

07hr_AC-Ag_Misc_pt08



Details: Informational Hearing (September 6, 2007)

(FORM UPDATED: 07/12/2010)

WISCONSIN STATE LEGISLATURE ... PUBLIC HEARING - COMMITTEE RECORDS

2007-08

(session year)

Assembly

(Assembly, Senate or Joint)

Committee on ... Agriculture (AC-Ag)

COMMITTEE NOTICES ...

- Committee Reports ... **CR**
- Executive Sessions ... **ES**
- Public Hearings ... **PH**
- Record of Comm. Proceedings ... **RCP**

INFORMATION COLLECTED BY COMMITTEE FOR AND AGAINST PROPOSAL

- Appointments ... **Appt**
- Clearinghouse Rules ... **CRule**
- Hearing Records ... bills and resolutions
(**ab** = Assembly Bill) (**ar** = Assembly Resolution) (**ajr** = Assembly Joint Resolution)
(**sb** = Senate Bill) (**sr** = Senate Resolution) (**sjr** = Senate Joint Resolution)
- Miscellaneous ... **Misc**

VHS Informational Hearing
Assembly Committee on Agriculture
9/6/07

- Wisconsin has the top fish health program in the nation.
- Disease Background:
 - VHS does not cause disease in humans.
 - Transmitted primarily via infected fish. Also travels in water (i.e. rivers).
 - Europe has been dealing with VHS for a number of decades.
 - Great Lakes strain is different. The virus has mutated.
 - First time found in fresh water. Previously found only in salt water.
 - Infecting every type of fish species. Other strains target certain species.
- Need more information on what species are most impacted. There are varying degrees of mortality.
- Fish Farms (including hatcheries):
 - Need to prevent introduction of VHS on fish farms. State is working to this end. Reinforcing importance of biosecurity.
 - Has not been found on any Wisconsin fish farms, to date.
 - Disease would be fairly easy to eliminate from farms/hatcheries, but it can be costly.
 - VHS does not like heat or changes in Ph (acidity).
- Does not appear to impact other aquatic animals (i.e. turtles).
- Not yet sure how quickly the virus acts.
- Wisconsin is ahead of the nation in protecting fish farms and hatcheries in that our rules require all fish coming into the state to be VHS tested.
- Dept. is considering emergency rule for VHS testing on movement of live fish within Wisconsin. Testing is expensive.
- 2200 registered fish farms in Wisconsin.
 - Most hobby farms (ponds)
 - 250 fish farms
 - 100 DNR hatcheries
- Working with the Native American tribes on this issue as well.
- Dept. needs additional resources to deal with VHS (on top of all the other animal health issues they deal with). Currently only has 1 ½ FTE positions dedicated to aquaculture. Animal Health Division is understaffed, in total.





VHS n Just How Serious Is This Fish Disease and What Can Be Done About It?

[Print Page](#)

By Joan Sanstadt, News Editor

What does the fish virus that showed up this summer in Lake Michigan and in Lake Winnebago mean for anglers n and for the state's economy?

To find out the answers, Rep. Al Ott (R-Forest Junction), chair of the Assembly Agriculture Committee, invited Dr. Robert Ehlenfeldt, the state veterinarian, and Dr. Myron Kebus, state aquaculture veterinarian, to brief the committee on the disease at a Sept. 6 informational hearing.

Committee members asked the veterinarians to share what is known about the disease as it currently exists. But equally important, they asked for a longer-range picture that might even be called a bit of "crystal ball" gazing.

Viral Hemorrhagic Septicemia, or VHS as it is commonly called, has been found in Lake Michigan and in Lake Winnebago. The disease is caused by a virus but it is a virus "that can't cause a disease in humans n that has been pretty well established," Ehlenfeldt said.

VHS is transmitted from one body of water to another through infected fish. It can also travel in water and therefore can be pretty widely distributed.

The greatest concern, according to Ehlenfeldt, is that "nothing like this has been found before in fish in this region.

"However, Europe has been dealing with this for decades. While it has been found in both the Pacific and Atlantic oceans, it has not before been found in North America," he continued. But there was more disturbing news.

