



Indiana
Department
of
Health

*Candida auris: What to know
for hospital infection preventionists*

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8/30/2022

OUR MISSION:

**To promote, protect, and improve
the health and safety of all Hoosiers.**

OUR VISION:

**Every Hoosier reaches optimal health
regardless of where they live, learn,
work, or play.**



Agenda for today

- Brief background
- Update to the communicable disease reporting rule
- Update on case counts
- Updates to the C. auris toolkit

Candida auris

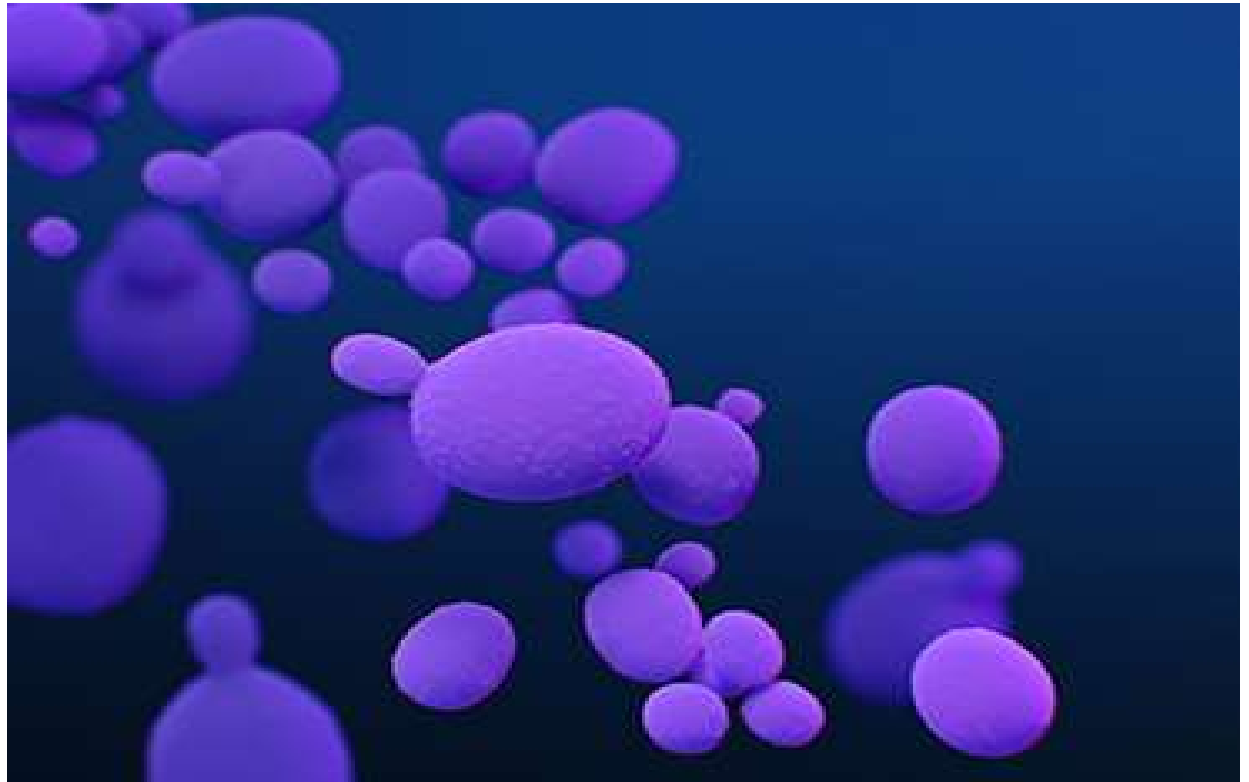
- Exhibits drug resistance and in some cases multi-drug resistance.
- Resistance patterns vary by geographic location.
- First described in 2009 in Japan.
- First case in the U.S. in 2016.
- First case in Indiana in 2017, seen with regularity starting in 2019.
- Has several aspects that make its emergence a public health concern.

C. auris: Why do we care?

- *C. auris* exhibits a 30 percent to 60 percent mortality rate in the clinically infected.
- It is often seen as a co-infection when accompanied with other multi-drug resistant organisms.
- Some *C. auris* infections have been resistant to all known antifungals.
- We can slow the spread of this germ through good infection prevention practices.

