



Candida auris

Surveillance Infection Prevention

Niki McGuire – Infection Prevention Nurse
MDHHS MDRO Containment Manager

April 11, 2024

What is *Candida auris*?



A fungal yeast organism



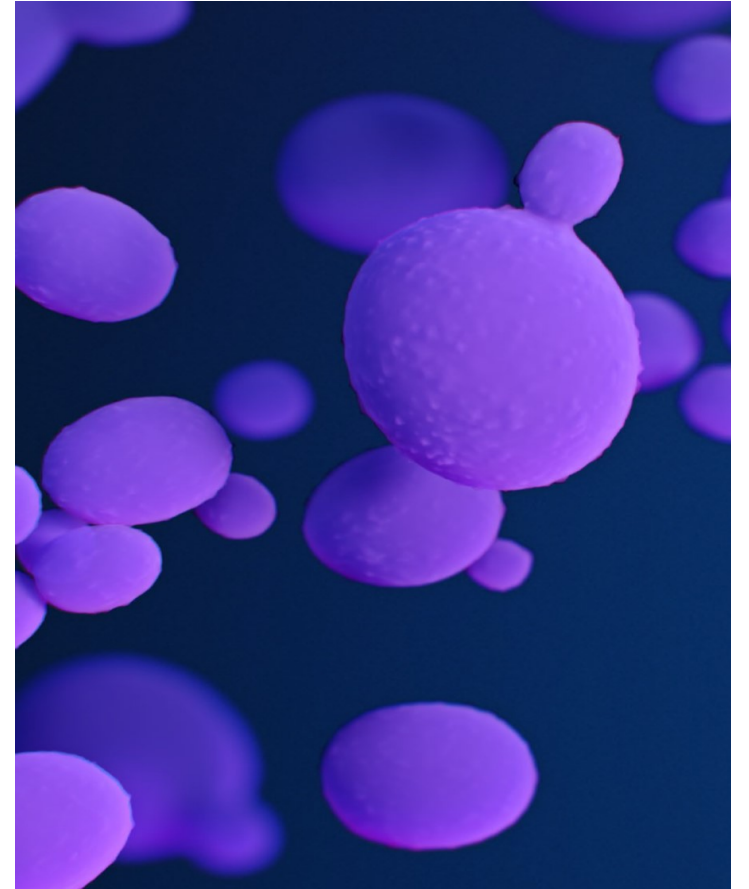
Often colonizes the skin and other body sites, but can cause invasive infections



Can be resistant to antifungal medications, sometimes multidrug-resistant



Can spread in health care settings



Surveillance

[Michigan.gov/HAI](https://michigan.gov/HAI)

Candida auris Surveillance Report

April 8, 2024



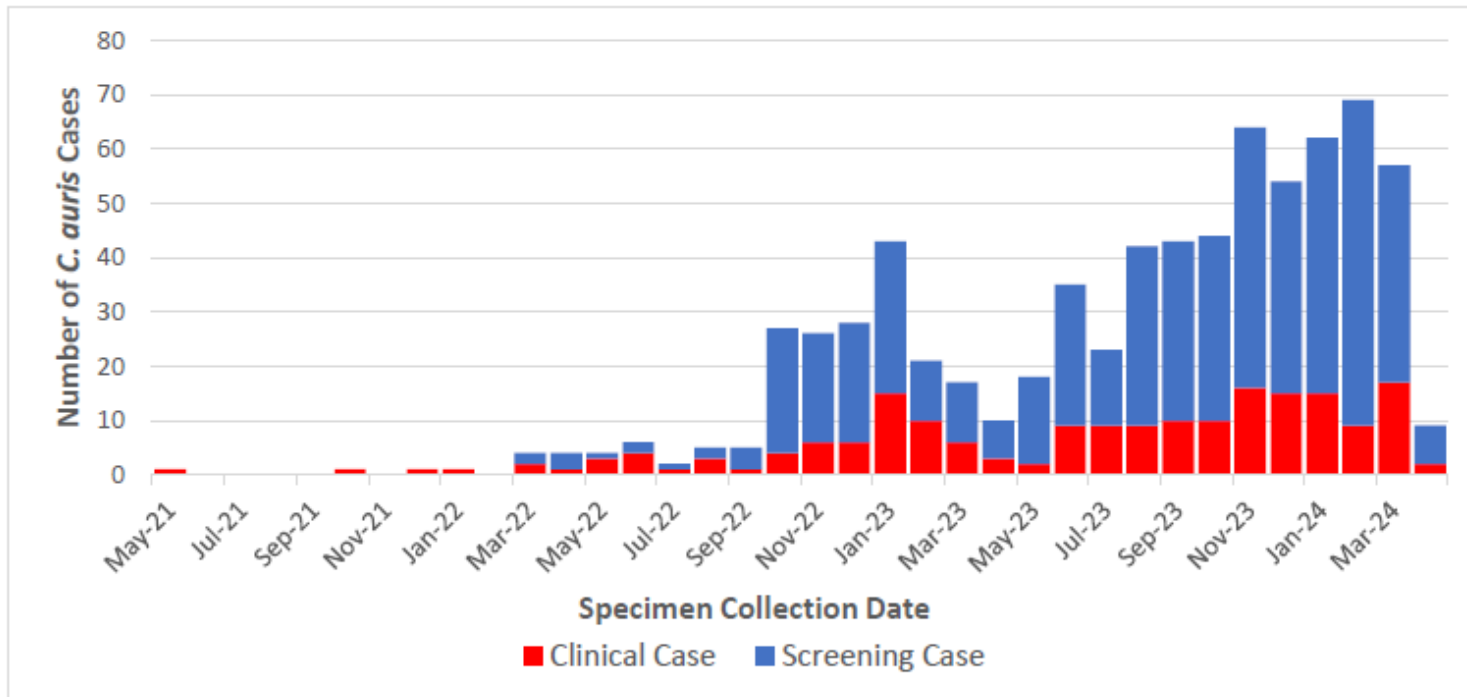
Michigan *C. auris* Case Count:

