

[NO SPEECH]

**JULIE PHILLEY, MD:** So nontuberculous microbacterial disease is common in the environment. We actually all live around these types of bacteria all of the time. Fortunately, most of us don't get sick from them.

But what we do end up seeing is that it does infect certain people's lungs. And these are the types of people that can present with a cough that has been present for years. And often, actually even in my own practice, I see that they've coughed, they've taken multiple rounds of antibiotics, and the cough has never gone away. Sometimes, this can be one year. Sometimes, this can be as many as 5 to 10 years that the disease has gone undiagnosed.

These bacteria are common in our water supply and in the soil. And so, although they don't make the majority of us sick, places that are very close to water sources, like the coast, like the South and in the east coast, are particularly highly prevalent in these types of bacteria. And we see more cases in these types of regions.

We also see quite a bit in Hawaii. But every state has these bacteria. And again, they don't always make us sick, but when they do it's very important that we find the right diagnosis early so that we can actually help our patients feel better.

So there are some geographic hot spots in the United States that have a higher prevalence of NTM. Of course, this is not a contagious disease, and we don't have the exact numbers, because it's not reportable. So some of our evidence comes from things like Medicare data. And the NIH actually published a good study looking at the numbers of people that are actually infected within NTM to the best of our knowledge.

The prevalence can actually be as high as 55 per 100,000 in the female population. And we see more of this along coastal regions, so places like you know the south-- places like Texas Louisiana, Mississippi certainly in Florida, and up the east coast. And Hawaii actually has one of the highest prevalence rates of NTM in the United States.