Questions and Answers: The National Veterinary Stockpile and Classical Swine Fever Virus Vaccine

The National Veterinary Stockpile (NVS) program, coordinated by the U.S. Department of Agriculture’s (USDA) Animal and Plant Health Inspection Service (APHIS), provides support to States, Tribes, and Territories responding to damaging animal disease outbreaks. Within 24 hours, the NVS can provide veterinary countermeasures—including certain types of animal vaccines, antivirals, supplies, equipment, and response services—to animal health officials in affected areas. To learn more about this program, see the NVS factsheet on APHIS’ Web site at www.aphis.usda.gov/publications/animal_health/content/printable_version/veterinary_stockpile.pdf.

One of the vaccines NVS provides is the classical swine fever (CSF) virus vaccine.

Q. Does NVS hold CSF virus vaccine in its inventory?  
A. We currently maintain contracts with biologics manufacturers that hold our CSF vaccine as a contingency to address an outbreak of this disease anywhere in the country.

Q. Why does NVS hold different types of CSF vaccine?  
A. We maintain two different types of CSF vaccines because there is no “ideal” CSF vaccine currently available. Vaccines with different assets and liabilities might be used in different disease situations, disease eradication programs, or swine populations.

CSF vaccines currently on contract with our vendors include:

• A conventional CSF virus vaccine with a modified live virus (MLV)—one dose of this vaccine provides onset of immunity in 4 to 5 days; it can be administered parenterally (subcutaneously) or orally (i.e., in bait vaccines to immunize feral swine). However, this vaccine is not suitable for a vaccination program intended to detect infection in vaccinated animals (DIVA) by serologic tests (i.e., it is not a “DIVA”-type vaccine).

• A DIVA-compatible E2 antigen-based CSF virus vaccine with a killed Baculovirus vector—two doses of this vaccine are required for maximal immunity; onset of immunity may not occur until 14 to 21 days after the first dose of vaccine. This vaccine is only effective when given parenterally; it is not effective as an oral vaccine.

Q. In what disease situations, eradication programs, and swine programs might the different CSF vaccines be used?  
A. In a focal CSF outbreak, the MLV vaccine might be used in an inner-ring vaccination program, where vaccinates will be depopulated in a “vaccinate-to-kill” program. Meanwhile, the DIVA vaccine might be used in an outer “vaccinate-to-live” zone.

In a widespread CSF outbreak, the MLV vaccine might be used in terminal market swine, while the DIVA vaccine might be used in breeding stock.

Q. How can an NVS partner request CSF vaccine?  
A. APHIS leadership must first approve the use of CSF vaccine. This approval is typically requested jointly through the State animal health official and the APHIS area veterinarian-in-charge. After receiving approval, the NVS partner will work with the NVS to coordinate CSF vaccine requests.

We have the capacity to obtain and deliver CSF vaccine within 2 to 4 days. If required, additional deliveries would continue during the ensuing days and weeks.

Q. What should I do if I receive vaccine that is outside of the specified storage temperature (2–8 ºC)?  
A. If you detect temperature excursions (i.e., either above or below the acceptable temperature range) with the vaccine, follow these procedures:

1) Immediately move and store the vaccine in an isolated area of a refrigerator/storage room confirmed to be in the acceptable temperature range.

2) Clearly mark the affected vaccine with “DO NOT USE” labels. (Do NOT discard the affected vaccine.)
3. Complete the requested information below.

4. Immediately email this information and the appropriate TEMPERATURE MONITORING LOG to nvs@aphis.usda.gov and call (301) 851-3595.

5. Collect the shipping documents and temperature monitoring devices from the shipping container for analysis and provide these to the NVS Mobile Logistics Team, if onsite. If NVS personnel are not onsite, consult with the NVS Deployment Management Team by emailing nvs@aphis.usda.gov and calling (301) 851-3595.

Make sure to record the following information:

- Date
- Time and time zone
- Name and telephone number of person detecting temperature excursion
- Temperature of refrigerator/container/storage room at time of excursion
- Estimated amount of time temperature was outside acceptable range
- Ambient air temperature (estimated if not recorded)
- The commercial carrier and shipping information (if excursion was detected upon receipt)

You also need to record the information below for affected vaccines, using a separate line for each lot/serial number:

- Vaccine, manufacturer, and lot/serial number
- Number of containers
- Number of doses
- Actions taken

Q. Where can I find more information about CSF and other animal vaccines?
A. For questions, concerns, or complications related to the use of animal vaccines, visit APHIS' veterinary biologics Web site at www.aphis.usda.gov/animal_health/vet_bioligics. You can also contact the Center for Veterinary Biologics program coordinator at (515) 232-5785.

In an emergency, contact the NVS through our 24/7 hotline at 1-800-940-6524.

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