Classes of Antifungals

- Azoles
 - Fluconazole
 - Voriconazole
 - Posaconazole
- Echinocandins
 - Micafungin
 - Caspofungin
 - Anidulofungin
- Polyenes
 - Amphotericin B



Update to the CDR

- Updated physician reporting rule for *C. auris*
 - All cases of *Candida auris* and unusual *Candida* sp. (species other than *C. albicans*, *C. parapsilosis*, *C. dubliniensis*, *C. lusitaniae*, *C. tropicalis* or *C. krusei*)
- Submission criteria for isolates to IDOHL.
 - *Candida auris* clinical isolates representing both invasive (e.g., blood and CSF) and non-invasive sources (e.g., urine, wound, and respiratory tract) if the patient has no history of clinical *C. auris*. Also, clinical isolates from unusual *Candida* sp. (species other than *C. albicans*, *C. parapsilosis*, *C. dubliniensis*, *C. lusitaniae*, *C. tropicalis*, or *C. krusei*). Finally, clinical isolates of *C. auris* from previously identified clinical *C. auris* cases may be sent for susceptibility testing if patient hasn't improved with treatment. Please note, colonized cases of *C. auris* as determined by screening tests do not need to be sent to IDOH labs for confirmation.

C. auris: Colonization vs. Clinical Infection

- Colonization
 - *C. auris* can asymptomatically colonize skin.
 - There is no established decolonization protocol.
 - Precautions for a colonized patient should stay in place indefinitely.
 - Doesn't necessarily cause adverse health effects.
 - Usually not actively treated.
- Clinical infection
 - Actively treated.
 - 30% to 60% mortality rate.
 - Patient should be considered colonized after clinical infection resolves.

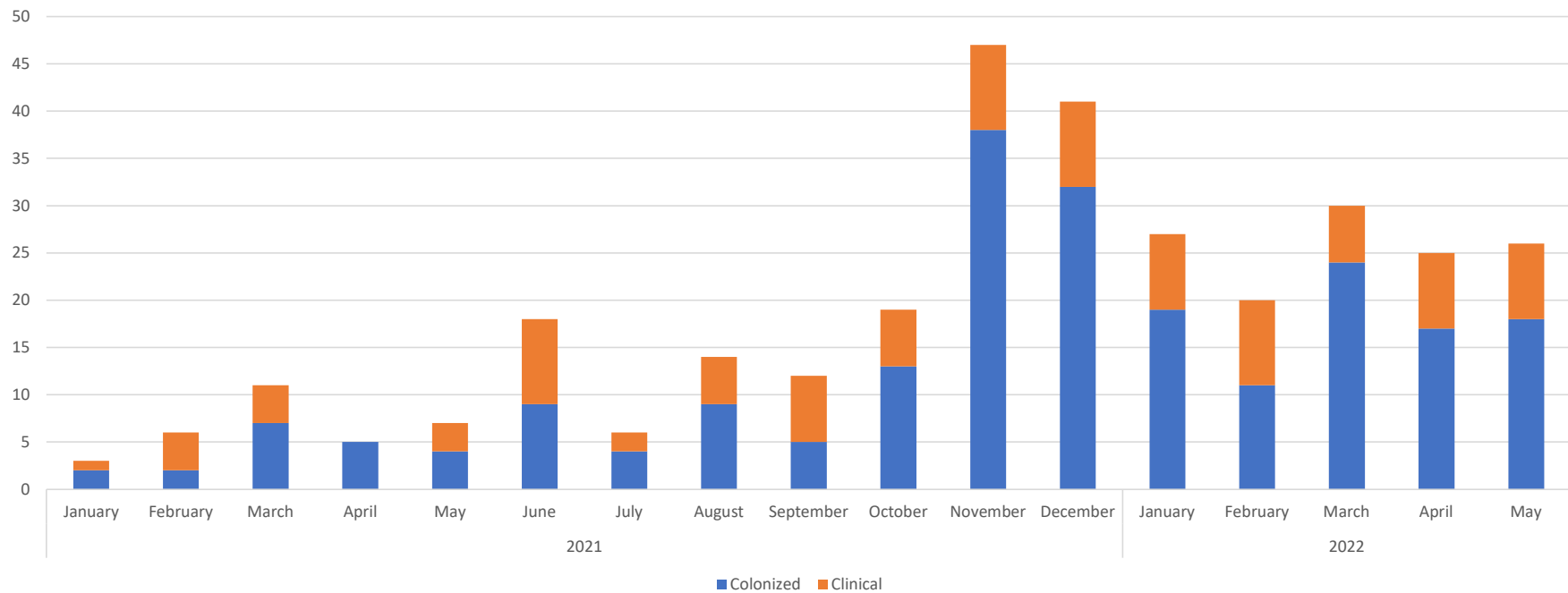
Precaution Application by Scenario

Facility Type	Clinical Infection	Colonization
Acute Care Hospital (Specialty, LTACH, etc.)	Contact Precautions	Contact Precautions
Long-term Care Facility (SNF, vSNF, etc.)	Contact Precautions	Enhanced Barrier Precautions*

