

CDC warns of potentially fatal bacterial illness on US gulf coast

June 2 2023, by Steven Reinberg



A potentially deadly germ has made its way to the U.S. Gulf Coast,

health officials warned this week.

So far, three cases of infection from the bacteria *Burkholderia pseudomallei* have been reported to the U.S. Centers for Disease Control and Prevention. The bacteria causes melioidosis, which can be fatal if left untreated.

"It is an environmental organism that lives naturally in the soil, and typically freshwater in certain areas around the world. Mostly in subtropical and tropical climates," said Julia Petras, an epidemic intelligence service officer with CDC's National Center for Emerging and Zoonotic Infectious Diseases.

The most recent case was reported in Mississippi in January, following two previous cases in the same county in Mississippi in July 2020 and May 2022. Melioidosis is now considered endemic to the U.S. Gulf Coast and infections may be seen from Texas to Florida, Petras said.

But because most people exposed to *B. mallei* don't have symptoms of the infection and develop antibodies against it, many more people have most likely been infected, she said. All three patients who were infected responded to treatment and recovered, Petras said.

The most common ways the bacterium infects people is through open wounds or by being inhaled during a severe storm with high winds. It can also be ingested by drinking contaminated water, she noted.

Those most at risk for a serious bout of melioidosis are people with diabetes and those with chronic liver or [kidney disease](#) or any autoimmune disease, she explained.

"Excessive alcohol use is also a known risk factor, and binge drinking has actually been associated with cases as well from endemic areas,"

Petras said.

It's very rare that the bacterium can be transmitted from one person to another, she said. Only two cases worldwide are known. One occurred in the womb and the other was from [sexual intercourse](#), but how the transmission happened isn't known.

Once infected, the bacterium attacks various organs including the lungs, brain and any organ with an abscess. "A lot of patients will have pneumonia with sepsis, and or sepsis, which is associated with higher mortality and worse outcomes," she said.

According to Petras, the key to combating melioidosis is early diagnosis and the right treatment.

"We have antibiotics that work," she said. "What I'm talking about is IV antibiotics for at least two weeks, followed by three to six months of oral antibiotics."

There are specific antibiotics to treat this organism. Meropenem (Merrem) and ceftazidime (Fortaz) are the ones recommended for IV use and then amoxicillin is given via pills for the second phase, she said.

"It's extensive treatment, but if you've finished the full course and you're diagnosed early, which is the really key thing, your outcome is probably going to be quite good," she added.

Petras said that doctors along the Gulf Coast need to be aware of the possibility of *B. mallei* infection. People in these areas should protect themselves by covering any open wounds, wearing gloves when gardening and staying out of high winds.

That advice is especially aimed at diabetics and others with chronic

conditions or [autoimmune diseases](#).

It's not clear how or when *B. mallei* got to the Gulf Coast. But it's likely climate change played a role. *B. mallei* thrives in warm, damp areas and was first found in Australia and Thailand, Petras noted.

"It's been estimated that there's probably 160,000 cases a year around the world and 80,000 deaths," she said.

"This is one of those diseases that is also called the great mimicker because it can look like a lot of different things," Petras explained. "It's greatly under-reported and under-diagnosed and under-recognized—we often like to say that it's been the neglected, neglected tropical disease."

More information: For more on melioidosis, head to the [U.S. Centers for Disease Control and Prevention](#).

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Citation: CDC warns of potentially fatal bacterial illness on US gulf coast (2023, June 2)
retrieved 2 May 2024 from
<https://medicalxpress.com/news/2023-06-cdc-potentially-fatal-bacterial-illness.html>

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