"Prior to this VHS has not been seen in fresh water n it has only been found in salt water. This means the virus has changed allowing it to adapt to fresh water. This particular strain of VHS affects virtually every group of fish species n from minnows to muskies, walleyes to bass," Ehlenfeldt continued.

"This is important to Wisconsin's economy. When something draws a lot of concern in this region n and nationally n it becomes a major concern to USDA," Ehlenfeldt noted. "VHS is on the list of major diseases in the world and it is important to trade that we show we have a handle on it," he added.

The disease is not only widespread, it has various degrees of mortality. "Some fish with high virus levels look o.k.; some with low levels are dying," Ehlenfeldt volunteered. "Muskies may be more affected than any other species," he indicated.

Ott found it "especially troubling that it n VHS - can go from salt to fresh waters. What's going on here?"

Kebus replied, saying "the mutation has occurred in the genetics of the virus. What we're seeing here is most similar to the strain we've known about in the Atlantic Ocean."

Ott wanted to know if the mutation was "a natural phenomenon or man-made?"

"Mutations are occurring all the time," Kebus answered. "We can say they are part of the natural process. Maybe they have been caused by an introduction from the marine environment n something from fishermen or anglers. It's very unlikely we'll ever nail it down."

Rep. Barbara Gronemus (D-Whitehall), ranking minority member on the ag committee, asked "if immunity to VHS developed over time?"

"That's a very important question," Kebus responded. "If you look at the virus in comparison to other virus responses n we find that fish who have never had contact with VHS die from it. We surmise there is some other exposure.

"In time this virus is likely to find equilibrium. Once a species recovers, it may not remain as common. An example would be lake trout (where some recovery seems to have occurred)," Kebus said.

Fish respond to the virus differently if they are in a hatchery system or in a farm system, the veterinarian continued. "These are different situations. If they are on a fish farm, they may not have a timeline to wait for things to readjust. It will be prudent for the Wisconsin aquaculture industry to see if it can prevent introduction of VHS on to fish farms."

Responding to a question about a possible vaccine, Kebus said work is being done on developing a vaccine but he did not see one becoming available in the near future.

Kebus said "VHS is something that can be prevented and it is fairly easy to eliminate it from a hatchery. That's because it doesn't like warm temperatures, changes in pH levels and, to survive, the virus needs to stay wet."

"These are things we can do n but the problem is it will cost money," he added.

"How much time do farmers have to adjust n is there a timeline?" Gronemus wanted to know. Kebus said that was a "tough" question and one he couldn't answer.

"Will consumers get a hiccup because it is a virus and avoid eating fish?" Gronemus asked.

Kebus said his answer would be "no" n but Ehlenfeldt said "it is difficult to anticipate consumer reaction. But I don't think we will see what we saw with BSE."

Rep. Phil Garthwaite (D-Fennimore) wanted to know if VHS is found only in fish n was it also in crayfish and muskrat?

Kebus said what had been found in crayfish and muskrat was a different virus. "But VHS has already done what we hadn't expected n which was to jump into fresh water from salt water. We'd expected to see it in trout and salmon, but we're surprised to see it in 45 different fish species," he acknowledged.

What Rep. Rep. Amy Sue Vruwink (D-Milladore) wanted to know was what, if any, precautions could be taken to limit the spread of VHS.

Kebus said the first time VHS was seen in Wisconsin was in the Winnebago System and then in Lake Michigan. "It can be picked up in fish, boots, fishing equipment n but it is an especially bad idea to bring fish from another body of water, home to your pond."

"All scientific information is that it is not a human health concern, but all fish should be fully cooked n that's just basic," Kebus added.

Responding to questions from Rep. Gary Tauchen (R-Bonduel), Kebus said the first time VHS had been found in North America was "coming out of Lake Ontario into Ohio, Michigan, New York and Wisconsin. We still have not seen it on a farm. That's surprising to a lot of people n is it because of preventive measures taken by farmers or is something about the virus?"

"What is it about cold temperature the virus likes?" was the question from Rep. Andy Jorgensen (D-Fort Atkinson).

