



SARS-CoV-2 mRNA Vaccine Waste Management

As the country ramps up with administering the SARS-CoV-2 mRNA vaccine, questions are beginning to arise about disposing of waste from vaccine administration. The following represent general recommendations for managing waste from administering the SAR-CoV-2 mRNA vaccine. In general, disposal of SARS-CoV-2 mRNA vaccine related wastes should follow the same processes for other vaccine related wastes.

However, not all states are the same – if a state has more stringent requirements than described below, follow the state laws! In addition, if the CDC or vaccine manufacturer require management different than the guidance below, follow those recommendations. Last, please be sure to follow your waste hauler’s Waste Acceptance Policy.

The following containers should be used for each of the waste products:

- **Sharps container** - Used syringes/needles and empty vaccine vials, where required by rule or policy.
- **Pharmaceutical waste container** - Remaining doses of vaccine. The vaccine is not a hazardous waste and, as such, does not need to be managed as a hazardous waste pharmaceutical. The SARS-CoV-2 mRNA vaccine does not contain any viral material, attenuated or otherwise; vials containing residual liquids may be disposed of according to state or end disposal facility requirements for non-hazardous pharmaceuticals or regulated medical waste/red bag.
- **Red bag** – Vial trays (please note this is a requirement of Pfizer, see link below for more info) and grossly contaminated personal protective equipment (PPE). In some states, unused doses of vaccine may also be disposed of in the red bag. However, this should be carefully evaluated to comply with state regulation, hospital protocols, and landfill/disposal policy.
- **Trash** – PPE such as masks, gowns and gloves that are not contaminated as well as items such as cotton balls, alcohol wipes, bandages and polystyrene (Styrofoam®) packaging that is not required to be returned to manufacturer.
- **Recycling** – Cardboard packaging that is not returned to the manufacturer can be recycled.
- **Return to manufacturer** – Follow vaccine manufacturers’ instructions for return of any “cold box” shipping materials and tracking devices. In the case of the Pfizer-BioNTech COVID-19 vaccine, the temperature-monitoring device, foam lid, dry ice pod, and the box that held the vial trays should be returned.
- **Other** - Dry ice should be allowed to sublimate (change from solid to gas) in an open, well-ventilated area. It should be kept in the original container. (Dry ice in an

enclosed space can lead to build-up of carbon dioxide which can result in a potential for suffocation).

References:

Pfizer-BioNTech, *Shipping and handling guidelines*, retrieved December 18, 2020.

https://www.cvdvaccine-us.com/images/pdf/Shipping_and_Handling_Guidelines.pdf

Pfizer-BioNTech, *The S.T.E.P.S. to Pfizer-BioNTech COVID-19 Vaccination*, retrieved December 18, 2020.

<https://www.cvdvaccine-us.com/images/pdf/How-To-Prepare-and-Administer-the-Vaccine-Poster.pdf>