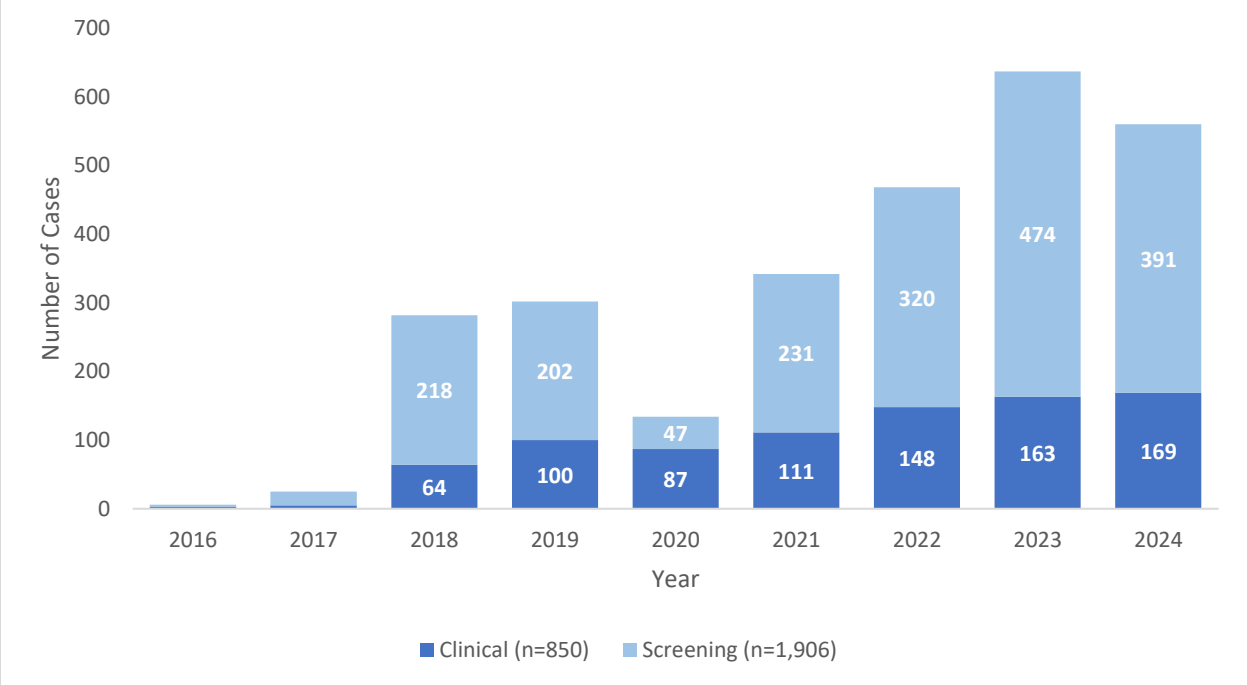
Report updated: 12/9/2024
Data through September 30, 2024

Candida auris Data Summary – Chicago, IL

Candida auris is a yeast that is often multi-drug resistant and can spread in healthcare settings via person-to-person transmission or contact with contaminated surfaces. *C. auris* can cause serious, difficult to treat infections.

*Per IL code, C. auris is reported to the Chicago Department of Public Health when patients develop infections and are tested during the course of their clinical care (**clinical cases**), or during screening of asymptomatic (**colonized**) patients either upon admission to a healthcare facility or as part of a facility point prevalence survey (PPS).* The Chicago Department of Public Health (CDPH) performs active surveillance by conducting PPS at facilities with a higher burden of *C. auris* or in response to a reported clinical case of C. auris. The frequency of PPS varies due to outbreak response and true surveillance. Data are used to evaluate infection prevention and control (IPC) practices to identify areas for improvement and provide support. *C. auris* was first reported in Chicago, Illinois in 2016. As of September 30, 2024, **850 clinical cases** and **1,906 colonized individuals** have been identified in Chicago facilities.