"A number of viruses and bacteria prefer cold n that's not uncommon. Viruses can even be maintained in a frozen state," Kebus added.

At this point Ehlenfeldt interjected something he's learned from researching the avian influenza virus. "The Avian influenza virus tends to be found in human cells that are deeper into the body (where temperatures are warmer) n for instance in the lungs, rather than in nasal passages. This shows the complexities of these diseases," he added.

Considering Wisconsin doesn't have the money for "full treatment" Rep. Louis Molepske (D-Stevens Point) wanted to know if VHS was "a production type disease or an economic disease like pseudorabies or foot and mouth disease n I'm trying to find the level?"

"If you are asking how many fish can die on us," Ehlenfeldt replied, "we don't know. We're trying and so is USDA. In August we said 'stop fish movement in the Great Lakes'."

Through APHIS, Wisconsin will get \$47,000 to do testing to determine the virus threat. "We'll look at waters and watersheds to determine where the disease is," Ehlenfeldt said. "Back in 2005, we started testing imports; in 2006 we made the emergency rule a permanent rule."

There is ongoing communication among the Department of Agriculture, Trade and Consumer Protection, the Department of Natural Resources, UW-Extension and the Wisconsin Aquaculture Association.

"We're now looking at a rule for within Wisconsin n if you fish or your fish eggs are sourced from the wild they need to be tested," Ehlenfeldt said.

Two tests are available for VHS. Each is a 60-fish test n that is, 60 fish from each species of fish, Ehlenfeldt explained. "The American Fisheries Society test is done once a year. The other test is an international test and it is done twice a year. We could do either n but it comes down to economics; it is cheaper to test once a year. But there is no money available from APHIS for tests on fish farms. Yet we're spending 20 percent of our time on this," he estimated.

Testing is necessary because of international trade issues. "It's about maintaining trade," Ehlenfeldt said. "In the U.S., the big fish is the catfish. Frankly, they (those owners) are scared to death. If VHS becomes more prevalent, the international market will be shut down. It is different now; for years we had VHS testing for trout and salmon."

Facility numbers

Ehlenfeldt said there are 250 total fish farm facilities in the state. Of that number, 17 are state fish hatcheries and the rest vary quite a bit in size.

Included in that number are fishing clubs and, as Ehlenfeldt recalled, "when I was at UW-Platteville, our biology class even had some kind of a club."

While not many facilities move live fish off the premises, there are a few larger facilities that do everything including stocking, bait, etc.

According to an aquaculture survey conducted by the Wisconsin Agricultural Statistics Service (WASS), the total bait and fish farm industry represents \$10 to \$15 million a year to Wisconsin.

While there are four or five really large aquaculture facilities, most of the rest of the fish farms have gross average incomes of between \$50,000 to \$70,000 a year n some less than that because they are basically hobby-type ponds, Ehlenfeldt said.

Indemnity

How can risk be minimized? Is there any possibility of vaccination? Was insurance against VHS available for producers? Was there any indemnity program as there is for tuberculosis? Those were the questions posed for the veterinarians by Tauchen.

"If we have this many businesses at risk, we need to minimize risk on the industry statewide," the lawmaker emphasized.

Kebus said "vaccines have been produced n but they need to be developed for the different species." He estimated this would take two to three years and be quite costly.

"Mortality insurance is not readily available for fish farmers," he said.

As to indemnification plans for fish farmers, the answer was simple n there are none.

Ehlenfeldt pointed out "the disease has been present in Europe since the '70s. They've tried to limit spread. We won't eradicate it in the wild n that would be extremely difficult and expensive. Some European fish farms have been devastated by the disease," he added. "Some have done deep cleaning and then repopulated, but all of that has been at the owner's expense.

"In Wisconsin, we'll compensate producers for losses, if we order depopulation. But the depopulated population has to be 'for food and fiber for human consumption' n but bait is not for human consumption," Ehlenfeldt said.

What about fee fishing? What about fish consumed at restaurants?

To those questions, Ehlenfeldt said "we're walking on some uncharted, squishy ground on some of these issues. We'll have to come back to the legislature with some of these issues n that part is pretty iffy."