Total Cases	Clinical Case	Screening Case
726	192	534

Cases initially identified as screening cases that later develop a positive clinical culture will solely be reported as a clinical case to avoid double counting the same individuals.

- 59 individuals converted from a screening to clinical case.

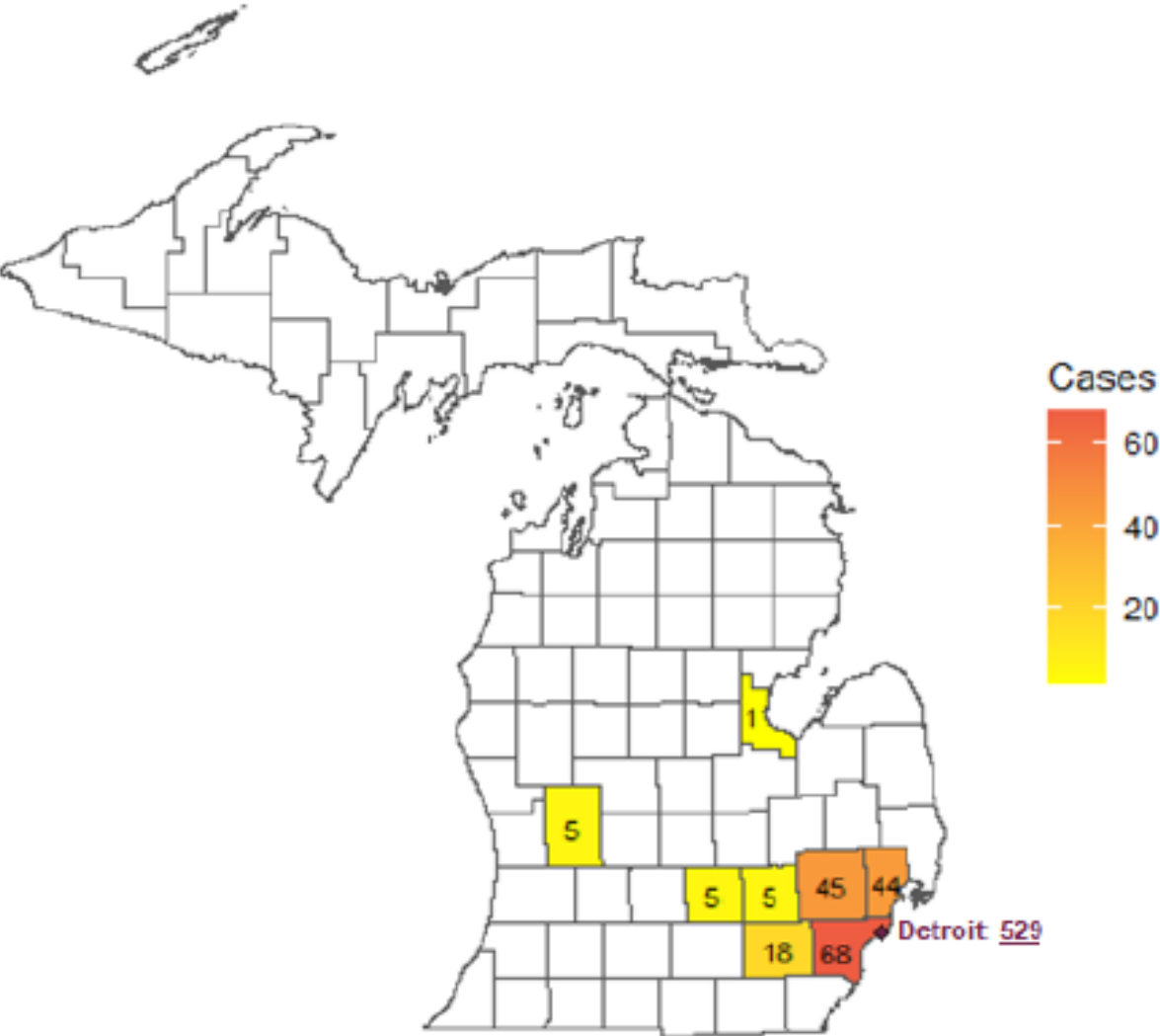
Fig 1. *Candida auris* Cases in Michigan by Case Type^a, 2021 – April 8, 2024



