

## Candida auris Data Summary – Chicago, IL

<u>Candida auris</u> 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 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* and in response to reported clinical cases of *C. auris*. In quarter 1 of 2025, a total of 9 PPS were conducted by CDPH in facilities across Chicago; 77.8% of PPS were performed to assess prevalence at higher burden facilities, and 22.2% were in response to reported clinical cases. 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 March 31, 2025, **991 clinical cases** and **2,149 colonized individuals** have been identified in Chicago facilities.



Figure 1. Chicago *C. auris* Cases (n=3,140) by specimen collection year and specimen type<sup>1</sup>, May 2016 – March 31, 2025<sup>2</sup>

<sup>1</sup>Colonized (screening) to clinical cases (n=261) are counted twice: once as a screening case and once as a clinical case at the time of specimen collection

<sup>2</sup>Data are provisional as of 4/8/25

Data Source: Combined IL XDRO Registry, INEDSS, and CDPH conducted PPS.

## C. auris Epidemiology in Quarter 1 of 2025 (January - March)

From January to March 2025, 62 clinical and 133 screening cases were identified. Clinical cases peaked in the first month of quarter 1. 44.4% of all PPS events conducted in quarter 1 were conducted in the month of March, which could account for the larger proportion of screening cases in the third month of the quarter.



Figure 2. Chicago *C. auris* Cases (n=733) by specimen collection month and specimen type<sup>1</sup>, April 1, 2024 – March 31, 2025<sup>2</sup>

<sup>1</sup>Colonized (screening) to clinical cases (n=119) are counted twice: once as a screening case and once as a clinical case at the time of specimen collection

<sup>2</sup>Data are provisional as of 4/8/25

Data Source: Combined IL XDRO Registry, INEDSS, and CDPH conducted PPS.

In quarter 1 of 2025, **clinical** cases of *C. auris* have been predominantly male (64.5%) and with a median age of 64. Similarly, the majority of *C. auris* **screening** cases have been male (61.7%), with a median age of 66. Figures 3 and 4 summarize the gender distribution of gender for clinical *C. auris* cases in Chicago.



Figure 3. Percent of Chicago clinical C. auris cases (n=991) by gender, May 2016 – Mar 31, 2025<sup>1</sup>

Data Source: Combined IL XDRO Registry, INEDSS, and CDPH conducted PPS.

Figure 4. Percent of Chicago clinical *C. auris* cases (n=991) by age group and year of specimen collection, May 2016 – Mar 31, 2025<sup>1</sup>



<sup>&</sup>lt;sup>1</sup>Data are provisional as of 4/8/25

Data Source: Combined 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

<sup>&</sup>lt;sup>1</sup>Data are provisional as of 4/8/25

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. Figure 5 summarizes the prevalence of *C. auris* in different healthcare setting types across the city at select points in time in 2025.



Figure 5. *C. auris* prevalence<sup>1</sup> by facility type from CDPH conducted point prevalence surveys<sup>2</sup>, Chicago, IL, January 1, 2025 – March 31, 2025

<sup>1</sup>Prevalence is calculated as total number of positives (previously known positives + new positives) over the census <sup>2</sup>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

Data Source: Point Prevalence Surveys Conducted by CDPH

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

Figure 6 shows *C. auris* clinical cases in Chicago stratified by type of testing facility. An important note regarding this figure is that while most cases tend to be tested at Acute Care Hospitals (ACH), some of them are residents at other facilities, such as skilled nursing and long-term care facilities.



Figure 6. Chicago clinical C. auris cases (n=991) by facility type and year of specimen collection, May 2016 – March 31, 2025<sup>1</sup>

<sup>1</sup>Data are provisional as of 4/8/25

Data Source: Combined IL XDRO Registry, INEDSS, and CDPH conducted PPS.

Figure 7 summarizes the specimen source of clinical *C. auris* cases in quarter 1 of 2025. Blood and urine continue to be the most common sources of *C. auris* clinical isolates. Note that cases identified from the collection of respiratory specimens are reported as 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 7. Percent of Chicago clinical *C. auris* cases (n=62) by specimen source and month of specimen collection, Jan 1, 2025 – Mar 31, 2025<sup>1</sup>

Data Source: Combined IL XDRO Registry, INEDSS, and CDPH conducted PPS.

**Blood** and **urine** are the most common sources of *C. auris* clinical isolates Risk Factors for *C. auris* 

- Chronic illness
- Medical devices
- Long stays in healthcare

**vSNFs** and **LTACHs** have the highest prevalence of *C. auris* (>40%)

<sup>&</sup>lt;sup>1</sup>Data are provisional as of 4/8/25

## Infection Prevention and Control (IP&C) Recommendations

IP&C measures include the use of transmission-based precautions, increasing access to alcohol-based hand rub and personal protective equipment, improving hand hygiene compliance, and cleaning and disinfection of patient's environment and shared equipment with appropriate agents used according to manufacturer's instructions for use.

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

- Ensure staff are adhering to facility's <u>hand hygiene</u> policy.
- Appropriate use of <u>Transmission-Based Precautions</u> based on the 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 an <u>EPA-registered List P</u> agent or, if one is unavailable or otherwise unsuitable, a sporicidal <u>EPA List K</u> agent.
- Communication about the patient's *C. auris* status when the 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.
  - Illinois healthcare facilities are **required** to query the <u>XDRO registry</u> for past *C. auris* infection or colonization history.
- <u>Screening contacts of newly identified case patients</u> 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: <u>https://www.chicagohan.org/programs/hai</u>