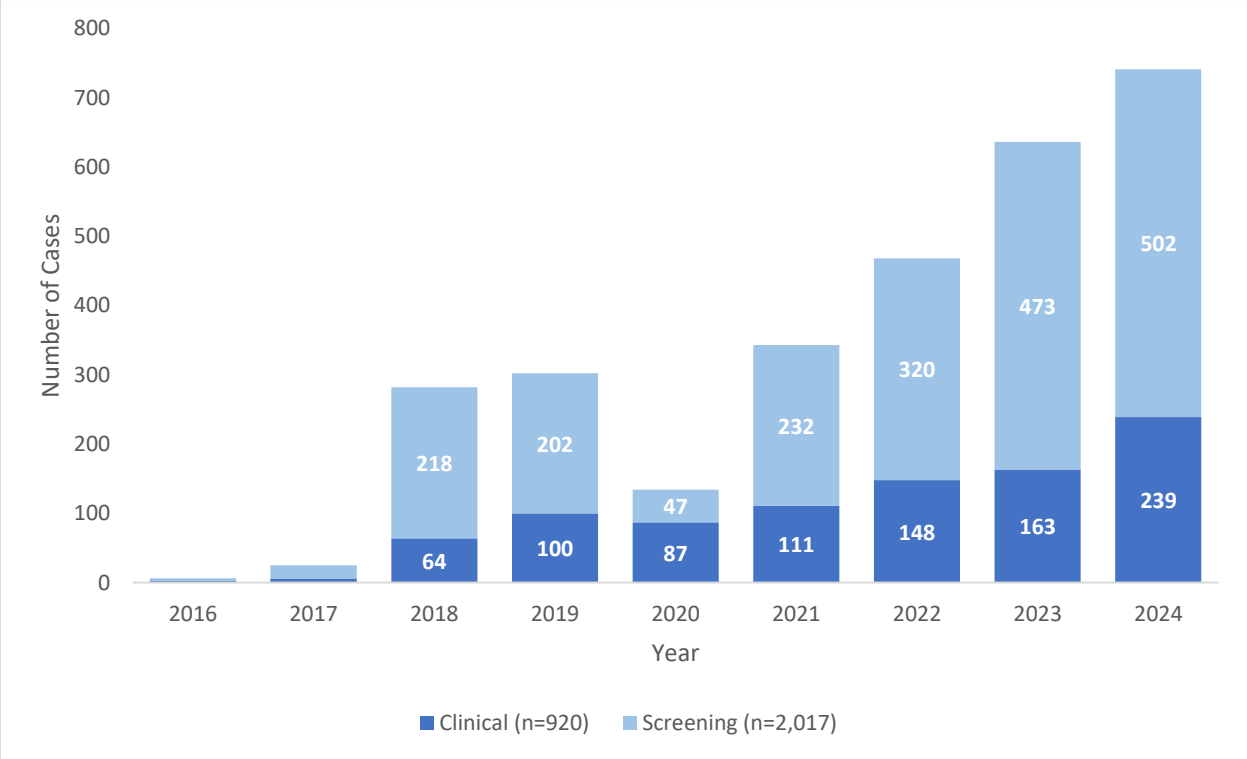
Report updated: 1/28/2025
Data through December 31, 2024

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* and in response to reported clinical cases of *C. auris.* In 2024, a total of 56 PPS were conducted by CDPH in facilities across Chicago; 21 (37.5%) were performed to assess prevalence at higher burden facilities and 35 (62.5%) were in response to a reported clinical case. Quarter 2 had the most PPS events performed in 2024 (19, 33.9%) spanning from April 1 – June 30. 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 December 31, 2024, **919 clinical cases** and **2,012 colonized individuals** have been identified in Chicago facilities. **During 2024, reported clinical cases increased by 46.6% from 2023.** Identified screening cases increased by 6.1%; the number of screening events in 2024 was 56 in comparison to 30 screening events in 2023.