"But you do have statutory authority and responsibility to deal with that issue if it is for food," Ott asked.

"On the rule draft we're working on, the question is not if we pay indemnity n but it is on how do we establish value. When we dealt with CWD in the deer industry, we've used USDA appraisers to determine the value of the deer," he said.

Ehlenfeldt frankly admitted "VHS is new n we don't know all that is going on. It is a new virus and has only been around for four to five years. It has the potential to change the structure of a body of water where it exists. For instance, walleye water could become northern pike water."

"The big question is how will the state respond n and what is the appropriate response," Kebus said.

"Do you have what you need n in terms of money?" Ott wanted to know.

"Money is always an issue," Ehlenfeldt acknowledged. "We have 1.5 positions dealing with aquaculture. The Animal Health Division at DATCP is like a rubber band n it can stretch n and stretch n but all the while it is weakening and getting smaller n and harder to stretch.

"We have 37 people in our division. In the past five years we've had to deal with chronic wasting disease, monkey pox, Avian influenza, BSE, brucellosis (because it has shown up in other states), tuberculosis (present in Michigan for some time but last year turned up in Minnesota), a viral carp disease, John's disease, Newcastle outbreak in California n and now VHS.

"What we're seeing are new and re-emerging diseases," Ehlenfeldt said.

"For VHS we need five positions n right now 20 percent of our animal health program is being used to deal with this disease," he added. (In an aside, Ehlenfeldt said, "I don't like paying my taxes, either.")

Asked about the involvement of the U.S. Fish & Wildlife Service, the veterinarians said there had been a "shift" in the role Fish & Wildlife has played in fish diseases. "Their role is more in support of federal hatcheries that exist in some parts of the country," Kebus indicated.

The new veterinary diagnostic lab doesn't do fish work and besides, they're at capacity right now. "At the most they can do six tests per week n and each test takes 28 days," Ehlenfeldt said. "Another issue is that APHIS hasn't certified aquaculture labs in the past," he added.

In an interview with Agri-View, Ehlenfeldt added insight he gained a few weeks ago at an APHIS veterinarian meeting in Washington D.C. Here's what he said:

"Twelve state vets were there. We're all in the same situation of dealing with budget reduction n which gets harder to do. A Georgia state vet summed up the problem this way: 'we don't know how to say 'no' n and we take on every challenge that is presented to us.'

"The reality is we don't think about half of those diseases that are out there. We deal with the ones that pop up and we don't have time to deal with the old ones n then, when some of those 'old' diseases re-emerge, that's when heads roll," Ehlenfeldt concluded.

Editor's note: Dr. Bob Ehlenfeldt wasn't kidding. In the past 19 years, the heads of at least three Wisconsin state veterinarians have "rolled" when "old" diseases re-emerged.

Copyright © 2007 Agri-View



Briefing Document for Viral Hemorrhagic Septicemia

Dr. Kebus

Viral Hemorrhagic Septicemia (VHS) was first reported in Wisconsin on May 11, 2007 after the Wisconsin Veterinary Diagnostic Laboratory confirmed positive samples from freshwater drum, or sheepshead, in Little Lake Butte des Morts, part of the Lake Winnebago system. It has since been found in Lake Winnebago, and in Lake Michigan near Green Bay and Algoma. Since this time the DATCP, DNR, the Wisconsin Aquaculture Association have met several times to discuss the appropriate response.

DATCP VHS activities prior to May 11, 2007 DATCP Activities on VHS

1998

- DATCP receives responsibility for VHS and other fish disease regulation from the Wisconsin Legislature
- DATCP fish rules apply to DNR activities, private fish farmers and others.
- DATCP develops the Fish Health Medicine Certificate Program – the first training course for veterinarians that includes VHS training.