Figure 1. Chicago *C. auris* Cases (n=2,756) by specimen collection year and specimen type[1], May 2016 – September 30, 2024[2]

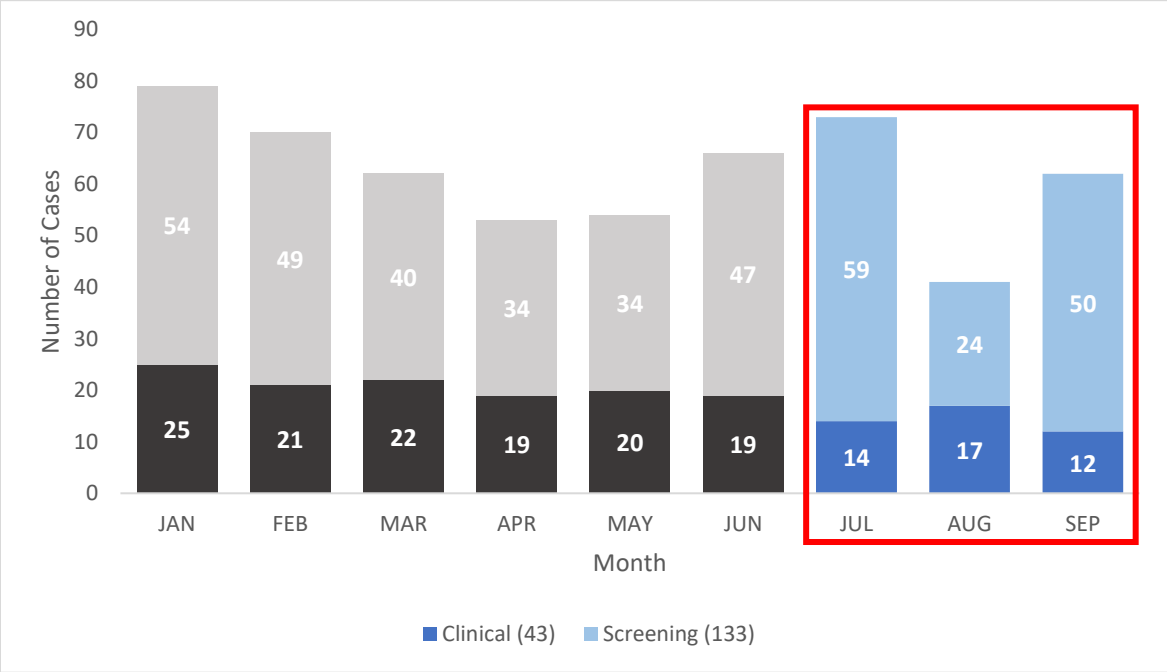


[1]*Colonized (screening) to clinical cases (n=219) are counted twice: once as a screening case and once as a clinical case at the time of specimen collection*
[2]*Data are provisional as of 10/9/24*
Data Source: Combined de-duplicated IL XDRO Registry, INEDSS, and CDPH conducted PPS.

C. auris Epidemiology in Quarter 3 of 2024 (July-September)

From July to September 2024, 43 clinical and 133 screening cases were identified. Clinical cases remained relatively steady while screening cases decreased in August and peaked again in September. 57% of all PPS conducted in quarter 3 were conducted in the month of July, which could account for the large proportion of screening cases in the first month of the quarter. In quarter 3 of 2024, reports of C. auris clinical cases have decreased.

Figure 2. Chicago _C. auris_ Cases (n=560) by specimen collection month and specimen type, January 1, 2024 – September 30, 2024[1]



[1]*Data are provisional as of 10/9/24*
Quarter 3 denoted by red box.
Data Source: Combined de-duplicated IL XDRO Registry, INEDSS, and CDPH conducted PPS.

In quarter 3 of 2024, **clinical** cases of *C. auris* have been predominantly male and with a median age of 66. Similarly, the majority of *C. auris* **screening** cases have been male with a median age of 66. Table 2 summarizes the age and gender of *C. auris* cases in Chicago during quarter 3.

Table 1. _C. auris cases_ by specimen type and demographic characteristics, July 1, 2024 – September 30, 2024[1]

Specimen type	Median age	Gender (Male)
Clinical	66	69.7%
Screening	66	64.6%

[1]*Data are provisional as of 10/9/24*
Data Source: Combined de-duplicated IL XDRO Registry, INEDSS, and CDPH conducted PPS.

Patients 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 2 summarizes the prevalence of *C. auris* in different healthcare setting types across the city at select points in time in the third quarter of 2024.

