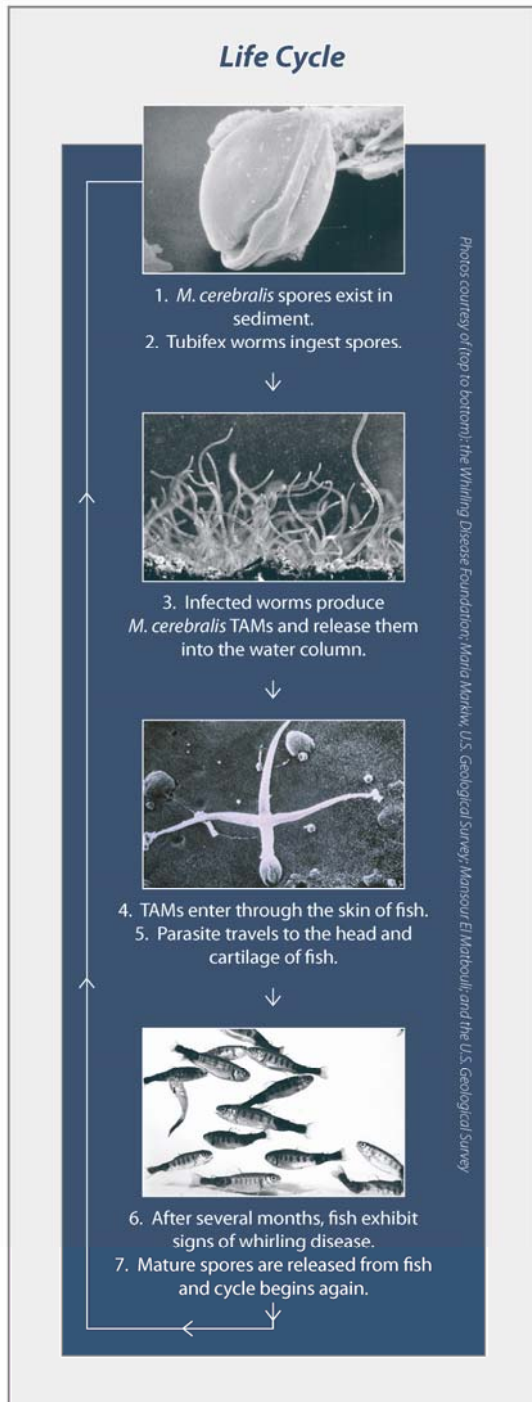




WHIRLING DISEASE FACT SHEET



- ✓ Whirling disease affects salmonid fish, the family of fish that includes trout, salmon, grayling, and whitefish.
- ✓ Physical symptoms of whirling disease include blackened tail, whirling behavior, and deformities of the head and spine. Severe infections can lead to death.
- ✓ The presence of the parasite does not always lead to development of the disease or to population losses. However, this can occur under certain circumstances and whirling disease has been associated with major fishery losses and economic costs.
- ✓ There is no known cure or vaccine for whirling disease.
- ✓ Whirling disease is caused by a microscopic parasite called *Myxobolus cerebralis*.
- ✓ The parasite is an exotic species that was introduced to the United States from Europe in the 1950s. It has since been detected in 23 states.
- ✓ The parasite depends on two hosts in order to complete its complicated life cycle. These two hosts are salmonid fishes and a small aquatic worm known as *Tubifex tubifex*.
- ✓ *Tubifex tubifex* are common and widespread in a variety of stream habitat types. They are related to earthworms and are usually less than one inch long.

- ✓ The whirling disease parasite is spread through the movement of infected fish or fish parts, and by the movement of water or mud that contains the parasite spores. The parasite can spread naturally through a watershed or by humans moving from one watershed to another.
- ✓ Whirling disease can not infect humans, mammals, or fish that are not members of the salmonid family. For example, bass, catfish, and pike cannot get whirling disease.
- ✓ The Whirling Disease Initiative is a program of the Montana Water Center on the campus of Montana State University. Established in 1997, the Initiative supports research that develops practical management solutions to maintain viable, self-sustaining wild trout fisheries in the presence of the whirling disease parasite.

WHAT CAN THE PUBLIC DO?

- ✓ **DON'T** transport live fish, insects, live bait or plants from one water body to another without proper authorization. This practice could spread disease or other exotic species.
- ✓ **DON'T** dispose of fish heads, skeletons or entrails in any body of water. Fish parts should always be disposed of in the garbage, by deep burying or by total burning.
- ✓ **DO** contact your local fish and wildlife agency if you observe signs of whirling disease in fish or observe illegal fish stocking.
- ✓ **DO** obtain certified disease-free fish for any private stocking projects.
- ✓ **DO** clean all equipment such as boats, trailers, boots, float tubes, and fins of mud before leaving an area when fishing. Thoroughly cleaning and drying equipment is the best way to prevent the spread of *all* aquatic exotics.

For more information, contact:

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