Candida auris Cases in Michigan

Michigan.gov/HAI

Fig 2. Jurisdiction of Health Care Facility at *C. auris* Case Detection^b

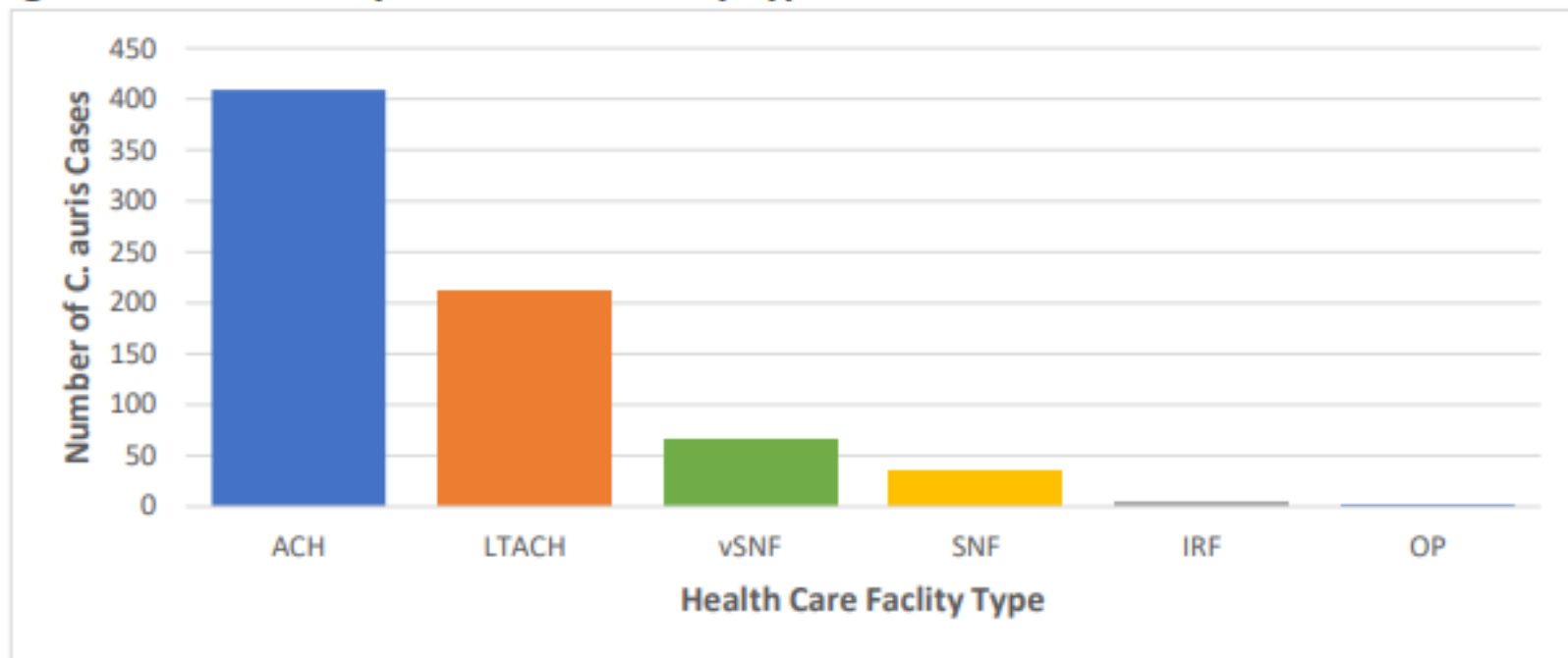


6 Cases reported from out-of-state facilities.

Candida auris in Michigan Counties

Michigan.gov/HAI Data available as of 2/19/24

Fig. 3. *C. auris* Cases by Health Care Facility Type^c at Detection^b



*Candida
auris* Cases
by
Facility Type
at Detection

[Michigan.gov/HAI](https://michigan.gov/HAI) Data
available as of 2/19/24

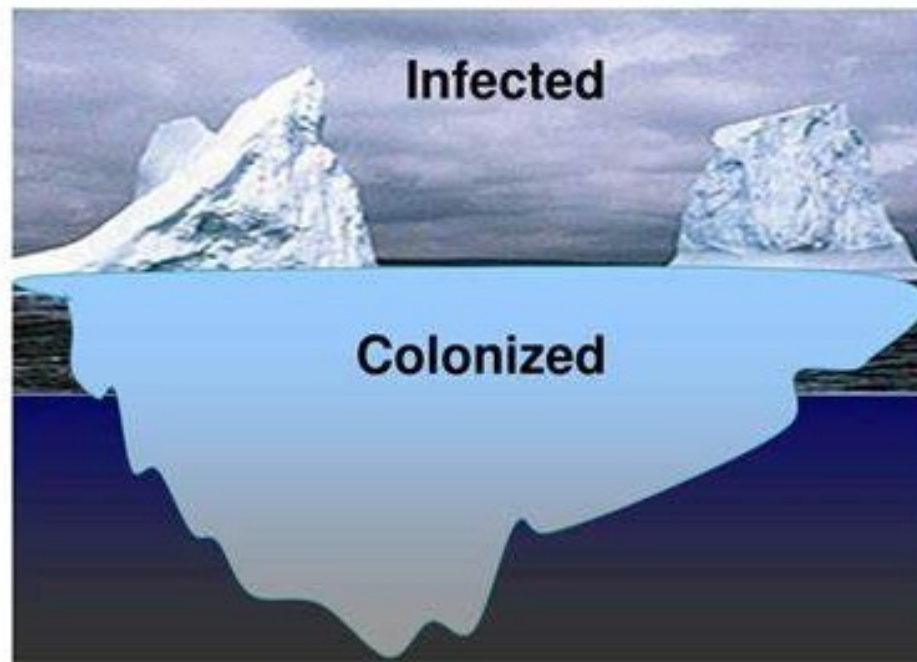
Infection Prevention

[Healthcare-Associated Infections \(michigan.gov\)](https://michigan.gov)

To date, **59 individuals** converted from a colonization case to a clinical case.

