

FAD PReP/NAHEMS Tactical Topics: Vaccination for Contagious Diseases

Information is based on the **Foreign Animal Disease Preparedness and Response Plan (FAD PReP)/National Animal Health Emergency Management System (NAHEMS) Guidelines: Vaccination for Contagious Diseases (2014)** to be used in training or during an animal health emergency. References to the Guidelines sections are provided in parenthesis for more detail.

Introduction/Overview: Control of a foreign animal disease outbreak may require the large-scale vaccination of livestock to minimize the impact of the disease on animal and human health, minimize the impact on the economy and the environment, and ensure continuity of the U.S. food supply. Vaccination personnel must employ proper techniques for handling and restraining animals and as well as the proper handling and administration of vaccines.

FOR QUESTIONS REGARDING VACCINATION PROCEDURES: Contact your immediate supervisor. Follow chain of command.

General Vaccine Handling Guidelines (4)

- Refer to the vaccine manufacturer's recommendations for specific handling requirements.
- Store and transport vaccines according to temperature guidelines. If you suspect a break in the cold chain:
 - Report suspected break to your supervisor and mark the vaccine "DO NOT USE"
 - DO NOT DISCARD THE VACCINE UNLESS A DIRECTED BY A SUPERVISOR
- Never freeze vaccine intended to be refrigerated only. Do not subject vaccines to freeze-thaw cycles.
- Store vaccines in their original box until ready to use. Protect from sunlight.
- Do not use vaccines beyond the expiration date printed on the label. Notify your supervisor if you find a vaccine near or beyond the expiration date.
- To reconstitute lyophilized (dried powder) vaccines:
 - Reconstitute the vaccine ONLY using the sterile diluent provided with the vaccine. Match the lot number on the vaccine and the diluent.
 - Use a new, sterile, single-use syringe and needle to withdraw entire volume of diluent from bottle.
 - Reconstitute immediately prior to use.
 - Do not allow the vaccine to warm up before or during reconstitution.
- Exercise care when working with multi-dose vials to prevent contamination:
 - Never remove the rubber stopper from the vial.
 - Wipe the rubber stopper with alcohol or another approved antiseptic before piercing with a needle.
 - Use a new, sterile needle each time the stopper is pierced.
 - Mark the vial with the date and time first used and the user's initials.
 - Use or discard multi-use vaccines on the premises where they were reconstituted.

Receiving, Storing, and Transporting Vaccines (4.5)

Those responders assigned to the Logistics Section may be providing vaccine to groups in the field.

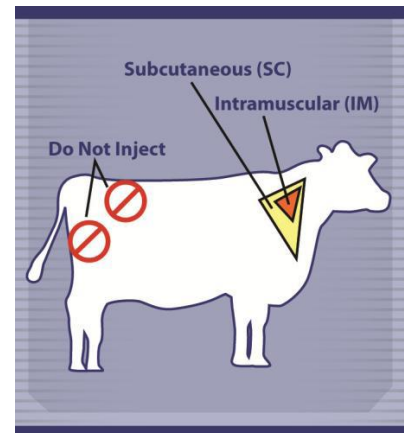
- Maintain appropriate temperatures of vaccine through receiving, storage, delivery to the field, to administration.
- Unpack and inspect vaccine shipments immediately on their arrival.
- Check expiration dates, sufficient matching diluents, and cold chain monitoring devices.
- Store vaccines in the main refrigerator compartment of a dedicated household or commercial refrigerator.
- Use a thermometer to monitor temperature inside the refrigerator.
- Do not store the vaccine in the refrigerator door. Limit the times the door is open.
- During transport, the insulated container should be packed and layered as follows:
 - Refrigerator/freezer packs placed on the bottom of the transport container
 - Barrier i.e. bubble wrap, packing paper, Styrofoam peanuts, to prevent vaccine-freezer pack contact
 - Vaccines, in original packages
 - Thermometer or cold chain monitoring device
 - Barrier
 - Additional refrigerator/freezer packs placed on the top

FAD PReP/NAHEMS Tactical Topics:

Vaccination for Contagious Diseases

General Vaccine Administration Guidelines

- Follow manufacturer's instructions regarding storage, route of administration and handling.
- Administer vaccines only by a route approved for the vaccine and indicated on the label. (9)
- Administer vaccine in the correct species-specific anatomical location. (10)
- Confirm that the needle has not punctured a blood vessel before administering a vaccine by injection.
- Follow guidelines regarding needle usage and replace needles as required.
- Properly clean, disinfect and maintain multi-dose syringes. Thoroughly rinse away any detergents or disinfectants after cleaning to prevent deactivation of vaccines.
- Prior to vaccination, confirm species-specific forms of official identification. (6)
- Identify individual animals or herds of animals with nationally unique numbers and associate them with a standardized location identifier at a point in time, unless notified otherwise. (6)



Recordkeeping Requirements (7)

- Follow incident-specific instructions regarding vaccine record information.
- Minimum information on a vaccination record:
 - Individual animal identification devices and numbers
 - Animal owner's name and mailing address
 - Signalment (species, age, sex, breed)
 - Date of vaccination
 - Route of vaccine administration (intramuscular [IM], subcutaneous [SC], intranasal [IN], oral) and location on animal
 - Vaccine information:
 - Brand or manufacturer
 - Product name or number
 - Lot number
 - Expiration date
 - Withdrawal date (food animals)

Responder Safety

- Responder safety is the highest priority.
- Do not recap needles to avoid needlesticks. Some modified live vaccines can infect personnel and many killed vaccines use adjuvants which can cause severe tissue reactions.
- Properly dispose of used needles in an approved sharps container.
- Seek medical attention if vaccine exposure is suspected (4.7).
- Use care and proper handling and restraint techniques when working around animals. Have sufficient assistance when restraining animals for vaccination (10).

Preventing Disease Transmission (11)

- Be familiar with the methods of disease transmission.
- Comply with all incident-specific biosecurity requirements, including assigned outerwear and PPE.
- Properly clean and disinfect and/or dispose of equipment used during vaccination. Follow protocols for donning/doffing of PPE and cleaning and disinfection of used PPE, clothing and equipment.
- Wash your hands. Change gloves between animals, barns, pens or premises.