

POLK COUNTY FACTSHEET

“BRAIN-EATING AMEBA”

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Around June, a parasite commonly referred to as “brain-eating ameba” or “ameba” starts to attract attention for its sudden and sadly, often fatal impact on humans.

According to the Center for Disease Control and Prevention (CDC), of the 132 people known to be infected in the United States since 1962, only three have survived. From 2004 to 2013, 34 infections were reported and all but two were fatal. The good news is ameba infection and the resulting illness are rare and often avoidable.

What are Amebas?

The term “ameba” is used to describe hundreds of different organisms; additionally, ameba may be spelled “amoeba.” The ameba commonly referred to as “brain-eating ameba” is *Naegleria fowleri*; a single-celled organism that loves warm freshwater bodies, such as the lakes and ponds found in Central Florida, but can be found around the world. The often-fatal illness caused by this ameba is “Primary Amoebic Meningoencephalitis” (PAM). Fortunately, PAM is exceedingly rare in Florida and the rest of the United States.

Naegleria fowleri is usually found in the sediments of warm lakes, rivers, ponds, or springs located in the southern states.



UF/IFAS PHOTO BY: TARA PAISIO

How Do Amebas Infect People?

Amebas infect people when contaminated water travels up the nose. This usually occurs as people take part in freshwater recreation. After an ameba enters the body, through the nose, it travels to the brain where it can cause Primary Amoebic Meningoencephalitis (PAM). PAM destroys brain tissue and can cause swelling and death.

Infections usually occur in July, August, or September; however in Florida, the season may range earlier and later due to our prolonged hot weather.

You cannot be infected by drinking contaminated water, intentionally or accidentally. You cannot be infected by eating fish from contaminated waters. *Naegleria fowleri* is not found in salt water (like the ocean) and infections cannot spread person to person.

The only way to ‘catch’ an ameba is for

contaminated fresh water to enter the body through the nose.

How Can I Avoid “Brain-Eating Ameba?”

Since *Naegleria fowleri* is usually found in the sediments of warm water, the best way to avoid infection is to avoid stirring up bottom sediments in the water. Children, especially young children, should be discouraged from rooting around in the mud or diving down to dig in the sediments. Keeping one’s face away from sediments in warm water will reduce the risk of infection.

You can protect yourself and your family further by encouraging those playing or swimming in warm water to wear ear plugs and a nose clip. If possible, avoid playing or swimming in warm shallow water during the summer months; this is the best way to avoid *Naegleria fowleri*.

What are the Symptoms of PAM?

According to the Center for Disease Control and Prevention (CDC), symptoms may be mild at first but will worsen quickly. The CDC lists the following symptoms:

- Symptoms usually start 5 days post-infection (may range from 1-7 days post-infection)
- Typically include headache, fever, nausea, or vomiting
- Later symptoms can include stiff neck, confusion, loss of balance, seizures, hallucinations, and lack of attention to people or surroundings
- After symptoms begin, the illness typically causes death within 5 days (may range from 1-12 days)

Contact your doctor immediately, if you suspect infection after playing or swimming in warm water. In the few known cases of survival, the patients recognized the symptoms early and

administered proper treatment quickly. If treatment is to be effective, it must be given quickly after symptoms show.

Where Can I Find More Information?

For more information on infection rates, prevention, or information **En Español**, visit the Center for Disease Control and Prevention’s brain-eating ameba website, www.cdc.gov/naegleria, or contact them at 800-CDC-INFO (800-232-4636).

For more information on Florida lake conditions that may favor ameba, read Florida LAKEWATCH’s circular #106 (<http://lakewatch.ifas.ufl.edu/LWcirc.html>). For additional information, contact them at 1-800-LAKEWATCH (800-525-3928) or visit their website at <http://lakewatch.ifas.ufl.edu/>.

Or, Call your County Extension Agent:

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