Questions and Answers About Viral Hemorrhagic Septicemia (VHS)
Federal Order

Q. What is VHS?
A. VHS is a highly contagious pathogen of fresh and saltwater fish. It causes clinical signs including internal hemorrhaging and death in susceptible species. Some fish will show no external signs while others show signs including bulging eyes, bloated abdomens, inactive or overactive behavior, and hemorrhaging in the eyes, skin, gills and at the base of the fins. Infected fish may also have lesions that look like those caused by other fish diseases. Therefore, testing is necessary to determine whether fish are infected. VHS has been reported in several of the Great Lakes and related tributaries where a number of large-scale die-offs of wild fish have occurred. The disease does not pose a risk to people, but the VHS virus has been found to infect at least 37 fish species.

Q. How did VHS arrive in the Great Lakes area?
A. It is not known how the disease arrived in the Great Lakes area. In the past, VHS was thought to be a concern only for trout and a few other freshwater fish raised for commercial aquaculture in Europe. The disease was first detected in Lake Ontario in 2005 and has since been detected in Lake St. Clair, Lake Erie and the St. Lawrence River, as well as Conesus Lake. As a result of additional research, we now know that the disease was present in Lake St. Clair as early as 2003. Before being detected in the Great Lakes area, VHS was limited in North America to saltwater finfish from the Atlantic and Pacific oceans. The recent outbreak in the Great Lakes region appears to be a new strain of the virus. This new strain is responsible for die-offs in many freshwater species.

Q. What initial action did the U.S. Department of Agriculture (USDA) take in response to this disease threat?
A. On Oct. 24, 2006, USDA’s Animal and Plant Health Inspection Service (APHIS) issued an emergency order prohibiting the importation of 37 species of live two Canadian provinces into the United States and the interstate movement of the same species from the eight States bordering the Great Lakes. The emergency order was issued in response to the rapid spread of VHS in the Great Lakes region. In addition, the Great Lakes strain of the virus impacts a greater number of fish species.

Q. Why did USDA revise the initial Federal Order?
A. Following the release of this emergency order, APHIS held a two-day meeting to discuss VHS and the development of a Federal regulatory program. During this meeting, APHIS received several recommendations from participants regarding modifications to the Federal Order that could be made to alleviate impacts on industry and related businesses in the Great Lakes region while still protecting against the spread of VHS. On Nov. 14, 2006, APHIS modified the Federal Order to allow live fish of VHS-susceptible species to move from the eight States bordering the Great Lakes provided that certain conditions are met. With the exception of salmonids, the movement of VHS-susceptible species from Quebec and Ontario, Canada into the United States remains prohibited under the Federal Order.

Q. Has VHS been found in commercially raised fish in the United States?
A. No. Detections of VHS have been limited in North America to the wild ocean-going and freshwater fish. The goal of the Federal Order is to prevent the spread of the disease to aquaculture facilities.

Q. What States are included in the amended Federal Order and why?
A. The following States are included in the Federal Order: Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin. The States of New York, Pennsylvania, Michigan and Ohio have experienced fish die-offs due to VHS. While such die-offs have not been observed in Illinois, Indiana, Minnesota and Wisconsin, these States are considered to be at-risk of having the disease because they too are part of the Great Lakes watershed and unimpeded natural fish movements between these bodies of water can spread the disease. Entire States rather than watersheds are included in the Federal Order because of the unrestricted intrastate movement of fish through human activity. Future surveillance may be able to more closely delineate the presence of VHS in specific areas.
Q. What conditions must be met under the Federal Order to move live VHS-susceptible species interstate for slaughter?
A. In order for live VHS-susceptible species to move interstate for slaughter, the fish must be:
- Intended for human consumption.
- Transported to a state-inspected slaughter facility that discharges waste water into a municipal sewage system that includes waste water treatment. As an alternative, the facility can also dispose of waste water in a non-discharging, settling pond or a settling pond with disinfection according to Environmental Protection Agency (EPA) and state requirements. Offal, including carcasses, from the slaughter facility must be either rendered or composted.
- Accompanied by the proper USDA documentation (VS form 1-27) for the movement of restricted animals if not tested for VHS.

Q. What is a settling pond with disinfection?
A. A settling pond is one of several ways a slaughter facility or processing plant can remove waste water. No all settling ponds incorporate a disinfection process. State agencies overseeing slaughter plants ensure that the disinfection process meets applicable Environmental Protection Agency and State regulatory standards.

Q. What conditions must be met under the Federal Order to move live VHS-susceptible fish for research and testing?
A. In order for live VHS-susceptible species to move to research and diagnostic laboratories, the fish must be:
- Accompanied by the proper USDA documentation (VS form 1-27) for the movement of restricted animals stating the fish are destined for a research or diagnostic laboratory. The laboratory must be approved by State, Tribal or Federal authorities for aquatic animal health.
- Received at a facility where waste fluids and carcasses are considered medical waste and disposed of according to EPA and State requirements.