Table 2. *C. auris* prevalence[1] by facility type from CDPH conducted point prevalence surveys[2], Chicago, IL, July 1—September 30, 2024

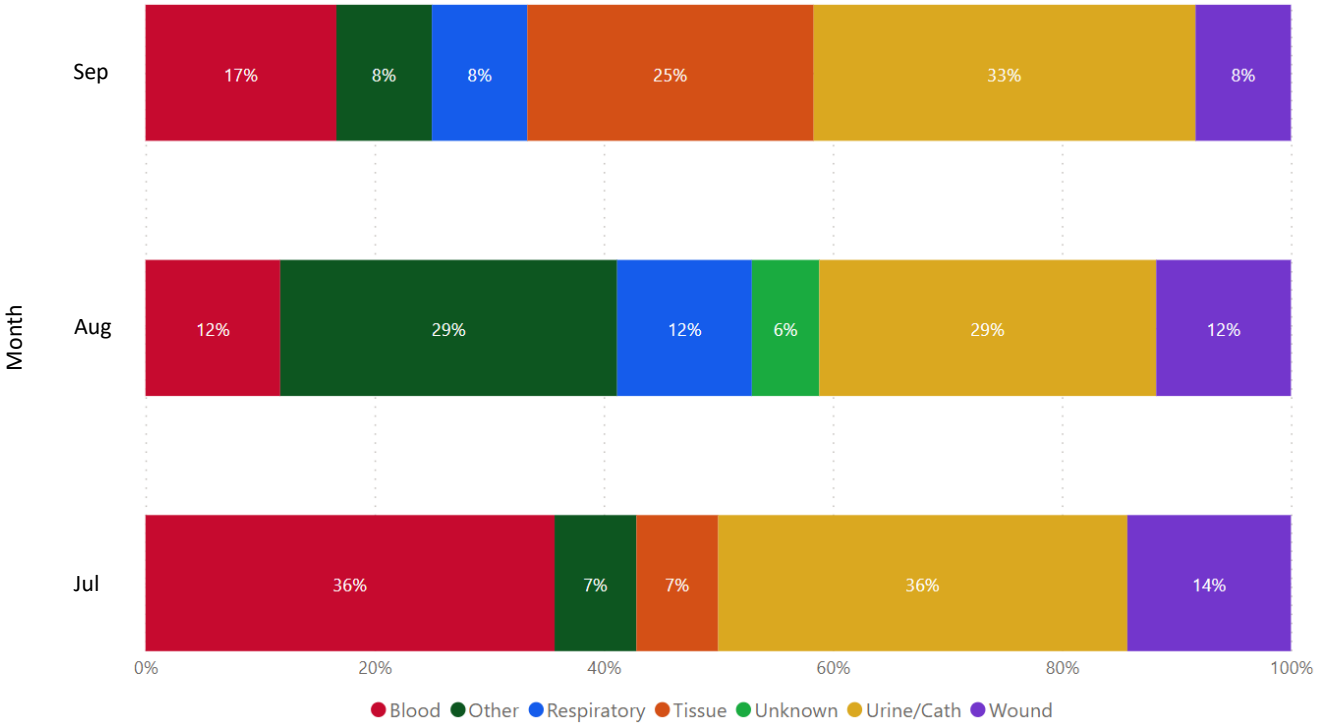
Facility type	Number of facilities tested	Number of surveys	Median Prevalence	Range of Prevalence
vSNF (vent floor only)	3	3	77.4%	60.9-80.6%
LTACH	3	4	38.9%	5.9-64.7%
ACH (mostly ICUs)	2	4	8.35%	0.0-66.7%[3]
SNF	2	3	2.8%	1.9-4.9%

[1]Prevalence is calculated as total number of positives (previously known positives + new positives) over the census
[2]CDPH routinely conducts point prevalence surveys at vSNFs and LTACHs and only does PPS in ACH and SNF when there is newly identified positive case
[3]CDPH was conducting regular PPS at two ACH in response to outbreaks.
Data Source: Point Prevalence Surveys Conducted by CDPH
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