Colonized vs. Infected

The Iceberg Effect



Candida auris Colonization Can Lead to Spread

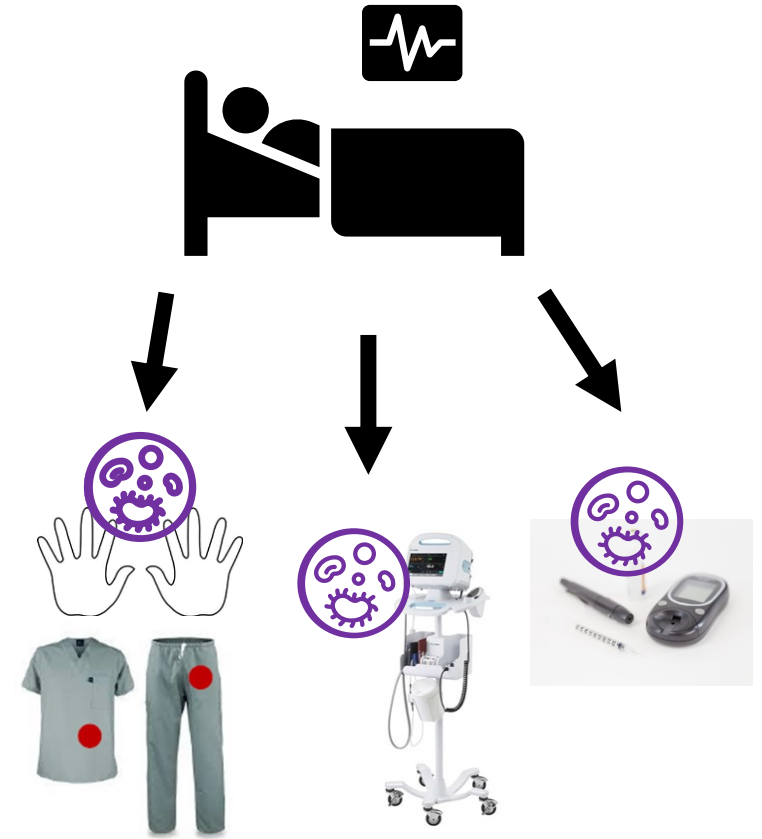
C. auris colonization is a **risk for transmission** to other patients.

Shedding of *C. auris* from colonized individuals leads to contamination of the surrounding healthcare environment

C. auris can **persist** in the environment for weeks, increasing potential for transmission

Even after treatment for invasive infection, patients generally **remain colonized** for long periods, and perhaps indefinitely

Therefore, all recommended infection control measures should be followed during and after treatment for *C. auris* infection



Candida auris Can Contaminate the Environment



iStockphoto.com

Patient/Resident Transfers

As with any MDRO, decisions to transfer a patient/resident from one level of care to another should be based on:

→ Clinical criteria

→ Ability of the accepting facility to provide the appropriate level of care

Not on the presence or absence of *C. auris* infection or colonization

**All facilities need to be prepared to
implement setting-appropriate precautions**

Infection Prevention Recommendations:



Hand Hygiene

- ABHS
- Location of ABHS
- Audits



PPE

- Gowns and Gloves
- High-contact resident care
SNF: CP or EBP
ACH: CP



EVS

- EPA List P cleaner/disinfectant
- Cleaner location & frequency



Communication

- C auris status
- Pending labs/cultures
- Screenings
- Precautions used

Placement of ABHS

- Outside resident rooms
- Inside resident rooms
- Common areas
- Clean/Soiled areas
- Therapy gyms/rooms
- Med carts
- Entrances/Exits
- Isolation carts



Infection Prevention Recommendations:



Hand Hygiene

- ABHS
- Location of ABHS
- Audits



PPE

- Gowns and Gloves
- High-contact resident care

SNF: CP or [EBP](#)

ACH: CP



EVS

- [EPA List P](#) cleaner/disinfectant
- Cleaner location & frequency



Communication







- [C auris status](#)
- Pending labs/cultures
- Screenings
- [Precautions used](#)

Personal Protective Equipment

- Availability of PPE
 - **Placement just outside resident room**
 - **Restocking PPE supply**
- Hand Hygiene when donning/doffing PPE
- Removing PPE prior to leaving the resident's room
- Proper process of donning/doffing