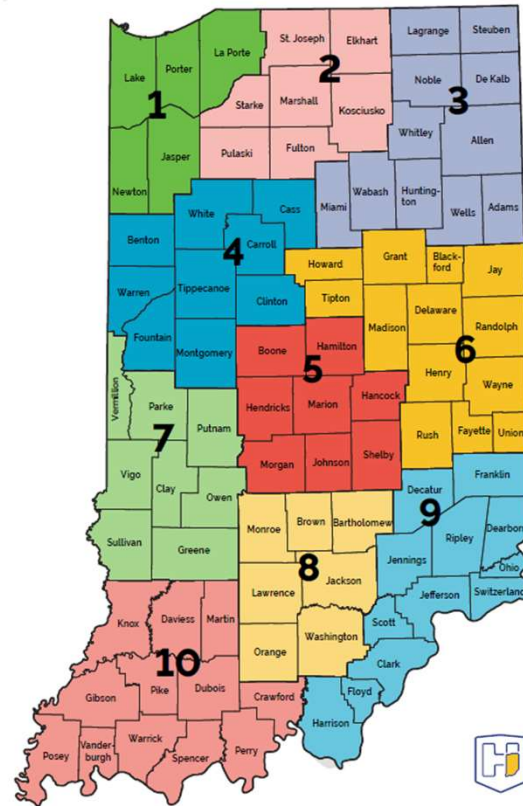
*For detailed instruction on the application and use of enhanced barrier precautions in a long-term care facility, please click [here](#).