Figure 1. Chicago *C. auris* Cases (n=2,937) by specimen collection year and specimen type[1], May 2016 – December 31, 2024[2]



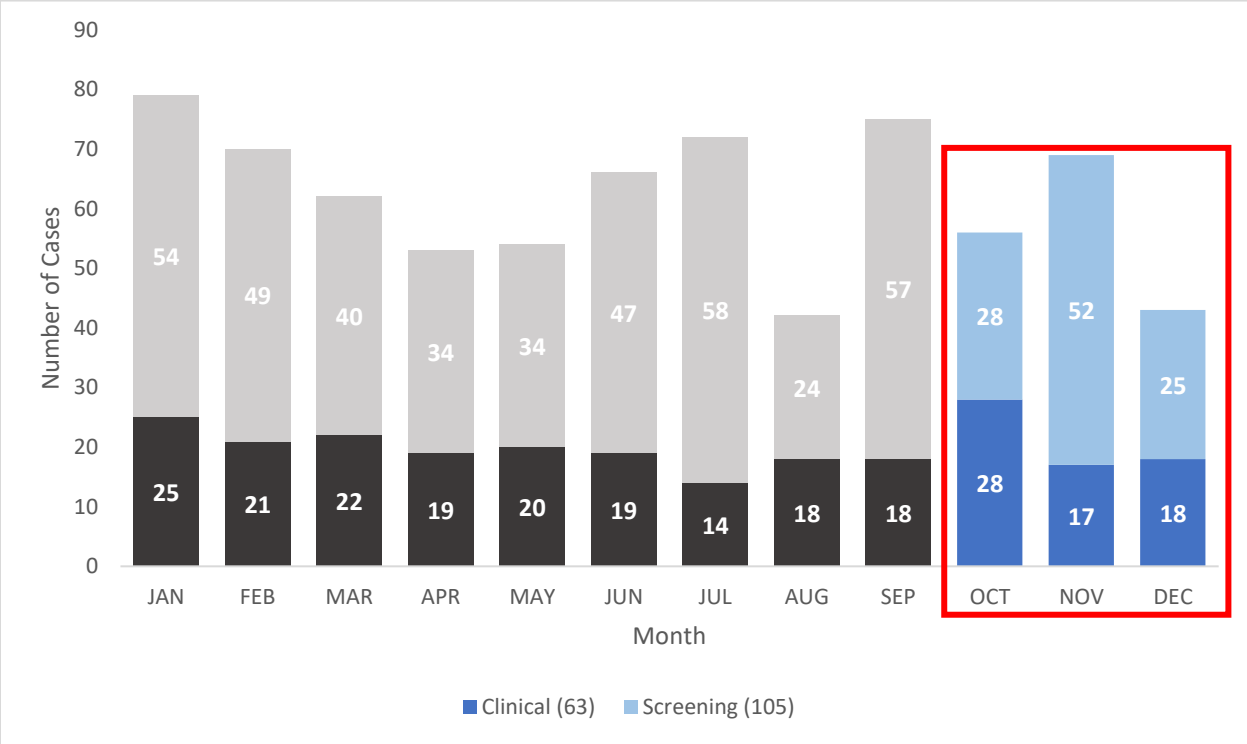
[1]Colonized (screening) to clinical cases (n=241) are counted twice: once as a screening case and once as a clinical case at the time of specimen collection
[2]Data are provisional as of 1/7/25

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

C. auris Epidemiology in Quarter 4 of 2024 (October-December)

From October to December 2024, 63 clinical and 105 screening cases were identified. Clinical cases peaked in the first month of quarter 4 and then dropped to the same levels seen in quarter 3. 12 PPS events were conducted in quarter 4, which is slightly lower than average. 58% of all PPS events conducted in quarter 4 were conducted in the month of November, which could account for the larger proportion of screening cases in the second month of the quarter.

