



OCTOBER 10, 2024

CDC's website is being modified to comply with President Trump's Executive Orders.

## About *Acanthamoeba* Infections

### KEY POINTS

- *Acanthamoeba* is a free-living amoeba, a kind of one-celled organism that lives in water, soil, and dust.
- Most people will come into contact with *Acanthamoeba* at some point, but most won't get sick. Although rare, some people develop serious *Acanthamoeba* infections that are often fatal.
- See a healthcare provider right away if you have symptoms of an *Acanthamoeba* infection.



## Overview

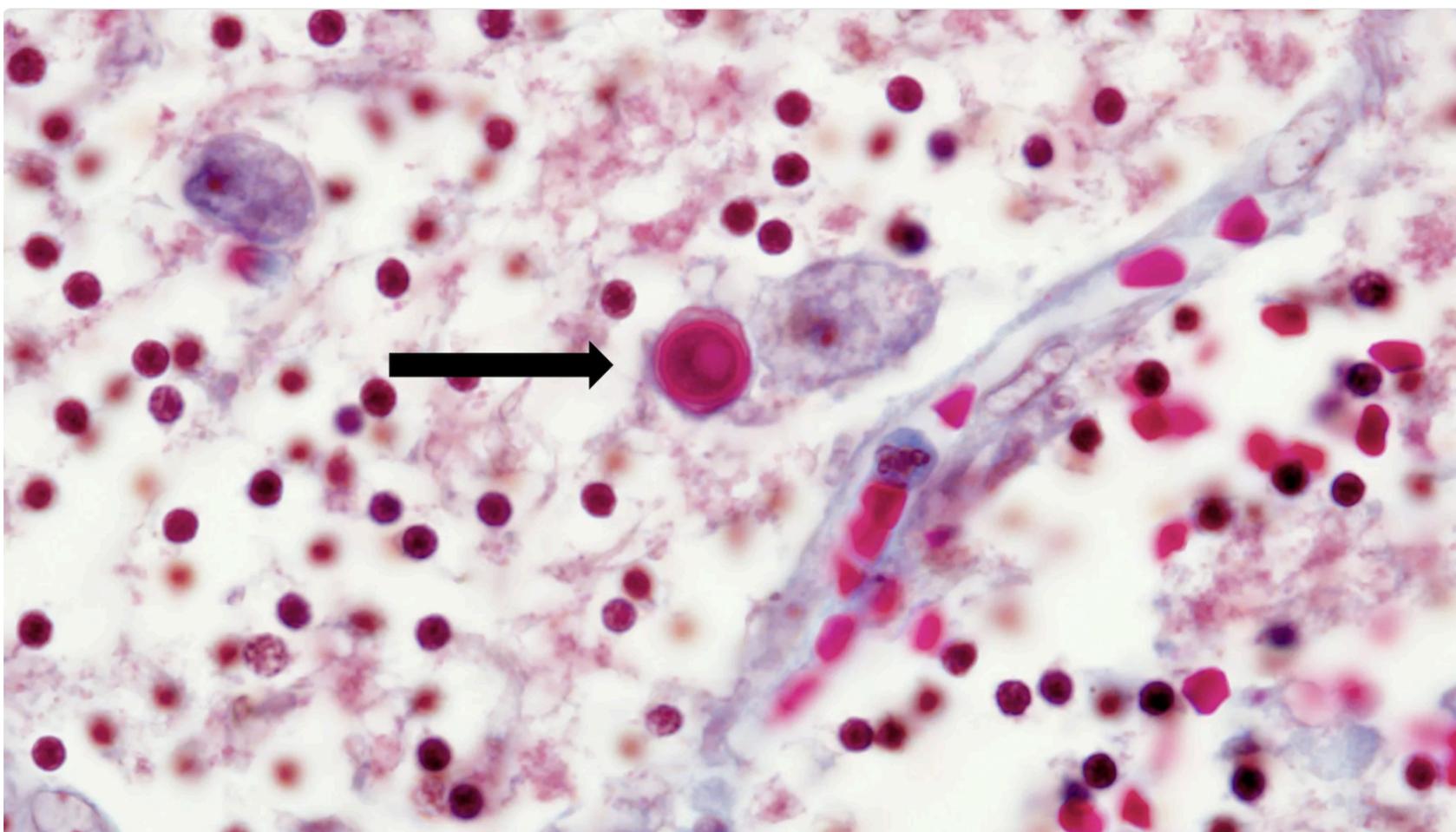
Most people will be exposed to *Acanthamoeba* during their lifetime. The amoeba is found in soil and dust as well fresh water and saltwater. It can also be found in swimming pools, hot tubs, drinking water systems, humidifiers, and in heating, ventilation, and air conditioning (HVAC) systems.

Most people exposed to *Acanthamoeba* won't get sick. For others, it can cause serious infections of the brain, skin, eyes, and sinuses.

*Acanthamoeba* can infect parts of the body through cuts or skin wounds or from being inhaled into the lungs or nostrils. It can get into the eyes through contact lens use.

## Types

### Non-keratitis *Acanthamoeba* infections



High resolution of *Acanthamoeba* in a patient's brain

Non-keratitis *Acanthamoeba* infections are rare but serious infections that can affect one or many parts of the body. These infections usually occur in people with weakened immune systems and include:

- Granulomatous amebic encephalitis (GAE), which affects the brain and is almost always fatal
- Cutaneous acanthamoebiasis, a skin infection
- *Acanthamoeba* rhinosinusitis, an infection of the nasal cavity and sinuses
- Disseminated infection, which affects multiple parts of the body. GAE, cutaneous acanthamoebiasis, and *Acanthamoeba* rhinosinusitis can all spread to cause disseminated infections.

**Keep Reading:**

[Non-keratitis \*Acanthamoeba\* infections](#)

## *Acanthamoeba* keratitis

*Acanthamoeba* keratitis is an eye infection that typically occurs in healthy people and can cause permanent vision loss. Most people in the United States who get this infection wear contact lenses. The infection usually doesn't spread to other parts of the body.

**Keep Reading:**

[Acanthamoeba keratitis](#)

## Free-living amebas

A free-living ameba is a kind of one-celled organism that lives in water and soil around the world. Most people will come into contact with these amebas during their lives but won't get sick. Others will develop rare but serious infections.

Although there are several types of free-living amebas that live in the environment, three are known to cause severe disease in people:

- *Acanthamoeba*
- [Balamuthia mandrillaris](#)
- [Naegleria fowleri](#)

All of these amebas can cause life-threatening brain infections. Some can also cause infections of the eyes, skin, sinuses, and other parts of the body.

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SOURCES

**CONTENT SOURCE:**

[National Center for Emerging and Zoonotic Infectious Diseases \(NCEZID\)](#)