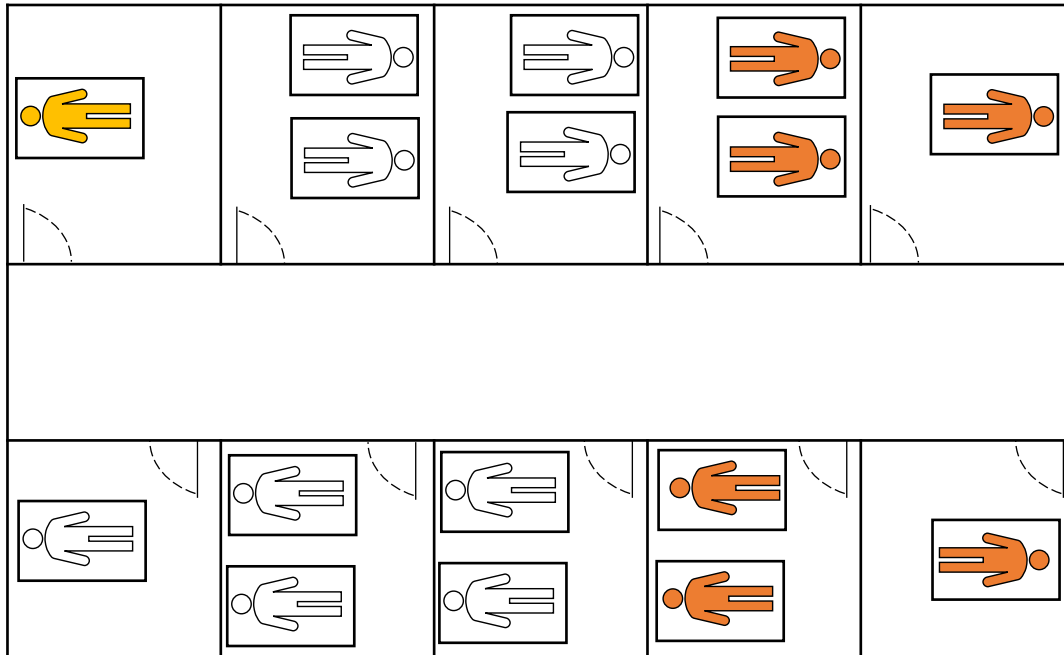
Personal Protective Equipment (PPE)

Type of Precaution	PPE	When	What Care
 <p>ENHANCED BARRIER PRECAUTIONS EVERYONE MUST:</p> <ul style="list-style-type: none"> Clean their hands, including before entering and when leaving the room. <p>PROVIDERS AND STAFF MUST ALSO:</p> <ul style="list-style-type: none"> Wear gloves and a gown for the following High-Contact Resident Care Activities: <ul style="list-style-type: none"> Dressing Bathing/Showering Transferring Changing Linens Providing Hygiene Changing briefs or assisting with toileting Device care or use: central line, urinary catheter, feeding tube, tracheostomy Wound Care: any skin opening requiring a dressing Do not wear the same gown and gloves for the care of more than one person. 	 	<p>Before high-contact resident care</p>	<ul style="list-style-type: none"> • Dressing • Bathing/showering • Transferring • Providing hygiene • Changing linens • Changing briefs or assisting with toileting • Indwelling device care or use • Wound care
 <p>CONTACT PRECAUTIONS EVERYONE MUST:</p> <ul style="list-style-type: none"> Clean their hands, including before entering and when leaving the room. <p>PROVIDERS AND STAFF MUST ALSO:</p> <ul style="list-style-type: none"> Put on gloves before room entry. Discard gloves before room exit. Put on gown before room entry. Discard gown before room exit. Do not wear the same gown and gloves for the care of more than one person. Use dedicated or disposable equipment. Clean and disinfect reusable equipment before use on another person. 	 	<p>Before any room entry</p>	<ul style="list-style-type: none"> • Any care

Resident Placement

Contact Precautions

- Single-resident room whenever possible



Enhanced Barrier Precautions

- Single-resident rooms are not required
- For facilities with capacity, single-resident rooms may be preferred
- *C. auris*-positive residents may be cohorted in the same room
- Facilities can consider a designated unit or part of unit for cohorting

Infection Prevention Recommendations:



