



HAI/AR Background: Cincinnati Health Department Blog

The Cincinnati Health Department Communicable Disease Prevention and Control Unit (CHD CDU) was made up of one supervising epidemiologist, three communicable disease nurses, and one administrative technician in January of 2020. Prior to this, the unit responded to healthcare associated infections and outbreaks at the direction of Ohio Department of Health (ODH). There were 2 cases of MDROs reported in 2017, 4 cases in 2018, and 9 cases in 2019. As the COVID-19 pandemic emerged in 2020 and took over all public health response, healthcare-associated infections (HAI) and antimicrobial resistance (AR) silently spread in the region. CHD and ODH investigated the first case of *Candida auris* (*C. auris*) diagnosed in Ohio in May 2020 as well as jointly investigated the first outbreak of *C. auris* at a hospital in Ohio in August of 2021. Since the beginning of 2020, the number of cases and clusters of Healthcare Associated Infections (HAIs) at facilities grew to 197 by December of 2022. While many supplemental staff had been added for the purpose of investigating and responding to COVID-19, HAI/AR investigations overwhelmed existing full-time staff and capabilities. CHD applied for and was awarded the NACCHO LHD HAI/AR Pilot Project Grant opportunity at the end of December 2022, in hopes of organizing a plan to build capacity to respond to emerging multi-drug resistant organism disease reports and facility outbreaks in cooperation with the ODH HAI Team, engage key local health department (LHD), hospital and long-term care facility (LTCF) partners, and ultimately reduce the spread of HAI and AR occurrences in the region. Below are the steps that were taken:

- CHD CDU met with CHD leadership to discuss concerns regarding the spread of *C. auris* in the region and general resistance from facilities to follow state recommendations.
- CHD presented a *C. auris* briefing to the CHD Board of Health public meeting, to alert them and the public we serve to the growing number of cases being diagnosed by facilities in our jurisdiction.
- CHD shared Southwest Ohio region *C. auris* data analysis with partners and stakeholders and responded to media requests following the CDC alert regarding the alarming increase in *C. auris* cases over the last 3 years in the U.S.
- CHD reached out to the University of Cincinnati's Master of Public Health program to seek students interested in volunteer or paid HAI/AR public health opportunities. Interviews were conducted and two students were selected for potential paid internships and six others were offered volunteer internships.
- CHD created a survey to assess the HAI/AR knowledge of local and regional healthcare providers and share the survey during regional meetings.

- CHD sought opportunities to present HAI/AR awareness and education presentations in regional meetings. Presentations were made and pre/post surveys conducted in the weekly Southwest Ohio Regional Infectious Disease meeting, the Monthly SW Region Large Hospital/Skilled Nursing Facility, and the monthly Cincinnati/Dayton Ohio APIC Chapter meeting.
- CHD presented a remote local LTCF education and awareness training program that was recorded and sent to all licensed LTCFs in the jurisdiction.
- CHD invited regional providers to join a public health/healthcare provider workgroup to collaborate on solutions to slow the spread of *C. auris* in the Southwest Region.
- CHD presented to EPIC leadership at the invitation of the Health Collaborative to seek solutions to communication gaps between system medical records. The presentation explored “flagging” patient records as needed to alert receiving facilities about a patient’s *C. auris* or other MDRO colonization/infection.
- CHD staff have been able to apply for APIC CIC certification and study resources.
- CHD continues to participate in regional ODH-led *C. auris* meetings, provider-public health meetings, regional stakeholder meetings and continues to keep CHD leadership informed.
- CHD CDU epidemiologist also joined the CSTE HAI/AR workgroup and attended the 2023 CSTE Conference.
- CHD Assistant Commissioner attended the 2023 NACCHO Conference.

Through the knowledge and the skills made available CHD was able to prioritize and analyze the *C. auris* investigations and outbreaks and develop a strategy to address facility specific issues resulting in a very successful partnership with the first hospital on the list of priorities. Multiple presentations were provided to staff groups (nurses, environmental services, transport, therapy, etc.) that were very well received. The facility conducted the recommended point prevalence screenings in affected units and developed an admission screening strategy. This will hopefully be the first of many future success stories in the CHD HAI/AR strategy!