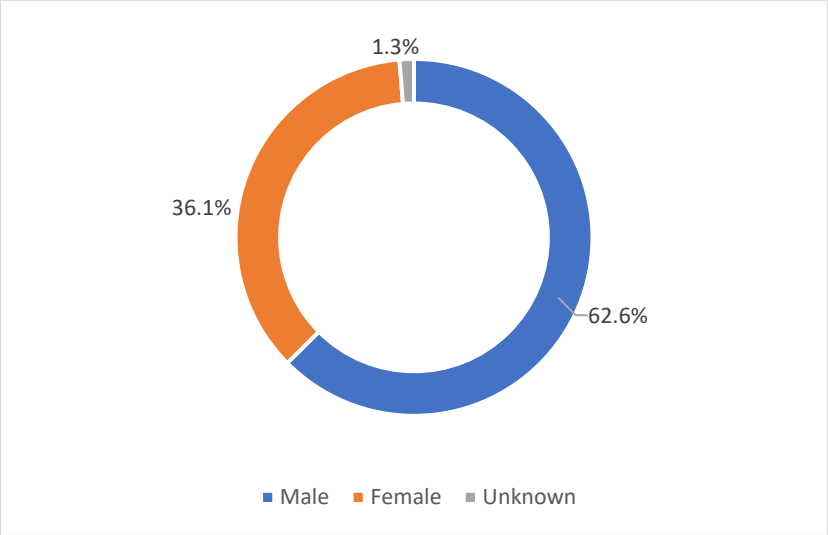
Figure 2. Chicago *C. auris* Cases (n=741) by specimen collection month and specimen type[1], January 1, 2024 – December 31, 2024[2]



[1]Colonized (screening) to clinical cases (n=19) 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 1/7/25
Quarter 4 is denoted by red box.
Data Source: Combined de-duplicated IL XDRO Registry, INEDSS, and CDPH conducted PPS.

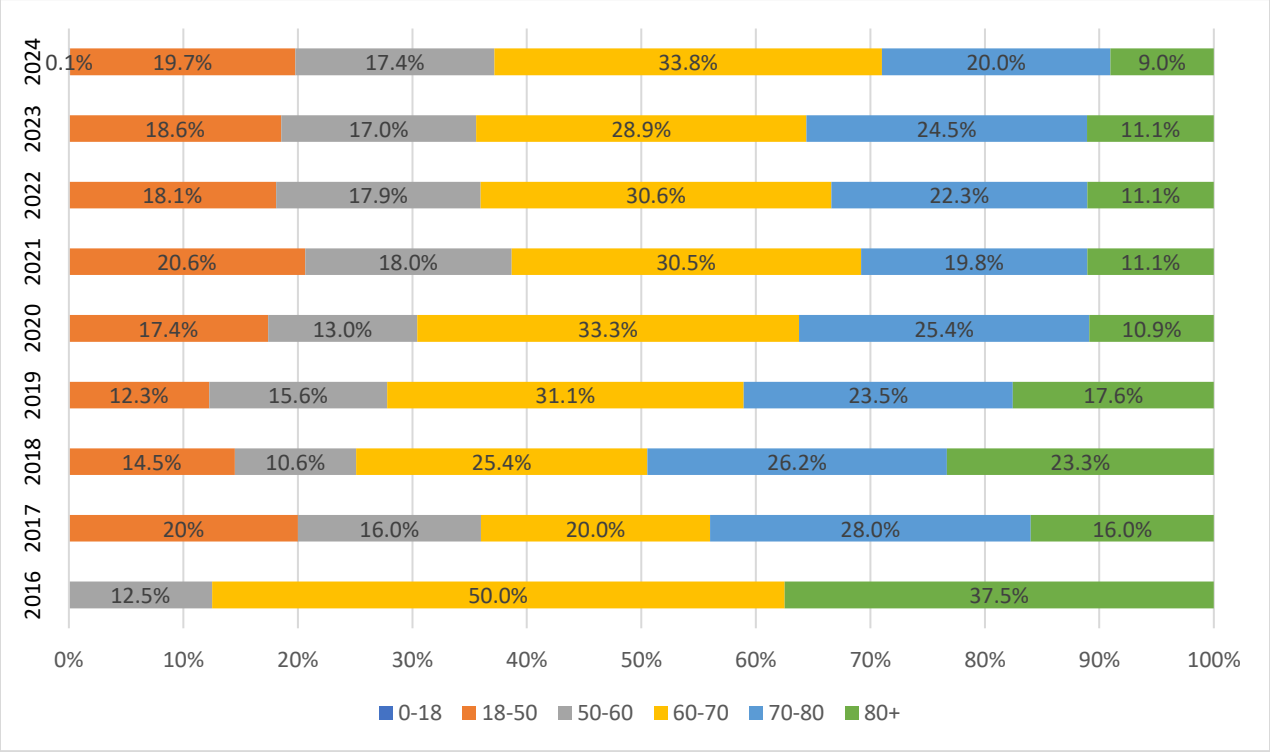
In quarter 4 of 2024, **clinical** cases of *C. auris* have been predominantly male and with a median age of 64. Similarly, the majority of *C. auris* **screening** cases have been male with a median age of 63. Figures 3 and 4 summarize the gender distribution of gender for clinical *C. auris* cases in Chicago.