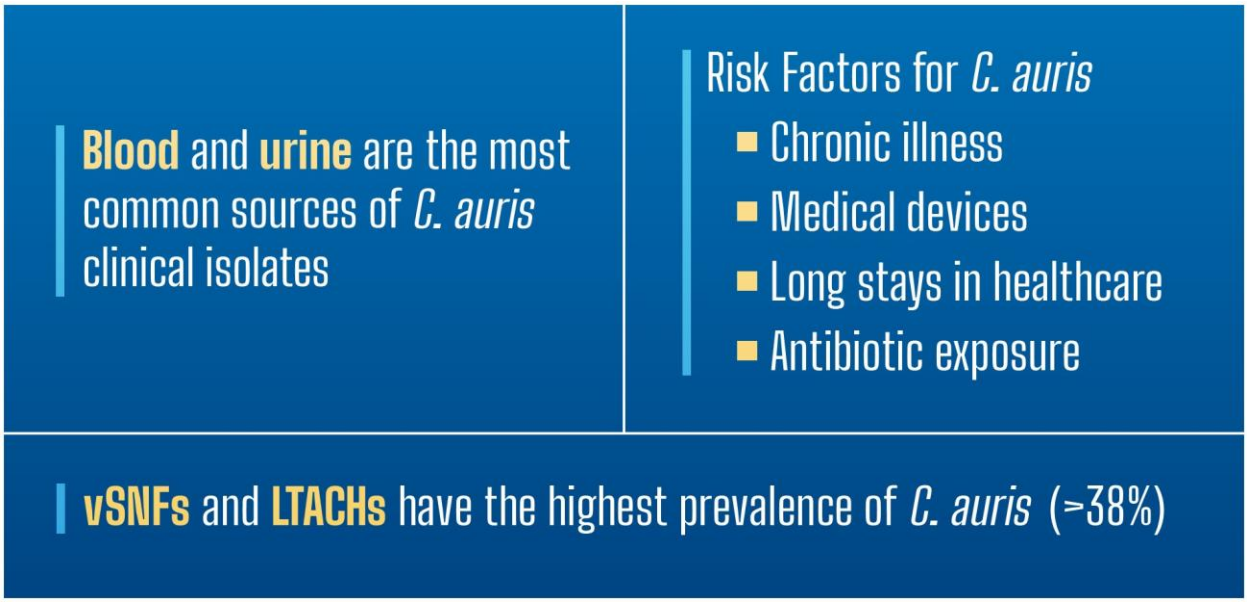
It is noteworthy that an increasing number of skilled nursing facilities (SNFs) are being associated with cases of *C auris* among their residents. During the third quarter of 2024, CDPH conducted 3 PPS among 2 SNFs in response to newly identified *C auris* cases among their residents, an increase from 4 SNFs for the entire year of 2023. These PPS were conducted in response to single cases in SNFs. Despite low prevalence at most of the SNFs surveyed, the introduction of *C. auris* could result in further spread to the environment and eventually, to residents. CDPH is committed to closely monitoring and providing support and education to healthcare facilities that identify *C. auris* cases to mitigate spread. The high prevalence noted in acute care facilities was associated with surveillance screening in response to outbreaks at two facilities, and therefore should not be generalized to represent Chicago acute care facilities.

C. auris has been identified from many body sites including blood, urine, respiratory tract, tissue, and wounds. Figure 3 summarizes the specimen sources from which *C. auris* was identified in clinical cases. Respiratory specimens are considered clinical because they are collected during the course of care. However, respiratory specimens likely represent colonization and may have been collected as screening specimens by some healthcare facilities. In addition, urinary specimens may represent colonization or infection; interpretation of clinical cultures requires assessment of patient signs and symptoms.

Figure 3. Percent of Chicago clinical *C. auris* cases (n=43) by specimen source and month of specimen collection, January 1 – June 30, 2024[1]



[1]Data are provisional as of 10/9/24
Data Source: Combined de-duplicated IL XDRO Registry, INEDSS, and CDPH conducted PPS.



This includes the use of transmission-based precautions, increasing access to alcohol-based hand rub and personal protective equipment, improving hand hygiene compliance, and adherence to the cleaning and disinfection of patient environment and shared equipment.

CDPH provides guidance and conducts on-site assessments to evaluate and recommend processes to improve:

- Adherence to hand hygiene.
- Appropriate use of Transmission-Based Precautions based on setting.
- Cleaning and disinfecting 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 sporicidal EPA List K agent.
- Communication about patient's *C. auris* status when patient is transferred.
    - 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/programs/hai