved Vaccines

Please read these options carefully, as they all have conditions and one option is **required** for certain generators.



### **OPTION 1**

#### **Ship unexpired vaccines to the manufacturer for use or proper management (with prior permission from the manufacturer)**

Vaccines managed under this option are not regulated in Wisconsin as solid or hazardous waste. To use this option, the vaccines **MUST NOT** have expired. (*Expired* Thimerosal-preserved vaccines must be managed as hazardous waste under options 2, 3 or 4.)

Contact the manufacturer to see if this option is available for your *unexpired* vaccine and under what conditions. We strongly recommend you check into how the manufacturer will manage the returned vaccines to minimize your organization's liability for any environmental contamination caused by how the manufacturer manages the vaccines. Shipments should comply with any applicable U.S. Department of Transportation (U.S. DOT) Hazardous Materials Regulations available at [hazmat.dot.gov](http://hazmat.dot.gov) or by calling (800) 467-4922.

### **OPTION 2**

#### **Manage the vaccines under the State of Wisconsin hazardous waste management contract**

All state of Wisconsin agencies, institutions and campuses (e.g., UW-Madison and UW System) that do not use option 1 are **required** to use the state contract. Additionally, Wisconsin municipalities **may** use the state contract.

NOTE 1: "Municipality" is broadly defined and includes those who have authority to award public contracts. See:

[vendornet.state.wi.us/vendornet/procman/prod30.asp](http://vendornet.state.wi.us/vendornet/procman/prod30.asp)

To register for access to VendorNet, go to [vendornet.state.wi.us/vendornet/default.asp](http://vendornet.state.wi.us/vendornet/default.asp)

The current hazardous waste contract can be found on VendorNet here:

<http://vendornet.state.wi.us/vendornet/asp/gvi.asp>

The VendorNet Information Center is open Monday through Friday, 8 a.m. to 4:30 p.m., to answer questions. In the Madison area, call the VendorNet Information Center at **264-7897** or **264-7898**. Otherwise, call **1-800-482-7813** or send an e-mail message to [vendrhelp@doa.state.wi.us](mailto:vendrhelp@doa.state.wi.us) for assistance.

If you are a Wisconsin VSQG of hazardous waste and are using the state contract, you may self-transport your hazardous waste to the state contractor. You do not need a hazardous waste transportation license and EPA identification number, and you are exempt from complying with the hazardous waste transporter standards in ch. NR 663, Wis. Adm. Code.

NOTE 2: Find a definition of VSQG in [dnr.wi.gov/files/pdf/pubs/wa/wa295.pdf](http://dnr.wi.gov/files/pdf/pubs/wa/wa295.pdf) and in s. NR 662.220, Wis. Adm. Code, at [www.legis.state.wi.us/rsb/code/nr/nr662.pdf](http://www.legis.state.wi.us/rsb/code/nr/nr662.pdf).

Before considering self-transport, you should obtain permission from the risk management and fleet programs at your municipality, agency, institution or campus.

While the U.S. DOT Hazardous Materials Regulations do not apply to transportation of hazardous material in a motor vehicle operated by a government employee only for noncommercial government purposes, we recommend following the regulations as a good management practice. For information on those regulations, go to [hazmat.dot.gov](http://hazmat.dot.gov) or call (800)467-4922.

### OPTION 3

#### **Transport the vaccines to a Wisconsin VSQG Hazardous Waste Collection Facility**

If you are not required to use option 2, you may use this option if:

- you are a Wisconsin VSQG (see option 2, note 2); and
- you comply with the transportation requirements for VSQGs, described after Option 4, below.

Contact a VSQG collection facility near you for information about hazardous waste and costs for managing it. See a list of Wisconsin VSQG collection facilities at [http://datcp.wi.gov/Environment/Clean\\_Sweep/index.aspx](http://datcp.wi.gov/Environment/Clean_Sweep/index.aspx).

The VSQG collection facility is required to give you a shipment receipt, including:

- your company's name and location, including street address, city and state;
- the quantity and type of waste; and
- date the waste was accepted by the VSQG collection facility.

While it isn't currently required, we recommend that you keep these receipts for at least three years after the waste acceptance date.

### OPTION 4

#### **Contract directly with a hazardous waste management company to manage the vaccines**

***If you are not required to use option 2,*** you may use this option.

Lists of licensed Wisconsin hazardous waste transporters are available at [dnr.wi.gov/topic/waste/licenses.html](http://dnr.wi.gov/topic/waste/licenses.html).

Wisconsin VSQGs may transport their hazardous waste vaccines according to the requirements listed on the following page.

## Transportation requirements for VSQGs transporting their own wastes

If you are a Wisconsin VSQG and are not required to use the state hazardous waste contract, you may transport your own hazardous waste vaccines either to a hazardous waste management company location or to a VSQG collection site.

NOTE: Find a definition of VSQG in <http://dnr.wi.gov/files/pdf/pubs/wa/wa295.pdf> and in s. NR 662.220, Wis. Adm. Code, at [www.legis.state.wi.us/rsb/code/nr/nr662.pdf](http://www.legis.state.wi.us/rsb/code/nr/nr662.pdf).

If you do transport your own very small amounts of waste, you should ask permission to do so from your employer's risk management and fleet programs.

VSQG's transporting their own wastes do not need a hazardous waste transportation license or EPA identification number, and are exempt from complying with the hazardous waste transporter standards in ch. NR 663, Wis. Adm. Code.

## Links for Waste Management Requirements

Wisconsin's healthcare waste pages  
<http://dnr.wi.gov> search for "business healthcare waste"

Wisconsin's hazardous waste guidance  
[dnr.wi.gov/topic/Waste/](http://dnr.wi.gov/topic/Waste/)

Wisconsin's hazardous waste rules  
[www.legis.state.wi.us/rsb/code/nr/nr600.html](http://www.legis.state.wi.us/rsb/code/nr/nr600.html)

Wisconsin's infectious waste rules  
[www.legis.state.wi.us/rsb/code/nr/nr526.html](http://www.legis.state.wi.us/rsb/code/nr/nr526.html)

## For more information

Search the DNR staff directory at: <http://dnr.wi.gov>. Search for your county and the subject "waste."

Call the Waste and Materials Management Program general number at (608) 266-2111 and ask to have your call redirected.

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