Hand Hygiene

- ABHS
- Location of ABHS
- Audits



PPE

- Gowns and Gloves
- High-contact resident care
SNF: CP or EBP
ACH: CP



EVS

- [EPA List P](#) cleaner/disinfectant
- Cleaner location & frequency

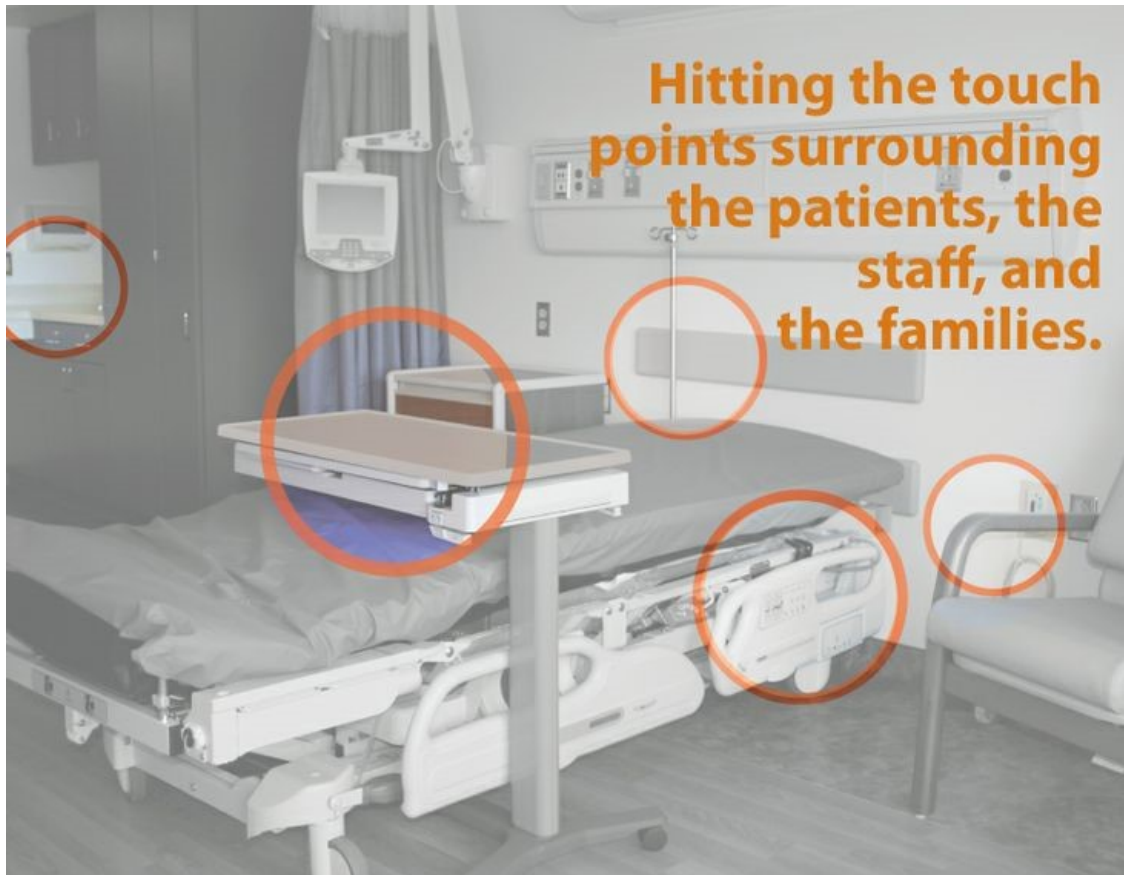


Communication

- C auris status
- Pending labs/cultures
- Screenings
- Precautions used

Cleaning & Disinfection Plan for *C. auris*

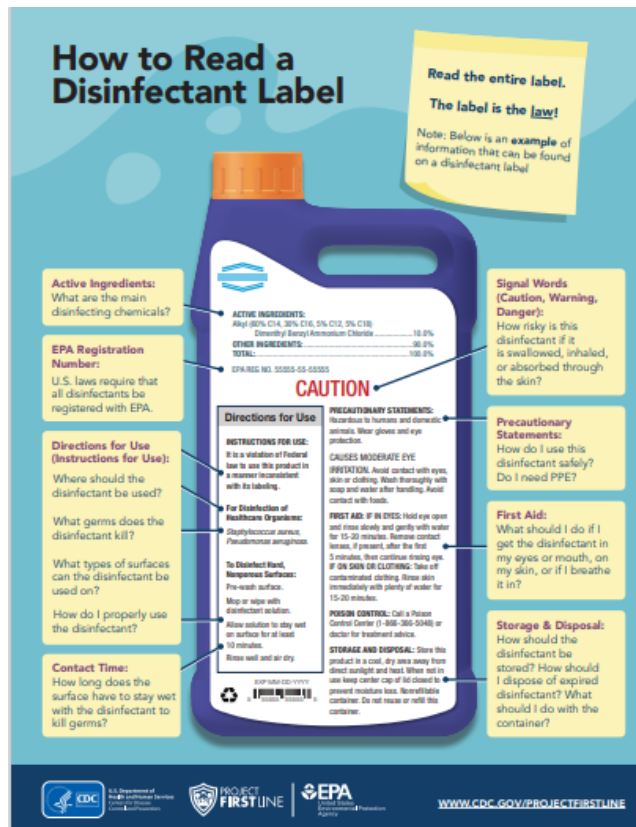
- Clean *C. auris* rooms last
- Increase cleaning frequency of high-touch surfaces
- Clean shared medical equipment



Effective Disinfectant Products for *C. auris*

EPA List P

<https://www.epa.gov/pesticide-registration/list-p-antimicrobial-products-registered-epa-claims-against-candida-auris>



EPA United States Environmental Protection Agency

Search EPA.gov

Environmental Topics ▾ Laws & Regulations ▾ Report a Violation ▾ About EPA ▾

[Pesticide Registration](#)

CONTACT US

List P: Antimicrobial Products Registered with EPA for Claims Against Candida Auris

On this page:

- [Products on List P](#)
- [How to use List P products effectively](#)
- [How to check if a product is on List P](#)
- [Additional Resources](#)

Products on List P

The following products are registered for use with *Candida auris* (*C. auris*). EPA has reviewed laboratory testing data demonstrating that these products kill *C. auris*.

C. auris **EXIT** is a fungus that can cause severe infections and spreads easily between patients. *C. auris* infections tend to occur in health care settings and can be resistant to antifungal drugs.

Prior to these products being registered, there were no antimicrobial pesticides registered specifically for use against *C. auris*.

