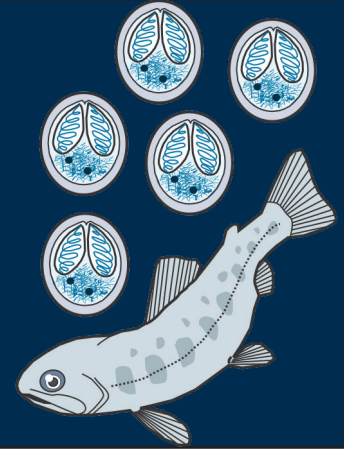




Whirling Disease And The Parasite That Can Cause It

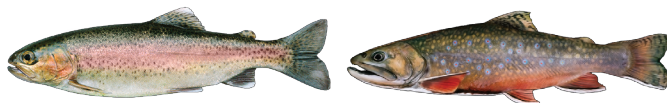
What You Need To Know About The Disease In Wisconsin



Myxobolus cerebralis is a microscopic parasite that can cause whirling disease. The first detection of the parasite in wild caught fish in Wisconsin was documented in March 2024, but there were no clinical signs of the disease. It is possible for fish to be infected and never show signs of the disease, but they can still carry and spread the parasite. There is no treatment for whirling disease, so it is extremely important to understand the disease and how to minimize its spread.

What Species Are At Risk?

- Whirling disease affects trout and salmon.
- Young fish are most vulnerable to the disease.
- Rainbow and brook trout are the most susceptible trout species in Wisconsin.



Rainbow trout

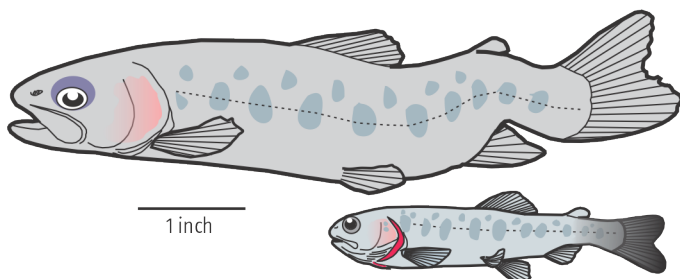
Brook trout

- Other species, like brown trout, coho and Chinook salmon are only partially susceptible (or even resistant like the lake trout) to developing whirling disease.

What Does A Fish With Whirling Disease Look Like?

Fish with whirling disease may:

- swim in a circular, “whirling” motion.
- develop blackened tails, most notably with younger fish.
- have spinal or skull deformities.



Illustrations of juvenile and young-of-year rainbow trout with signs of whirling disease.

What Is The Life Cycle Of Whirling Disease?

- The life cycle involves both a fish host and an invertebrate host (see back for an illustrated life cycle of the disease).
- The parasite damages the cartilage it infests and nearby nerve tissue, which can lead to the characteristic whirling that gives the disease its name.