2005

- DATCP modifies FHC to require VHS negative test for imports from states/provinces known to have VHS

2006

- March, 2006 WDNR requested an exemption on importing muskies from Ontario – DATCP denied the exemption on grounds of emerging VHS concerns.
- DATCP participates in National Forum on VHS in Minneapolis, August 8-9, 2006
- DATCP is the first state agency to adopt import requirements to reduce the risk of importing VHS (October 2006)
- DATCP distributes over 2,000 copies of its VHS Fish Health Advisory, June 2006
- DATCP is Recognized by USDA APHIS on November, 2006 as the state of Wisconsin's Competent Fish Health Authority
- DATCP presents VHS issues to the DATCP Board, November 15, 2006
- DATCP State Veterinarian, Dr. Robert Ehlenfeldt, and DATCP Aquaculture Veterinarian, Dr. Myron Kebus participate in decision –making process at the USDA APHIS meetings in Washington D.C. on October 31, and November 1, 2006
- DATCP's Dr. Kebus is consulted by the Center for Epidemiology and Animal Health – National Surveillance Unit within USDA APHIS as the lead national expert on the veterinary/economics VHS disease in the Great Lakes Region, December to present.

2007

- DATCP State Veterinarian, Dr. Ehlenfeldt participates in USDA APHIS meeting on VHS and the National Aquatic Animal Health Plan, January 2007
- DATCP gave a presentation at Aquaculture America, San Antonio 2007 on VHS, February 2007.
- DATCP is chosen as one of the primary reviewers for the U.S. VHS Surveillance Plan, January to present
- DATCP is chosen to participate on the North Central Regional Aquaculture Center, VHS committee for USDA, February 2007

- DATCP is selected to provide USDA APHIS with input on Fishing Tournaments and potential impact on VHS spread.
- VHS Sample Collection Training for Veterinarians, May 25, 2007
- VHS Biosecurity Session, at the Northern Aquaculture Demonstration Center, June 14, 2007
- Cool Water Egg Disinfection Workshop, Wisconsin Veterinary Diagnostic Laboratory, August 9, 2007

After May 11, 2007, DATCP performed the following activities in response to VHS:

- Immediately sent bait dealers, bait harvesters and fish importers, a notice reminding all of them that the import requirements include testing for VHS.
- Sent registered fish farms a fish health advisory on VHS and appropriate biosecurity measures
- Communicated with DNR to harmonize VHS press release information
- Communicated and discussed VHS risk with DNR fisheries and fish hatchery staff.
- To prevent the potential spread of VHS, quarantined three DNR hatcheries which obtained fish eggs from known VHS-affected waters. Some of the fish were released into waters of the state prior to the quarantines. Once the quarantines were issued by DATCP, fish movement was halted. DNR has voluntarily depopulated some of the fish. Some of the fish have been stocked into VHS-affected waters after negative VHS testing. Quarantines are still enforced pending completion of depopulation and disinfection or other resolutions, depending on the facility.

Dr. Ehlenfeldt

Currently, DATCP is working on an Emergency rule to protect both wild and farm raised fish. The rule was developed in consultation with the above mentioned group that would require:

- VHS-negative testing of fish of all species for stocking into waters of the state, if the live fish or fish eggs were obtained from a wild source in the previous 12 months. This is based on the fact that this is the highest risk. Numerous farms and DNR collect fish eggs and fish especially forage fish from the wild.
- VHS-negative test of susceptible species for movement from fish farm or DNR hatchery to fish farm or DNR hatchery if the source fish farm or DNR hatchery has obtained live fish or fish eggs from a wild source in the previous 12 months.

- No VHS testing for either stocking or moving into another fish farm or DNR hatchery, if the source fish farms or DNR hatcheries have not obtained live fish or fish eggs from a wild source in the previous 12 months.

DATCP feels the requirements of this rule are appropriate at this time and do not require unnecessary testing and costs to the industry. As more information regarding the distribution and prevalence of VHS in WI becomes available it will be incorporated into a permanent rule package that is currently being developed.

There are approximately 250 farms and DNR hatcheries that could be affected by this rule. It is estimated that 40-80% of these farms would have wild source fish. About 100 of the 250 are DNR hatcheries or coops.

The best estimate is that private fish farms are a \$10-15M industry in WI that contributes to a \$2B sport fishery. However the average gross revenue for these private fish farms in WI is approximately \$70,000 many provide only supplemental income to the owner.