Indiana case counts

C. auris Identified in Indiana, 2021 to May 2022



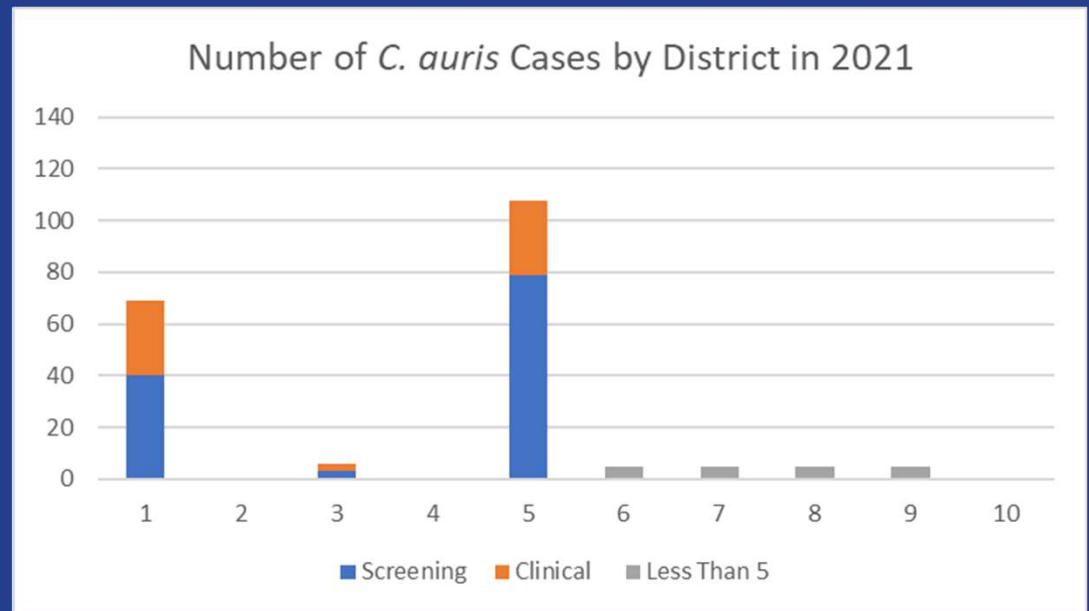
Indiana districts



3-3-2021

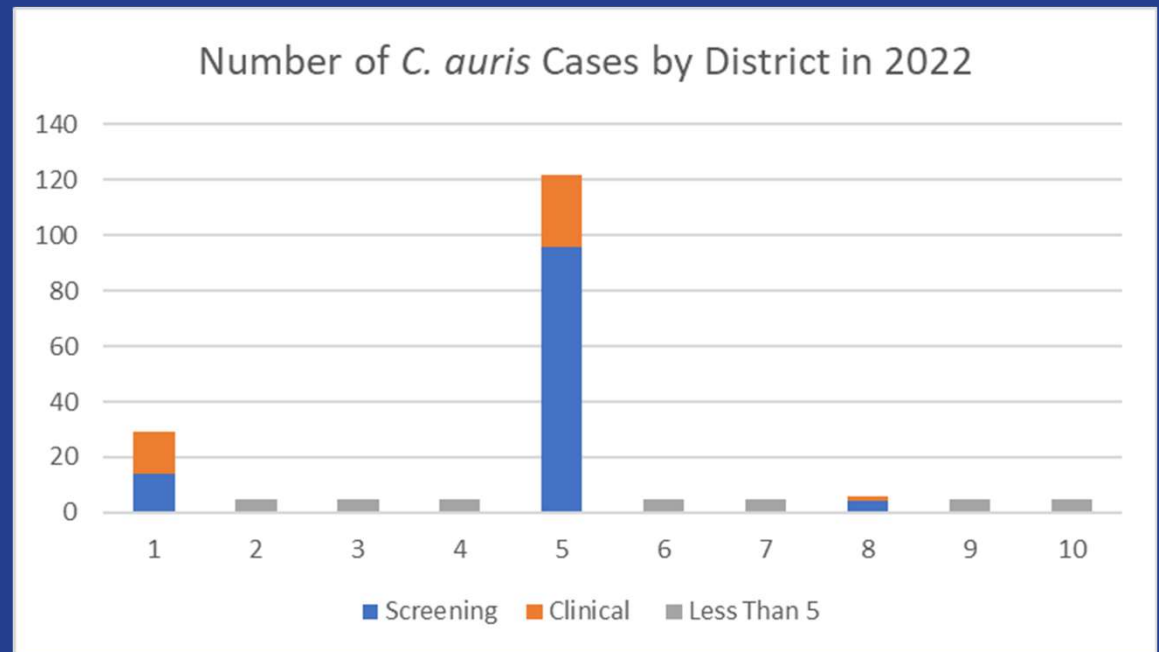
C. Auris cases by District, 2021

- Total numbers during 2021.
- Based on the diagnosing facility.
- 7 of 10 districts with at least one case.
- Numbers of colonized cases may reflect increased screening.



C. Auris cases by District, 2021

- January to August, 2022.
- At least one case seen in all Indiana health districts.
- Continued high concentration in central Indiana.



PPS in 2021*

- Total PPSs: 11
- Facility Type:
 - ACH: 2
 - LTACH: 3
 - SNF: 6
- Total Swabs Collected: 244
- Positives: 34
- Positivity Rate: ~14%

*Data from Oct. 1, 2021, onward.



PPS in 2022*

- Total PPSs: 24
- Facility Type:
 - ACH: 8
 - LTACH: 1
 - SNF: 15
- Total Swabs Collected: 479
- Positives: 26
- Positivity Rate: ~5%

*Data current through 3/31/22



The *C. auris* Toolkit Update

- New toolkit should be ready next week
- Some things remain the same:
 - Info to patients, IPs, EBP and contact precautions signage
 - Interfacility transfer form
 - *C. auris* reporting form
 - *C. auris* trends (CDC)
- Updated versions of the EBP guidance white page
- Table of contents page added

Safety Huddle

- Facilitate communication of IP concerns between shifts.
- Recommend its use if transmission is suspected.
- Places responsibility on a designated person.
- Designed to be short.

Infection Prevention and Control Safety Huddle

Unit: _____ Date: _____ Time: _____ Charge Nurse Signature: _____

- It is the responsibility of the charge nurse to initiate an infection prevention and control safety “huddle” at the beginning of every shift to pass on relevant safety information about patients/residents, families, and the work environment.
 - The information should be shared between charge nurses at the beginning/end of the shift.
 - The huddle should be short (2-5 minutes). The goal is to collect and share information about potential IC issues and concerns on a daily basis.
 - All healthcare providers on the unit should be aware of the issues that need to be addressed with the patients/residents.
 - Focus is the concern! This tool is not meant to be a rounding tool but for huddles.
- ✓ **What is/are the infection prevention and control safety concern/s staff should be aware of today?**

Infection Prevention and Control Safety Concerns	Please indicate patient/resident (Last name, room # & bed #)	Note key items of concern TBP or EBP signage posted, EPA disinfection products available

Environmental Cleaning

- Standardize monitoring of terminal cleans
- Easy reference high-touch surfaces
- Acts as a log that could be audited to assess job performance

