

CDC Actions to Prevent the Spread of Antifungal Resistance

Drug-resistant fungi can quickly spread through our communities, healthcare facilities, the environment (e.g., soil, water), and around the world. Antifungal-resistant infections have increased in recent years. Few drugs are available to treat fungal infections. CDC works to fight antifungal resistance using a One Health approach, which recognizes that the health of people is closely tied to the health of animals and our shared environment.

CDC ACTS IN FIVE STRATEGIC AREAS



Emerging Resistance

Each year among hospitalized patients in the United States, antifungal-resistant *Candida auris* (*C. auris*) causes about **400** infections and all other types of antifungal-resistant *Candida* cause about **35,000** infections.

Prevention

Build capacity to prevent and contain antifungal-resistant infections and healthcare-associated infections (HAIs). Promote responsible use of antifungals through outreach to consumers, industry, and healthcare providers.

One Health Surveillance

Work with federal and state agencies to expand capabilities for testing and tracking antifungal resistance and identify trends and patterns in hospital and agricultural settings.

Advanced Diagnostics and Laboratory Capacity Building

Develop and validate new laboratory tests and clinical diagnostics to detect antifungal-resistant infections and improve surveillance, infection control, and treatment decisions.

Research

Improve understanding of the many factors that contribute to the emergence, spread, and continuous presence of antifungal-resistant infections.

International Collaboration

Work with international partners to detect, prevent, and control antifungal-resistant fungi throughout the world.

Learn more about CDC's AR Solutions Initiative:
www.cdc.gov/DrugResistance/solutions-initiative



U.S. Department of
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Moving Forward to Combat Antifungal Resistance

As part of the 2020 U.S. National Action Plan, CDC and partner agencies are taking action to address antifungal resistance. The activities below are a snapshot of the antifungal resistance activities, including prevention, One Health surveillance, diagnostics and lab capacity building, research, and international collaboration.



Prevention

- Support state and local health departments to help healthcare facilities contain the spread of *C. auris* through screening and infection control.
- Incorporate antifungal stewardship into existing CDC and state antibiotic stewardship programs.



One Health Surveillance

- Work with internal and external partners to conduct environmental surveillance for antifungal-resistant *Aspergillus fumigatus* (*A. fumigatus*) in diverse crops and settings across the United States.



Advanced Diagnostics

- Develop antifungal susceptibility testing assays for new antifungal drugs.
- Validate advanced diagnostic tests to detect antifungal-resistant yeast and molds.
- Work with the Clinical and Laboratory Standards Institute to develop quality control standards for new antifungals.



Research

- Expand databases of whole-genome sequencing data on *C. auris*, *A. fumigatus*, and other resistant fungi.
- Examine the impact of antibiotics and antifungal drugs on the fungal microbiome and relationships to bacteria and other microbes.
- Study the effectiveness of different disinfectants against *C. auris*.



International Collaboration

- Strengthen international surveillance and containment of *C. auris* and other types of antifungal-resistant *Candida*.
- Provide technical assistance and training to foreign ministries of health to expand local capacity to detect and identify antifungal-resistant *Candida*.

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