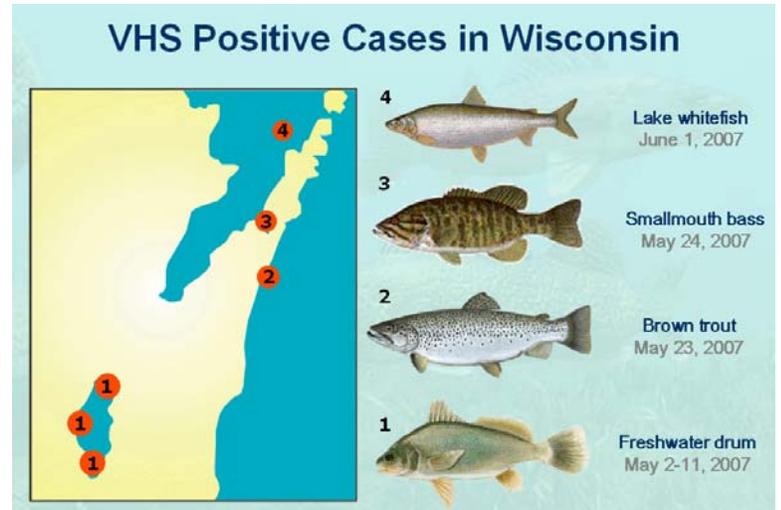


New VHS fish disease potentially a serious threat to Wisconsin fishing

Anglers can help keep Wisconsin fish healthy by taking simple steps

Viral Hemorrhagic Septicemia, or VHS, is a new fish disease that can kill a broad range of native game fish, panfish and bait fish and so poses a potential threat to Wisconsin's great fishing and the state's \$2.75 billion sportfishing industry. The disease was first detected in Wisconsin in May 2007 in fish from the Lake Winnebago and Lake Michigan systems.

VHS is not a human health threat, but it causes fish to bleed to death and it caused large fish kills in the lower Great Lakes in 2005 and 2006. VHS is considered a much more serious threat to fish than other fish diseases now present in Wisconsin. It can infect several dozen species including walleye, bluegill, musky and trout, it spreads easily and can kill all ages of fish.



The VHS strain affecting Great Lakes fish is new so it's too early to tell how it will affect fish populations. Wisconsin didn't suffer large fish die-offs from VHS in 2007, but the DNR is concerned about potential die-offs this spring and in coming years. Fish appear to be most vulnerable to VHS when water temperatures are cold and fish immune systems are stressed from spawning. The very youngest fish seem most likely to die from VHS.

Anglers and boaters play a key role in preventing the spread of VHS

VHS spreads when healthy fish eat VHS-infected fish or swim in water carrying the virus. People who move VHS-infected fish or large quantities of infected water to another lake or river can spread the disease. Infected bait minnows are the main way in which VHS is spread to new waters. The state Natural Resources Board on March 26, 2008, revised VHS prevention rules. These revised rules will go into effect upon publication April 4. A key change allows anglers to keep leftover minnows purchased from bait dealers and use them on the same or different waters at a later date under certain conditions. Help keep Wisconsin fish, lakes and rivers healthy by following these rules.

Under key provisions of the revised statewide VHS rules:

√ No person can take live fish away from a water unless you have a state permit or the fish are minnows bought from a Wisconsin bait dealer, including fish farms, and the following conditions are met:



- Anglers can take minnows bought from a Wisconsin bait dealer and left over after a fishing trip away from a lake or river and use them again on that same water.
- Anglers can take minnows bought from a Wisconsin bait dealer and left over after a fishing trip away from a lake or river and use them elsewhere if no lake or river water was added to the container holding the minnows.

√ All boaters and anglers must drain water from boats and boating and fishing equipment when leaving a waterbody or entering Wisconsin. Anglers can take away up to 2 gallons of water in their container holding live purchased minnows. For those anglers planning to use leftover minnows on another waterbody, this means the water in the container must be the water from the bait dealer, or from a well or a tap but not a lake or river. Drinking water containers are also exempt.

√ No person may harvest minnows or fish for minnows except suckers for any purpose using any gear in Lake Michigan, Green Bay, Lake Superior, the Mississippi River, Lake Winnebago, or any bay, slough or backwater of these waters and all connecting waters upstream to the first barrier impassable to fish. All suckers harvested from these waters may not be transported away from these waters live.

For a full list of VHS rules and more information on this serious fish disease, go to dnr.wi.gov/fish/vhs

Other DNR efforts to prevent spreading VHS

Regulations for boaters and anglers are only one part of Wisconsin's integrated approach in fighting VHS. This approach builds on state and partner efforts over the last 15 years to control other invasive aquatic species. Other key parts include:

- VHS testing and monitoring of wild fish and hatchery fish and water supplies;
- Biosecurity measures at state fish hatcheries;
- Fish health screening in the bait fish industry;
- Research and public outreach and information with partners, including paid and volunteer watercraft inspectors at many boat landings;
- Mandatory disinfection of gear by DNR staff working in lakes and rivers;
- Added VHS prevention requirements for people seeking permits for waterfront projects.

In addition, the state Department of Agriculture, Trade and Consumer Protection has tightened testing and inspection rules for fish farms and bait harvesters to prevent the spread of VHS.

Other Great Lakes states fighting VHS too

VHS was first diagnosed in fish in the Great Lakes in 2005. It was confirmed as the cause of fish kills in lakes Huron, St. Clair, Erie, and Ontario and the St. Lawrence River in 2005 and 2006, and then found in archived fish samples collected in 2003.



Michigan, New York, Ohio, Pennsylvania, Vermont and Ontario have all imposed rules on anglers and/or boaters, bait harvesters, bait dealers and fish farmers to contain VHS.

VHS must be reported to international authorities due to the high fish mortality and economic consequences it can cause. The federal government has limited the movement of 37 species of fish susceptible to VHS from Ontario or Quebec into the U.S., as well as limited the interstate movement of those species among the eight Great Lakes states and from those states to other parts of the U.S.

Three dozen fish species susceptible to VHS

The Great Lakes strain of VHS is genetically different from other known strains of the disease and was first detected in 2005. Historically, VHS was known as a very serious disease of farm-raised rainbow trout in Europe dating to the 1930s. Other strains affect marine fish in the Pacific Northwest and the Atlantic Coast.

Among the differences already noted in the Great Lakes strain is its ability to infect more than 40 different species of fish. Musky, panfish, walleye and smallmouth bass are among the anglers' favorites that are most susceptible. Important forage fish such as gizzard shad and freshwater drum are highly susceptible to VHS, as are bait fish such as the emerald shiner and spottail shiner.

Symptoms of a fish infected with VHS

Like many fish diseases, the symptoms present in a fish change with the severity of the infection. Fish may display few to no symptoms, or as the infection worsens, signs may include bulging eyes, bloated abdomens, inactive or overactive behavior, bleeding in the eyes, skin, gills and at the base of the fins.

Because many of these signs look like those caused by other fish diseases, inspection by a certified fish health professional is necessary to determine whether a fish is infected with VHS.



What to do with fish exhibiting signs of VHS

If you see a fish kill or diseased fish with the signs described above:

- Note the waterbody, date, fish species, and approximate number of dead/dying fish.
- If you note a suspicious looking fish, place the fish in a plastic bag and then in a cooler on ice.
- Contact your local fish biologist or call 1-800-TIP-WDNR (1-800-847-9367)
- Do NOT bring the fish to a DNR hatchery.



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