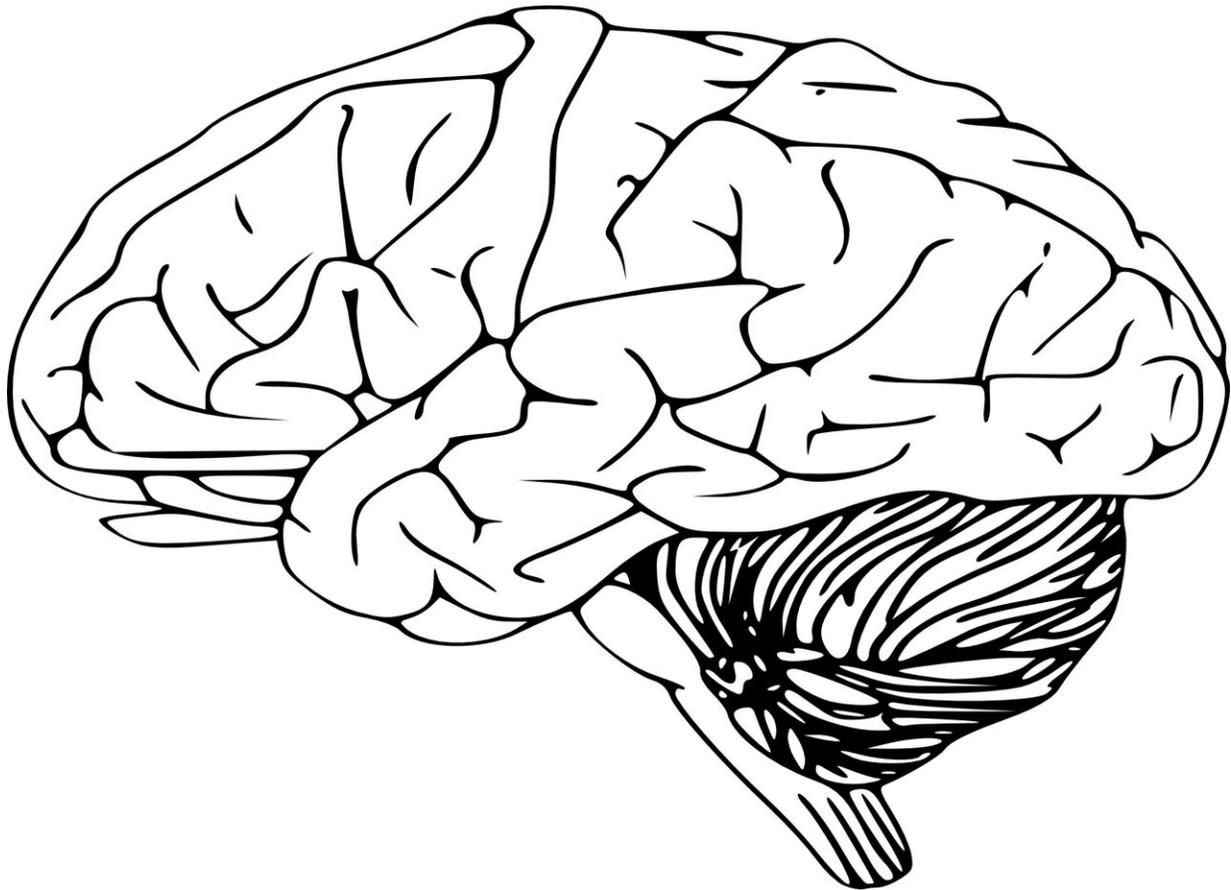


'Brain-eating amoeba' led to a death in Florida. What you can do to avoid infection

March 7 2023, by Howard Cohen



Credit: Pixabay/CC0 Public Domain

The old "get out of the water" fear once was stoked by a fictional shark tale set off the coast of Martha's Vineyard.

Florida could have an updated version that is even more fraught with danger. "Get out of your shower and bath." Or, at least, don't let [tap water](#) get sucked up your nose.

The idea revolves around a death in Southwest Florida in February from a "brain-eating amoeba" known as *Naegleria fowleri*.

The Florida Department of Health in Charlotte County confirmed that a person was infected with *Naegleria fowleri*, "possibly due to sinus rinse practices utilizing tap [water](#)."

The local NBC affiliate reported that the person used a neti pot filled with tap water as a sinus rinse.