How to Use list P Products Effectively

A product's effectiveness can change depending on how you use it. Disinfectants may have different directions for different pathogens. Follow the label directions for *C. auris*, including the contact time.

How to Check if a Product is on List P

Infection Prevention Recommendations:



Hand Hygiene

- ABHS
- Location of ABHS
- Audits



PPE

- Gowns and Gloves
- High-contact resident care
SNF: CP or EBP
ACH: CP



EVS

- EPA List P cleaner/disinfectant
- Cleaner location & frequency

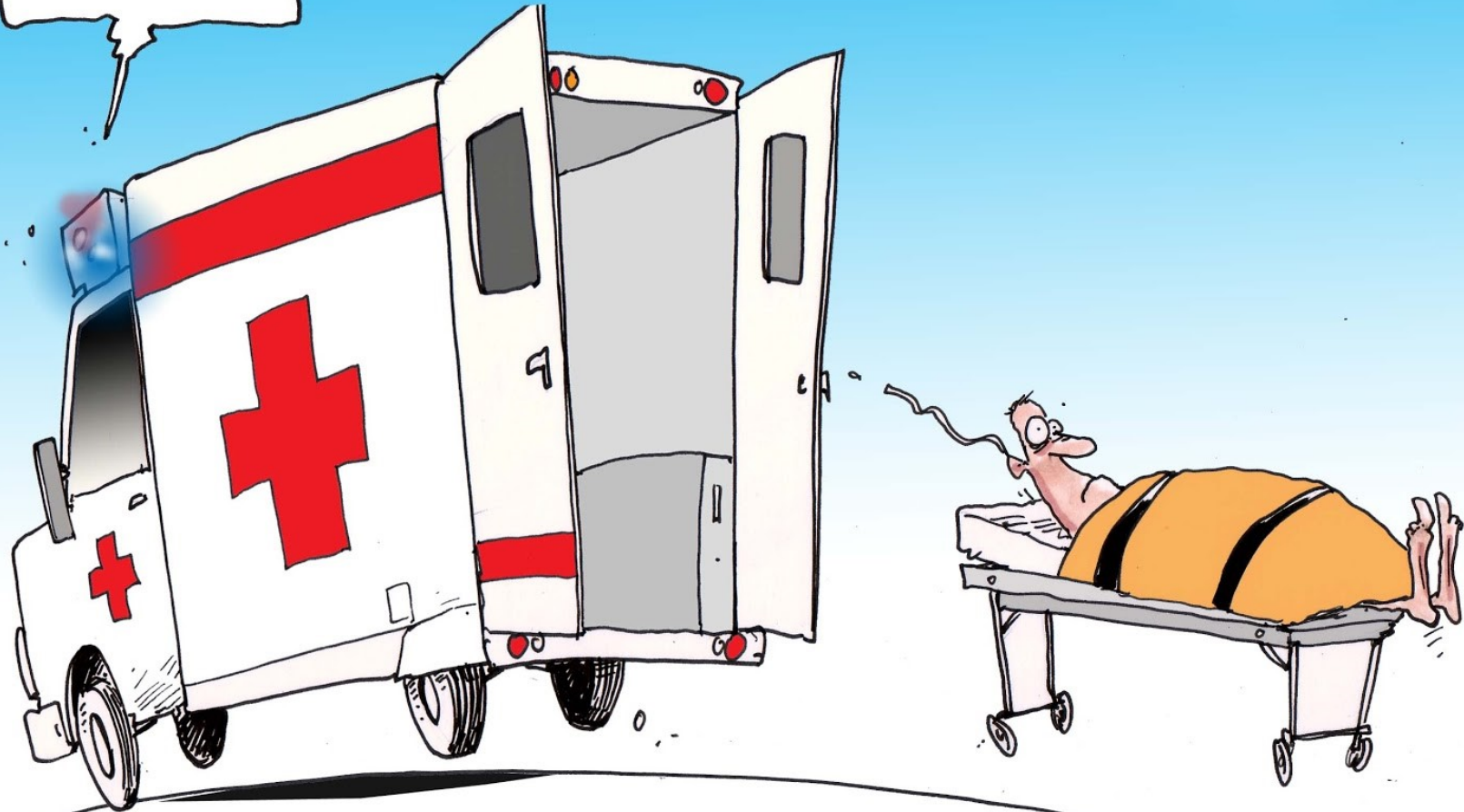


Communication

- C auris status
- Pending labs/cultures
- Screenings
- Precautions used

ROLE CLARITY

... NO...
IT'S YOUR
JOB TO CLOSE
THE DOORS...