Q. Where can producers get a VS form 1-27?
A. VS form 1-27 is available through APHIS’ Veterinary Services’ (VS) area offices. A list of the area offices is available at www.aphis.usda.gov/vs/area_offices.htm. Please contact the area office in your State, and staff will complete the form for you, sign it and provide you with a copy to accompany your shipment.

Q. What conditions must be met under the Federal Order to move live VHS-susceptible species for purposes other than slaughter, research or diagnostics?
A. In order to move live VHS-susceptible species for purposes other than slaughter, research or diagnostics, the fish must be transported with documentation from appropriate State, Tribal, or Federal authorities for aquatic animal health stating that the fish have tested negative for the VHS virus under existing national and international standards specified in the Federal Order. National standards for testing are detailed in the American Fisheries Society Suggested Procedures for the Detection and Identification of Certain Finfish and Shellfish Pathogens also referred to as the AFS Blue Book. The blue book is available online at www.fisheries.org/fhs. International standards for testing are included in the World Organization for Animal Health (OIE) Manual of Diagnostic Tests for Aquatic Animals, which is available online at www.oie.int/eng/normes/fmanual/A_00022.htm.

Q. Does this mean that live fish can move interstate from the 8 States included in the Federal Order if they test negative for VHS?
A. Live fish can move interstate if they test negative for VHS and are accompanied by documentation from the appropriate State, Tribal or Federal authority for aquatic animal health. This documentation ensures that all testing is conducted in accordance with the Federal Order at an approved State, Tribal or Federal laboratory.

Q. What type of documentation is required?
A. The appropriate documentation is determined by the competent State, Tribal or Federal authority for aquatic animal health. It could be a letter, health certificate or permit depending on individual State, Tribal or Federal requirements.
Q. What is a competent authority for aquatic animal health?
A. A competent authority is defined as the State, Tribal or Federal Agency that has jurisdiction over aquatic animal health. It is recommended that producers contact their State aquaculture coordinator for more information. A list of State aquaculture coordinators can be found at www.aphis.usda.gov/vs/aqua/ under General Information.

Q. Who determines whether the testing meets national and international standards?
A. The appropriate State, Tribal or Federal competent authority in the originating jurisdiction will make that determination.

Q. Do all species of fish need to be tested for VHS?
A. No. Only live VHS-susceptible species originating from the 8 States included in the Federal Order need to be tested before moving interstate. The list of VHS-susceptible species included in the Federal Order can be found at: www.aphis.usda.gov/vs/aqua/. This list may be updated as our knowledge of species susceptibility increases.

Q. Is testing farm based or fish-lot based?
A. The State, Tribal or Federal competent authority for aquatic animal health in the originating jurisdiction will make that determination.

Q. How can producers find approved laboratories for VHS testing?
A. APHIS recommends that producers contact their State or Tribal competent authority for aquatic animal health. The appropriate authority will determine which laboratories are approved to test for VHS. These laboratories may include State, Federal and University labs.

Q. How can producers find aquatic animal health professionals to collect samples for VHS testing?
A. APHIS recommends that producers contact their State aquaculture coordinator to provide assistance in locating an aquatic animal health professional. A list of State aquaculture coordinators can be found at www.aphis.usda.gov/vs/aqua/ under General Information.

Q. Does the Federal Order have any implications for the 42 States not included in the emergency action?
A. States not included in the Federal Order can continue to move live VHS-susceptible fish species without restriction. In addition, fish originating in States not included in the Federal order can transit the affected Great Lakes States without oversight.

Q. Do any requirements other than those included in the Federal Order need to be met to move live VHS-susceptible species interstate?
A. Yes. In addition to the Federal Order, producers need to meet their existing State requirements as well as any requirements stipulated by the receiving State.

Q. Can live VHS-susceptible fish be imported into the United States from Canada?
A. VHS-susceptible fish from all Canadian provinces except Ontario and Quebec can continue to move in U.S. commerce without restriction. With the exception of salmonids, all live VHS-susceptible species from Ontario and Quebec are prohibited from entering the United States at this time. VHS-susceptible species of salmonid fish may enter the United States from Ontario and Quebec only if they meet the requirements specified in the U.S. Fish and Wildlife Service Title 50 Certification. These requirements can be found in 50 CFR 16.13.a.3 and 16.13.b. For a copy of the certificate, please go to www.fws.gov/forms/3-2274.pdf.

Q. Does APHIS have plans to provide compensation for income lost as a result of the Federal Order?
A. No. Under the Animal Health Protection Act, APHIS only has the authority to provide compensation for animals depopulated as part of a disease eradication program. Under the Federal Order APHIS is not requiring the destruction of VHS-susceptible species, we are only regulating their movement. The revisions to the original Federal Order allow some movement while still protecting against the spread of VHS.