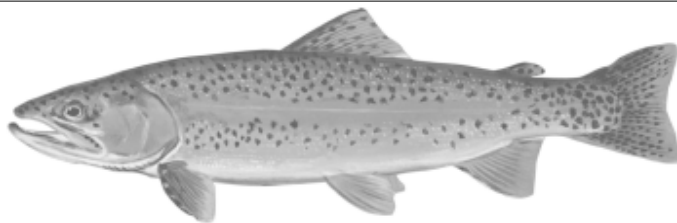


# fish health ADVISORY



WHIRLING DISEASE IN TROUT

October 2001

Wisconsin Department of Agriculture, Trade and Consumer Protection ■ Division of Animal Health

## Whirling Disease Agent Reported in 22 States

*Anyone who raises, transports, and/or fishes for trout in Wisconsin needs to be aware of the following information provided by the Wisconsin Department of Agriculture, Trade and Consumer Protection's (DATCP) Division of Animal Health.*

**Requirement concerning whirling disease**

**The Division of Animal Health requires testing for whirling disease of all aquaculture trout and salmon (private and state-supported) intended for stocking into public waters.**

**Where has whirling disease been found?**

Whirling disease is widespread nationally. It has been reported in 22 states:

- Alabama
- California
- Colorado
- Connecticut
- Idaho
- Maryland
- Massachusetts
- Michigan
- Montana
- Nevada
- New Hampshire
- New Jersey
- New Mexico
- New York
- Ohio
- Oregon
- Pennsylvania
- Utah
- Virginia
- Washington
- West Virginia
- Wyoming

**What is whirling disease?**

Whirling disease is caused by a myxosporean parasite, *Myxobolus cerebralis*, that enters trout and salmon and damages cartilage. The parasite can cause skeletal deformities, a loss of equilibrium, whirling swimming pattern, and death. There is no evidence of human health risk from eating infected fillets.

**Can whirling disease be transferred to my fish ponds?**

Given the extent of infection in other states, there appears to be significant risk in stocking untested fish. The Division of Animal Health will continue cooperative surveillance efforts with aquaculture veterinarians, fish farms, and the Department of Natural Resources in Wisconsin.

**Is whirling disease found in neighboring states?**

Yes. In fall 2000, the parasite was isolated from trout from a stream in the Upper Peninsula of Michigan, and from numerous streams and hatcheries in Lower Michigan.

**How is whirling disease transmitted?**

Once established, whirling disease can spread as infected fish move up or down stream. The parasite may be transferred by mud on waders, boots, boats, or other items moved between infected and uninfected areas. Fish-eating birds may transfer the parasite spores in their feces.

**Are other species affected?**

Apparently only trout, salmon and related species are affected.

**Do infected fish die?**

In some states, including Colorado and Montana, whirling disease has been associated with a great number of trout deaths. In California, Michigan, and New York, there have been few deaths. No one has been able to explain this difference, but environmental conditions seem to be the most important factor in deaths from whirling disease.

**What else do we know about whirling disease?**

Whirling disease is transmitted to fish from tubifex worms. The tubifex worms require earthen-bottom ponds or streams to develop.

**Does Wisconsin have laboratory testing services for whirling disease?**

Yes. The Wisconsin Veterinary Diagnostic Laboratory in Madison tests for many fish diseases, including whirling disease.

**How can I reduce the risk of introducing whirling disease?**

To minimize the risk of introducing the disease:

- **Purchase fish only from registered fish farms.**
- **Make certain that the fish entered Wisconsin with fish import permits from the Division of Animal Health.**
- **Ask for additional assurances of fish health.**

**What should I do if trout in my pond show signs of whirling disease?**

Contact a Wisconsin aquaculture veterinarian in your area. A list of aquaculture veterinarians is available from the Division of Animal Health, 608-224-4887. If the veterinarian finds or suspects whirling disease, he/she should immediately report any finding in any fish in Wisconsin to Dr. Myron Kebus at the Division of Animal Health (DATCP), **608-224-4876**.



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