Communication

To ensure safe patient care, identify strategies for providing effective and clear verbal and written communication at any care transition

- Between units (intra-facility)
- Between facilities (inter-facility)
- This includes a **patient's MDRO hx** and **current infection status**, and any **pending laboratory cultures** or **screening tests**

Inter-facility Infection Control Transfer Form			
This form must be filled out for transfer to accepting facility with information communicated prior to or with transfer. Please attach copies of latest culture reports with susceptibilities if available.			
Sending Healthcare Facility:			
Patient/Resident Last Name	First Name	Date of Birth	Medical Record Number
Name/Address of Sending Facility		Sending Unit	Sending Facility Phone
Sending Facility Contacts	Contact Name	Phone	E-mail
Transferring RN/Unit			
Transferring physician			
Case Manager/Admin/SW			
Infection Preventionist			
Does the person* currently have an infection, colonization OR a history of positive culture of a multidrug-resistant organism (MDRO) or other potentially transmissible infectious organism?		Colonization or history (Check if YES)	Active infection on Treatment (Check if YES)
Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)		<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Vancomycin-resistant <i>Enterococcus</i> (VRE)		<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
<i>Clostridioides difficile</i>		<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
<i>Acinetobacter</i> , multidrug-resistant		<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Enterobacteriaceae (e.g., <i>E. coli</i> , <i>Klebsiella</i> , <i>Proteus</i>) producing-Extended Spectrum Beta-Lactamase (ESBL)		<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Carbapenem-resistant Enterobacteriaceae (CRE)		<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
<i>Pseudomonas aeruginosa</i> , multidrug-resistant		<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
<i>Candida auris</i>		<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Other, specify (e.g., lice, scabies, norovirus, influenza):		<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Does the person* currently have any of the following? (Check here <input type="checkbox"/> if none apply)			
<input type="checkbox"/> Cough or requires suctioning	<input type="checkbox"/> Central line/PICC (Approx. date inserted)		
<input type="checkbox"/> Diarrhea	<input type="checkbox"/> Hemodialysis catheter		
<input type="checkbox"/> Vomiting	<input type="checkbox"/> Urinary catheter (Approx. date inserted)		
<input type="checkbox"/> Incontinent of urine or stool	<input type="checkbox"/> Suprapubic catheter		
<input type="checkbox"/> Open wounds or wounds requiring dressing change	<input type="checkbox"/> Percutaneous gastrostomy tube		
<input type="checkbox"/> Drainage (source):	<input type="checkbox"/> Tracheostomy		

CS304368 Updated 06/2019 Page 2 of 3

Communication of *C. auris* Status

When **ACCEPTING** patients/residents:

Ask about their *C. auris*/MDRO status

If positive, obtain a **copy of the lab report** or supporting medical records

Confirm the type of precautions needed

Ensure **all HCP are informed** of their *C. auris*/MDRO status

Maintain an up-to-date list of residents meeting criteria for precautions



Communication of *C. auris* Status

When **DISCHARGING** patients/residents:

Clearly state the status of *C. auris* and all MDROs

Current or recent infection

Colonization

Pending status (laboratory results pending or testing is needed)

Specify the **type of precautions** indicated

Tell HCP at the receiving facility

BOTH verbal and written communication

Utilize **Inter-facility Transfer Form**

HEALTHCARE FACILITY TRANSFER FORM
Use this form for all transfers to an admitting healthcare facility.

Affix patient labels here.

Patient Name (Last, First): _____
Date of Birth: _____ MRN: _____ Transfer Date: _____
Receiving Facility Name (if known): _____
Contact Name (optional): _____ Contact Phone (optional): _____
Sending Facility Name: _____

Candida auris Transfer Information Sheet

Immediately place this patient on transmission based precautions.

Acute Care or Long-term Care Hospital Settings: Contact Precautions only
Nursing Home Settings: Contact Precautions or Enhanced Barrier Precautions (EBP), depending on the situation (refer to health dept for more information).

Patient name: _____ (Last, First) Date of birth: _____ (MM/DD/YYYY)
Discharging facility: _____ Date completed: _____ (MM/DD/YYYY)
Reporter name: _____ Contact number: _____ (XXX-XXX-XXXX)

☐ This patient was identified with *Candida auris* (see attached lab report):

☐ Infection: Identification during clinical testing
☐ This infection has been treated or determined treatment not needed
☐ Treatment is ongoing

☐ Colonization: Identification during surveillance testing
Specimen collection date: _____ (MM/DD/YYYY) Specimen source: _____

☐ This patient's *Candida auris* status is under investigation, further laboratory results are pending

C. auris Screening Testing
Specimen collection date: _____ (MM/DD/YYYY)
Results: ☐ Pending

Notes: _____

If you have additional questions, please contact your local health department or the MDHHS Surveillance for Healthcare-Associated and Resistant Pathogens Unit (SHARP) at 517-335-8165

Page 1 of 2

Infection Prevention Recommendations:



Hand Hygiene

- ABHS
- Location of ABHS
- Audits



PPE

- Gowns and Gloves
- High-contact resident care
SNF: CP or [EBP](#)
ACH: CP



EVS

- [EPA List P](#) cleaner/disinfectant
- Cleaner location & frequency



Communication

- [C auris status](#)
- Pending labs/cultures
- Screenings
- [Precautions used](#)


Healthcare-Associated Infections

 > [Keeping Michigan Healthy](#) > [Communicable & Chronic Diseases](#) > [Healthcare-Associated Infections](#)

Surveillance for Healthcare-Associated & Resistant Pathogens (SHARP) Unit

Contact Information:

Website:  Michigan.gov/HAI *

Phone:  **517-335-8165** (Mon. - Fri.
8am - 5pm)

Email:  MDHHS-SHARP@michigan.gov

Fax: **517- 335-8263**

[SHARP Staff Contact Information](#)

*[Subscribe](#) to the SHARP Unit's Listserv