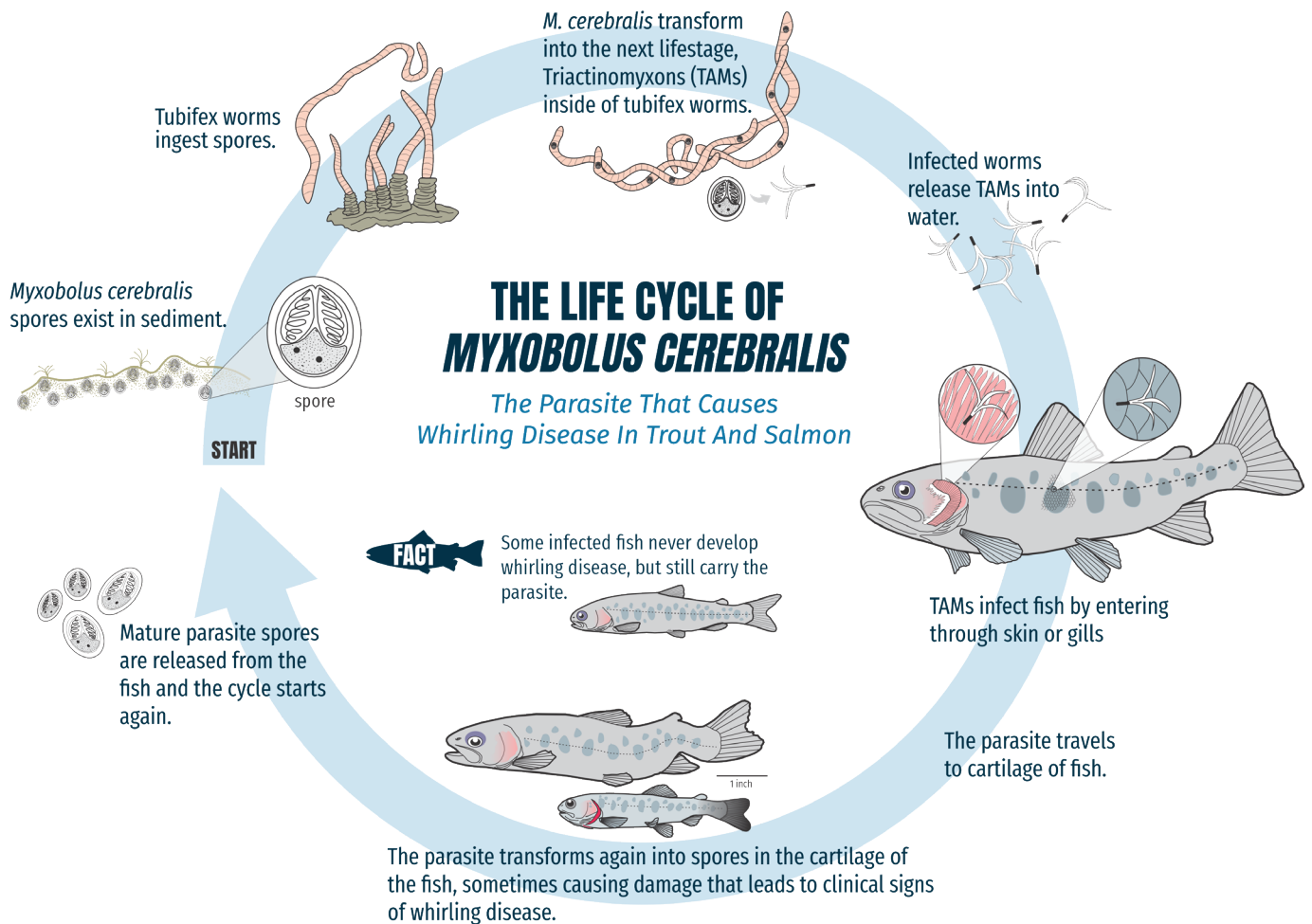
Whirled swimming behavior

How Is The Parasite Spread?

- The parasite can be spread if live or dead fish, tubifex worms, water, aquatic vegetation or mud carrying the parasite are moved to new bodies of water.
- Birds or other wild animals may also carry the parasite to new waters.

How Can This Parasite Be Treated?

- Spores in the environment are thought to be capable of remaining infectious for many years.
- There is no treatment, and it may be impossible to get rid of this parasite once it is established in a natural waterbody.



How Can The Spread Be Minimized?

- Never move wild fish to different water bodies.
- Never bring trout or salmon into the state without health testing or an importation permit.
- Drain and clean boating and fishing gear between water bodies.
- Use only hard bottom rubber (cleated) boots or waders in trout streams.

Once this parasite is in a water body, it is likely impossible to eliminate it. How can we manage or minimize the spread?

- Clean all equipment to remove mud and aquatic vegetation before leaving any location.
- Thoroughly dry all gear after cleaning.
- Do not deposit fish carcasses or entrails in the water.

Could The Disease Impact Wisconsin's Trout And Salmon?

- It is possible that the disease could impact trout or salmon.
- It is also possible that *Myxobolus cerebralis* won't have any impact on fish in Wisconsin. (Some states have detected the parasite in their waters but have not actually seen fish with whirling disease or any negative effects on their trout populations.)

Can Humans Get Whirling Disease?

- No, *Myxobolus cerebralis* is only capable of harming trout and salmon. It poses no threat to humans or household pets like dogs or cats.



The department will continue to monitor for the parasite and disease in both state hatchery-reared and wild trout and salmon populations.