Figure 3. Percent of Chicago clinical *C. auris* cases (n=919) by gender, May 2016 – Dec 31, 2024[1]



[1]*Data are provisional as of 1/7/25*
Data Source: Combined de-duplicated IL XDRO Registry, INEDSS, and CDPH conducted PPS.

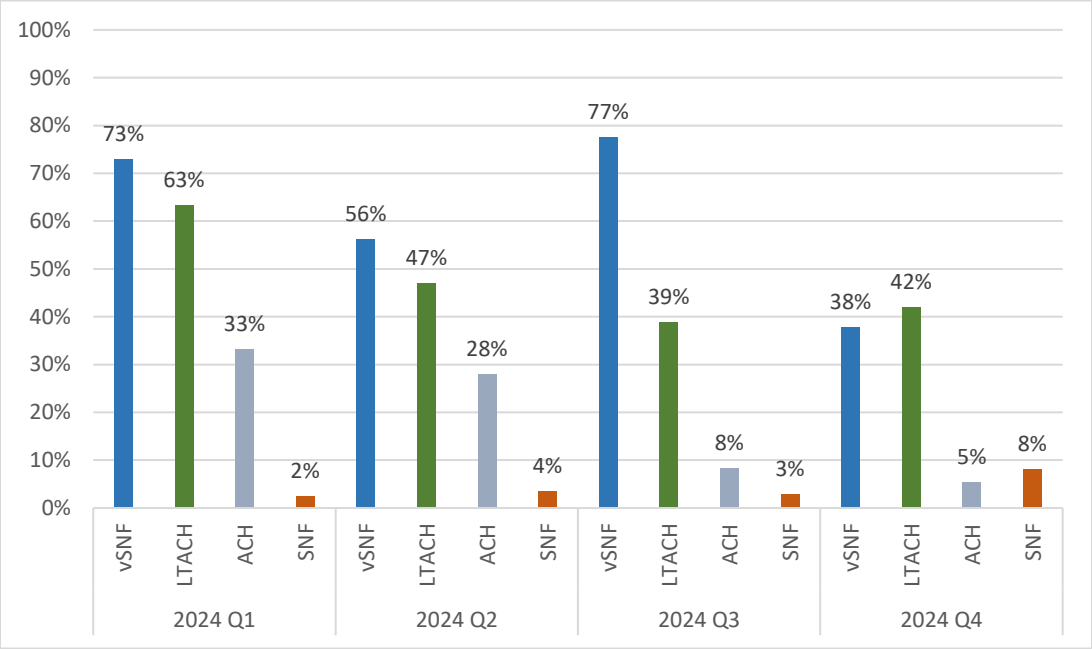
Figure 4. Percent of Chicago clinical *C. auris* cases (n=919) by age group and year of specimen collection, May 2016 – Dec 31, 2024[1]



[1]*Data are provisional as of 1/7/25*
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. Figure 5 summarizes the prevalence of *C. auris* in different healthcare setting types across the city at select points in time in 2024.