CDC Environmental Checklist for Monitoring Terminal

Number:		
Number of ES staff (optional):²		
Monitor the following priority sites for each patient room:		
Touch Room Surfaces³	Cleaned	Not Cleaned
Bed rails / controls		
Bedside table		
Bedside table (grab area)		
Bedside table / button		
Bedside table		
Bedside table handle		
Sink		
Light switch		
Inner door knob		
Plate on inner door knob / plate		
Light switch on		
Handrails by toilet		
Sink		

C. auris Environmental Facts

- Developed by IDOH
- Includes recommended devices to clean per shift
- Reminds staff to use List P and clean *C. auris* rooms last
- Reminder to understand contact kill time

Environmental Facts

for *Candida auris* Disinfection Practices



Candida auris (*C. auris*) is a species of yeast classified by the Centers for Disease Control and Prevention (CDC) as an emerging organism of epidemiological concern. Stringent environmental and device disinfection, robust hand hygiene and wearing proper PPE are needed to stop transmission and prevent the spread of this organism. Surfaces containing *C. auris* need to be disinfected with specific chemicals. *C. auris* is naturally resistant to some disinfectants. Here are some examples of best practices for infection control measures and disinfection:

Alcohol Based Hand Rub (ABHR) sanitizer is acceptable to use for hand hygiene with *Candida auris*. All staff including environmental services (EVS) should use ABHR before and after the removal of items when cleaning rooms. Also, all staff should wear a gown and gloves to clean the room.

Please focus on disinfecting the following items in unit common spaces at least once every

- Phones, computer keyboards and mouse
- Nursing Stations, writing devices and utensils
- Medication carts

Cleaning and Disinfection Practices

- **Use products on EPA List P.** If these are not available, use sporicidal products. (**See page 10 to access EPA List P products**).
- Ensure EVS staff know product contact dwell time (wet to dry times) for the product chosen.
 - Refer to instructions for use (IFUs) and manufacturer's guidelines.
- Ensure EVS staff use an adequate number of cleaning cloths according to IFUs for the cleaning agent. **Note: The number of cleaning cloths per room should be changed with each surface, i.e., bedside table, bed (may require several cloths), etc.**
- Create a workflow plan for cleaning rooms: EVS should be cleaning the *C. auris* rooms last.
- EVS cleaning cart reminders: Storage of food, drinks, or personal items is not permitted on carts.
- Staff should disinfect all surfaces of items that come out of the room, i.e., spray bottles or cleaning canisters, including any shared medical equipment

Six steps for Safe and Effective Disinfectant use from EPA

Guidance on Transfers

- Updated data through May 2022
- Includes links to CDC *C. auris* fact sheets, interfacility transfer form, HAI/AR webinar recordings and EBP white paper



Eric J. Holcomb
Governor

Kristina M. Box, MD, FACP
State Health Commissioner

Guidance on Inter-Facility Transfer of Individuals with *Candida auris*- Hospital to Post Acute Care Key Points

Background

This guidance is consistent with the recommendations of the Centers for Disease Control and Prevention (CDC). The purpose of this document is to provide guidance to long-term care facilities (LTCFs), including nursing facilities and skilled nursing facilities, about discharging, admitting, and readmitting a resident from a hospital who has a confirmed colonized or infected infection from *Candida auris*.

Basics

Candida auris is a yeast that has demonstrated resistance to one or more antifungal medications, with some infections resistant to all three types of antifungal medicines. It can cause serious infections and more than 1 in 3 patients with invasive *C. auris* infection die. First discovered in 2009 and has quickly spread to more than a dozen countries. Because it is new, some laboratories may have difficulty identifying it, and there is still much to learn about it.

Spread

C. auris outbreaks have been documented in healthcare facilities and can spread through contact with affected patients and contaminated surfaces or equipment. The first documented case in Indiana occurred in 2017, but it wasn't until 2019 that cases started occurring with regularity. The number of clinical cases of *C. auris* in Indiana has more than doubled from 2019 to 2021 and the total number of cases has increased by 50%.

C. auris Identified in Indiana, 2021 to May 2022



Stopping the spread of *C. auris*: a group effort

- Studies have shown that during an outbreak of *C. auris*, environmental contamination can be extensive¹.
- A primary way to control this spread is through environmental cleaning and disinfection¹.
- Infection prevention measures in long term care facilities are designed to protect residents as well as employees.

References

1. Caceres DH, Forsberg K, Welsh RM, Sexton DJ, Lockhart SR, Jackson BR, Chiller T. *Candida auris*: A Review of Recommendations for Detection and Control in Healthcare Settings. *Journal of Fungi*. 2019; 5(4):111. <https://doi.org/10.3390/jof5040111>

Questions?

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