Candida auris Data Summary

<u>Candida auris (C. auris)</u> is a yeast that is often multi-drug resistant and it can spread in healthcare settings via person-to-person transmission or contact with contaminated surfaces. *C. auris* can cause serious, hard to treat infections.

C. auris began spreading in Chicago, Illinois since 2016. Since then, 552 clinical cases, who were ill and had *C. auris* detected during their clinical care, have been identified as of March 21, 2023. Beginning in 2017, the Chicago Department of Public Health (CDPH) increased efforts to identify individuals colonized with *C. auris*, who were not ill from *C. auris* and were tested during admission to a healthcare facility or during prevalence surveys. 1,026 individuals have been identified (to date) to be colonized with *C. auris* primarily from specimens collected from a swab of the axillae/groin.

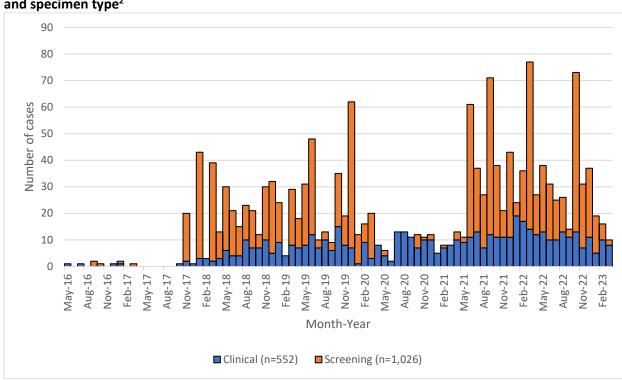


Figure 1. Chicago *C. auris* Cases (n=1,578), May 2016 - March 21, 2023¹ by specimen collection date and specimen type²

The following graph (Figure 2) shows the same data grouped by year of specimen collection. The large increase of colonized cases is driven by active screening of individual during admission to a healthcare facility or during point prevalence surveys to identify the number of people colonized. CDPH conducts periodic point prevalence surveys at facilities with higher burden of *C. auris* along with onsite reviews to assess compliance with infection prevention and control requirements.

¹2023 Data are provisional only as of March 21, 2023

²Colonized to clinical cases (n=105) are counted twice: once as a screening case and once as a clinical case at the time of specimen collection

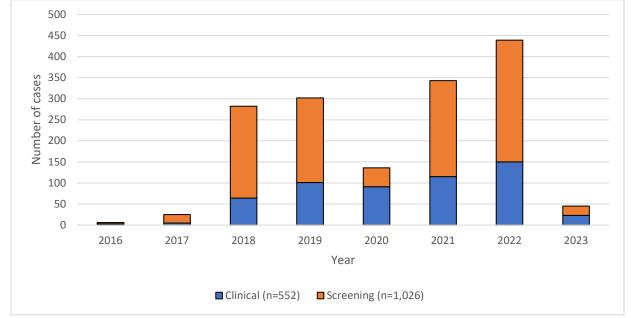


Figure 2. Chicago *C. auris* Cases (n=1,578), May 2016 - March 21, 2023¹ by specimen collection year and specimen type²

Individuals residing in ventilator-capable skilled nursing facilities (vSNFs) and long-term acute-care hospitals (LTACHs) are at increased risk of acquiring *C. auris* and other multidrug-resistant organisms due to multiple factors including serious underlying medical conditions; long healthcare facility stays; indwelling medical devices including tracheostomies, feeding tubes, and central venous catheters; frequent healthcare worker contact; and prolonged, broad-spectrum antibiotic exposure. *C. auris* persistently colonizes patients and contaminates the healthcare environment, allowing for easy transmission within a facility.

Table 1. C. auris prevalence by facility type, Chicago, IL, 2017-2023

Facility type	N facilities	N surveys	Median Prevalence	Range
vSNF (vent floor only)	4	42	52.8%	0-81.8%
LTACH	4	40	36.4%	0-64.2%
ACH (mostly ICUs)	18	37	0%	0-100% ²
SNF	11	11	0%	0-2.4%

¹Prevalence is calculated as total number of positives (previously known positives + new positives) over the census ²100% prevalence was among a census of 3 swabbed during an outbreak investigation when all 3 patients tested were positive

Abbreviation: N, number of; vSNF, ventilator-capable skilled nursing facility; LTACH, long-term acute-care hospital; ACH, acute care hospital; ICU, intensive care unit; SNF, skilled nursing facility

CDPH is dedicated to continuing to provide support and education to healthcare facilities to identify *C. auris* and contain the spread.

CDPH continues to prioritize supporting infection control in high-acuity long-term healthcare facilities to contain the spread of *C. auris* and multi-drug resistant organisms. Recommendations include improved

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adherence to infection-control practices, including the use of Transmission-based Precautions, increasing access to alcohol-based hand rub and personal protective equipment, improving hand hygiene compliance, and adherence to cleaning and disinfection of patient environment and shared equipment.

Among clinical cases with available demographic information, the median age was 63 years old and 62% were male. *C. auris* has been identified from many body sites including blood, urine, respiratory tract, wounds. The following table summarizes the specimen sources from which *C. auris* was identified in clinical cases.

Table 2. Characteristics of Chicago clinical C. auris cases (n=552), 2016-2023

Characteristic	Number (%)		
Specimen Source			
Blood	191 (35)		
Urine/Cath	185 (34)		
Sputum	56 (10)		
Wound	50 (9)		
Tissue	15 (3)		
Other	55 (10)		
Age (median)	63 years (IQR: 52-71.25)		
Sex			
Male	340 (62)		
Female	198 (36)		
Unknown	14 (3)		

Abbreviation: IQR, interquartile range

CDPH has been actively supporting Chicago healthcare facilities to identify *C. auris* cases and contain the spread of *C. auris*. CDPH provides guidance and conducts on-site assessments to evaluate and recommend:

- Adherence to <u>hand hygiene</u>.
- Appropriate use of <u>Transmission-Based Precautions</u> based on setting.
- <u>Cleaning and disinfecting</u> the patient care environment (daily and terminal cleaning) and reusable equipment with recommended products, including focus on shared mobile equipment (e.g., glucometers, blood pressure cuffs) with <u>EPA List P</u> agent. If List P is not accessible, <u>EPA List K</u> agent may be used. It is important to follow all manufacturer's directions for use, including applying the product for the correct contact time.
- Communication about patient's *C. auris* status when patient is <u>transferred</u>.
 - During the process of inter-facility communication (i.e. communication with another facility), staff should only communicate that a patient is infected or colonized with *C. auris* if there is **documented** identification of *C. auris* based on current or past laboratory testing.
 - Facilities should be able to confirm a patient's past *C. auris* infection or colonization history by querying the XDRO registry.
- Screening contacts of newly identified case patients to identify C. auris colonization.
- Laboratory surveillance of clinical specimens to detect additional cases.

For additional information see: Chicago Department of Public Health - Health Alert Network: https://www.chicagohan.org/diseases-and-conditions/cauris