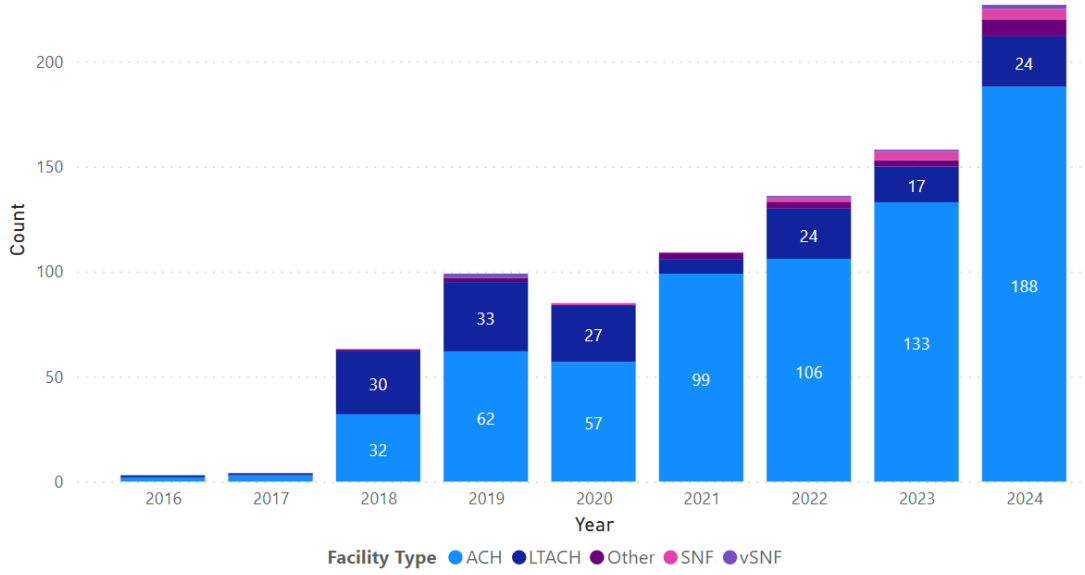
Figure 5. *C. auris* prevalence[1] by facility type from CDPH conducted point prevalence surveys[2], Chicago, IL, January 1, 2024 – December 31, 2024



[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
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.

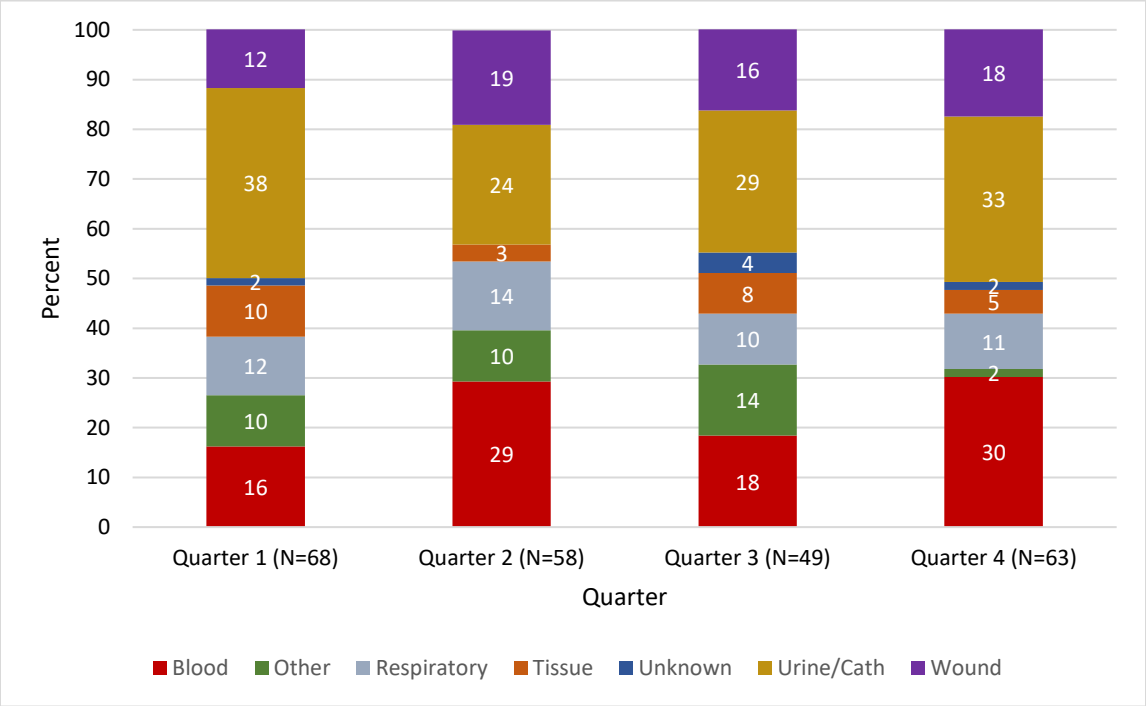
Figure 6. Chicago clinical *C. auris* cases (n=919) by facility type and year of specimen collection, May 2016 – Dec 31, 2024[1]



