

Better tests needed to identify *Candida auris* susceptibility

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Matching an infection with *Candida auris*, a pathogenic yeast, to an effective antifungal is a critical clinical decision. That decision relies on susceptibility testing, but commercially available antifungal tests

perform poorly for many treatments, researchers at Indiana University and Indiana University Health have found. The investigators, who tested the accuracy of 4 available tests for use with *C. auris*, present their findings at ASM Microbe 2023, the annual meeting of the American Society for Microbiology.

C. auris carries a [high mortality rate](#), killing more than 1 in 3 people with infections. Infections often emerge in healthcare settings, where people are particularly vulnerable, and rates are skyrocketing. According to the Centers for Disease Control and Prevention, annual cases in the United States have risen from fewer than 500 in 2019 to nearly 1500 in 2023. Many *C. auris* isolates are resistant to available antifungals, which is why clinicians often analyze individual samples for susceptibility to treatments.

But susceptibility is expensive and time-consuming to pin down, in part because no FDA-approved, commercially available tests exist for *C. auris*, note the researchers in Indiana. Hospital labs often send samples to larger, specialty laboratories for analysis. There are tests available for other pathogenic yeast infections, however, and the researchers behind the new study investigated those tests for use with *C. auris*.

They used 4 commercially available tests for pathogenic yeasts to analyze 50 *C. auris* isolates, collected from the CDC and the Indiana University Health Hospital, for susceptibility to available antifungals. The results were decidedly mixed. Two tests correctly characterized echinocandins, an [antifungal drug](#) administered intravenously and often used to treat *C. auris*.

However, those 2 tests performed poorly for fluconazole, which is in a group of treatments known as triazoles, and the only *C. auris* treatment available orally. Other results revealed that some available tests incorrectly reported resistance to a drug when a strain was susceptible,

and susceptibility when a strain was resistant.

Even though some tests performed well for some drugs, the findings show that right now, there is no single method that reports susceptibility of *C. auris* to antifungals, the researchers note. They also comment that new FDA-approved, commercially available tests would aid clinical decisions and improve care for patients infected with this potentially lethal, often drug-resistant pathogen.

Provided by American Society for Microbiology

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