Fish farmers in WI have two options for VHS testing. The AFS test costs approximately \$800.00-1,000.00 and is done annually on a per species basis. Each additional species could add \$400.00 to the cost. The OIE test costs \$1,600.00-2,100.00 covers multiple species but is a semi-annual test. The bottom line is that VHS testing will have a significant economic impact on most farms.

Wisconsin has arguably the best fish health program in the US well ahead of the rest of the country. However, the program is dependent upon voluntary compliance due to insufficient staff resources and this was a problem before VHS was found in the Eastern US.

Funding

USDA – APHIS announced funding available for wild source fish testing and compliance for 19 states (8 Great Lakes and 11 high risk). Wisconsin's potential allocation is \$47,000. DATCP and DNR will be applying for the funds. Most of the money is for wild fish surveillance to determine the prevalence of VHS before any changes are made nationally. This is expected to take up to 24 months. There is approximately \$20K from this fund that the department will attempt to use to pay overtime for increased compliance monitoring. Additional funds for continued surveillance may be available depending on the FY08 federal budget.

At present DATCP does not have the internal resources available to ensure compliance with the rules that have been created in order to prevent the spread of VHS. There are 1.5-2 positions available for aquaculture work depending upon other priorities in the field. AH is currently responsible for supporting the health of a \$34 billion dollar livestock industry with 7 full-time animal health inspectors, 4 compliance officers, and 5 district veterinarians spread throughout the state and a total staff of 37. We've got TB in adjacent states. It showed up in 4 new states this year. We had pseudorabies to deal

with. There's AI, BSE, Brucellosis, CWD, SVC, Johne's, Newcastle, moneypox and God only knows what else we missed in the past 5 years.

Long Term

As more information is gathered on the distribution and prevalence of VHS, DATCP will adapt its movement restrictions accordingly to support control and mitigation of the disease in the wild and prevent introduction of the disease to fish farms. Eradication in the wild is a highly improbable scenario.

In the event that a VHS-positive is isolated on a fish farm facility, DATCP will pursue eradication of the disease in that facility and will conduct the necessary epidemiological investigation to ensure all potentially exposed facilities are tested, and dealt with appropriately. Prevention of spread, as well as disease eradication and facility disinfection in a contained environment is possible.

Ongoing Issues:

- Lack of resources and funds at DATCP
- Lack of resources and funds for fish farmers
- In the event of the quarantine and condemnation of fish on a fish farm, indemnification will be an issue. Current statutory indemnity authority, sec. 95.31(3), allows for indemnity to be paid on livestock, which is defined as animals of species raised primarily to produce food for human consumption, including farm – raised deer.

This definition would not allow for the department to pay indemnity to a majority of Wisconsin fish farms. This may be a possible deterrent for a fish farm operator to report suspicion of a disease, for fear of losing his fish farm without compensation. It could also mean extensive and expensive litigation in the event of a condemnation order being issued.

- The Quarantines have not been lifted on the DNR hatcheries.
- Laboratory testing is at capacity.
- Development of protocols on disinfection of eggs.
- Development of restocking protocols.
- Treatment of facilities in affected areas.

Resources needed if the question comes up

- Resources needed are dependent upon the prevalence of the disease (unknown at this time) and the response level WI wishes to take with VHS
- For VHS issues only-issuing and tracking permits, reviewing health certificates and lab reports, inspections, record audits, border checks, issuing quarantines, possible depopulations, facility disinfection, etc
 - Fish biologist to deal with DNR issues only-quarantined hatcheries, movement permits, stocking permits, questions
 - Fish biologist
 - Four animal health inspectors
 - Program assistant
- Estimated cost: \$600,000.00
- This does not address the needs at WVDL which are at least a Microbiologist and PCR equipment
- It does not address the overall resource issues within the animal health division. The staff estimated to deal with VHS would represent a 20% staff increase to respond to a disease in a \$15M industry, \$2B counting all fishing in WI. How do we respond to a new disease outbreak in the \$34B livestock sector? Our livestock staff is just as thin, just as stretched and just as tired as our fish staff.