[1]*Data are provisional as of 1/7/25*
Data Source: Combined de-duplicated IL XDRO Registry, INEDSS, and CDPH conducted PPS.

From 2016-2024, the number of *C. auris* clinical cases associated with skilled nursing facilities (SNFs) has increased. Figure 7 summarizes the specimen source of 2024 clinical *C. auris* cases by quarter of 2024. 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=239) by specimen source and quarter of specimen collection, Jan 1 – Dec 31, 2024[1]



[1]Data are provisional as of 1/7/25
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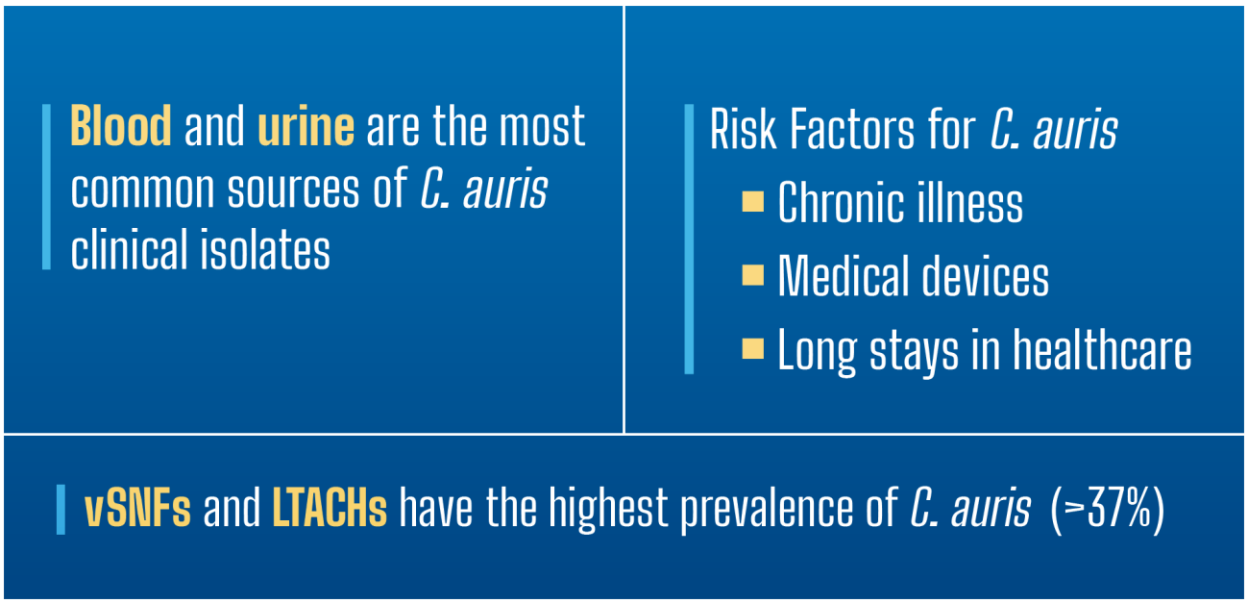

This includes the use of transmission-based precautions, increasing access to alcohol-based hand rub and personal protective equipment, improving hand hygiene compliance, and adherence to the cleaning and disinfection of patient environment and shared equipment.

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 an EPA-registered List P agent or, if one is unavailable or otherwise unsuitable, a 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