A neti pot is a container designed to rinse debris or mucus from the [nasal cavity](#), according to Mayo Clinic. People use neti pots to treat symptoms of nasal allergies, sinus problems or colds. The Mayo Clinic cautions that "it's important to use [bottled water](#) that has been distilled or sterilized. Tap water is acceptable if it's been passed through a filter with a pore size of 1 micron or smaller or if it's been boiled for several minutes and then left to cool until it's lukewarm."

Florida's health department has not released details on the person who died or identified the use of a neti pot, but acknowledged how administering the rinse could have resulted in this death.

You cannot contract the [infection](#) by drinking tap water, according to the health department. When you swallow water, it goes down your windpipe and into your stomach and organisms are broken down through the body's digestive process.

Water contaminated with the amoeba has to enter the body through the nose to do damage.

"Because that is the pathway for Naegleria to work its way into the cerebral spinal fluid in the brain, what ends up happening is the infection overwhelms the body, and ... unfortunately, it's highly dangerous and fatal," Dr. Joe Pepe, an administrator at the Charlotte County Health Department, told NBC2.

The department warned of the potential dangers of Naegleria fowleri, a microscopic single-celled living amoeba.

According to the U.S. Centers for Disease Control and Prevention, instances like this happen when water containing the amoeba enters the body through the nose.

"This typically happens when people go swimming, diving, or when they put their heads under [fresh water](#), like in lakes and rivers," according to the CDC. "The amoeba then travels up the nose to the brain, where it destroys the brain tissue and causes a devastating infection called primary amoebic meningoencephalitis."

At that point, the infection is almost always fatal, the CDC says.

Naegleria fowleri is not found in salt water, like the ocean, the CDC says. Also, you can't get a Naegleria fowleri infection from a properly cleaned, maintained, and disinfected swimming pool. Chemicals like chlorine kill the amoeba.

In very rare instances, Naegleria fowleri has been found in swimming pools, splash pads, surf parks, or other recreational venues that are poorly maintained or don't have enough chlorine in them. Portable backyard pools usually are filled with untreated water from a hose.

Naegleria fowleri generally fares better in warm, fresh water sources that are 80 degrees or more, which is why lakes and rivers in warm climates

like Florida can be potential sources.

Infections from *Naegleria fowleri* are rare, according to the CDC. There have been 31 infections reported in the United States between 2012 and 2021—between zero and five cases annually in that period. Of those cases, 28 people were infected by exposure to recreational water, two people were infected after rinsing their sinuses using contaminated tap water, and one person was infected by contaminated tap water used on a backyard slip-n-slide.

In 2022, three cases were reported in Iowa, Nebraska and Arizona.

Between 1962 and 2022, 37 cases have been reported in Florida, second only to Texas with 39 cases, according to the CDC.

A 13-year-old Palatka, Florida boy, vacationing at a North Central Florida campground, died after he was infected with the amoeba in August 2020, News4Jax reported. The property was not named because it was not positively identified as the source of the infection.

Florida's health department reported a case in Hillsborough County in July 2020.

How to avoid the infection

On Feb. 23, the Florida Department of Health issued warnings for people in Charlotte County on how to protect against contracting the infection. But the health department's tips can apply elsewhere.

- When making sinus rinse solutions, use only distilled or sterile water.
- Tap water should be boiled for at least 1 minute and cooled before sinus rinsing.

- Don't let water go up your nose or sniff water into your nose when bathing, showering, washing your face, or swimming in small hard plastic or inflatable pools.
- Don't jump into or put your head under bathing water in bathtubs, small hard plastic or inflatable pools. Rather, walk or lower yourself in.
- Avoid letting children play unsupervised with hoses or sprinklers, "as they may accidentally squirt water up their nose."
- Avoid slip-n-slides or other activities where it is difficult to prevent water going up the nose.
- Keep small hard plastic or inflatable pools clean by emptying, scrubbing, and allowing them to dry after each use.
- Keep regular swimming pools adequately disinfected before and during use.

Symptoms of infection

Symptoms of *Naegleria fowleri* infection after exposure can include headache, fever, nausea, disorientation, vomiting, a stiff neck, seizures, loss of balance, and hallucinations.

If you experience symptoms after getting water sucked up your nose seek medical attention immediately.

On Friday, the Florida Department of Health in Charlotte County said it was providing nasal clips and educational materials at 1100 Loveland Blvd. in Port Charlotte while supplies last.

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Distributed by Tribune Content Agency, LLC.

Citation: 'Brain-eating amoeba' led to a death in Florida. What you can do to avoid infection (2023, March 7) retrieved 4 May 2024 from <https://medicalxpress.com/news/2023-03-brain->

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