New Reportable Communicable Diseases: Carbapenemase-Producing Organisms and Candida auris



Fact Sheet for Acute Care Facilities

Infection or colonization with two new carbapenemase-producing, multidrug-resistant organisms (MDROs) and one multidrug-resistant fungal organism have been added as <u>reportable communicable</u> <u>disease conditions</u> in Wisconsin. As of July 1, 2022, confirmed and probable cases of the following are considered Category II reportable communicable diseases:

- Carbapenemase-producing carbapenem-resistant Acinetobacter baumannii (CP-CRAB)
- Carbapenemase-producing carbapenem-resistant Pseudomonas aeruginosa (CP-CRPA)
- Candida auris

Carbapenemase-Producing Organisms: CP-CRAB and CP-CRPA

While all carbapenem-resistant organisms are of concern, most worrisome are carbapenemase-producing organisms (CPOs). Carbapenemase production increases an organism's resistance to almost all β -lactam antibiotics, including carbapenems. In addition, carbapenemase genes are often located on mobile resistance elements that enable the transfer of antibiotic resistance to other organisms. Carbapenemase production has been identified among members of the Enterobacterales order, such as *E. coli* and *Klebsiella*; as well as in *Acinetobacter baumannii*; and *Pseudomonas aeruginosa*.

CP-CRAB in Wisconsin

- The number of CP-CRAB clinical and colonization isolates identified in Wisconsin has increased in recent years. In 2020, 56 isolates were identified, while in 2021, 161 isolates were identified.
- While previously detected primarily in southeastern Wisconsin, cases have now been detected in four of five public health regions of the state.

CP-CRPA in Wisconsin

A total of 5 cases of CP-CRPA have been identified in Wisconsin in recent years, with two identified in 2020 and three identified in 2021. Most individuals had a confirmed or suspected history of international travel.

Candida auris

C. auris is an emerging fungal pathogen, with some strains resistant to all three classes of antifungal medications. *C. auris* can cause large and prolonged outbreaks in health care facilities, as the organisms can persist on patients' skin and in the environment. Per CDC, invasive infections with *C. auris* appear to be associated with high mortality.

- As noted on CDC's <u>Tracking Candida auris</u> webpage, three of the four states that border Wisconsin reported cases of *C. auris* in 2021. Illinois, in particular, has reported a large number of cases, with 271 cases in 2021.
- Wisconsin identified its first case of *C. auris* in January 2022.

To date, information about cases of these organisms in Wisconsin has been based on voluntary laboratory reporting. Systematic, statewide surveillance will enable a full assessment of the extent to which these organisms are present in the state.



Case Definition and Reporting Information



CP-CRAB and CP-CRPA: All CRAB and select CRPA isolates (as determined by Wisconsin State Laboratory of Hygiene [WSLH] guidance) identified in clinical microbiology laboratories should be sent to WSLH for carbapenemase resistance mechanism testing. Results confirmed by WSLH will be automatically sent to WEDSS to support public health and clinical response.

For additional details on laboratory reporting criteria and surveillance case definitions, see the following resources:

- Wisconsin Division of Public Health, Bureau of Communicable Diseases Memo 2022-06: Surveillance for Carbapenemase-Producing Carbapenem-Resistant Acinetobacter baumannii (CP-CRAB), Carbapenemase-Producing Carbapenem-Resistant Pseudomonas aeruginosa (CP-CRPA), and Candida auris
- Wisconsin Communicable Disease Case Reporting and Investigation Protocol: Carbapenemase-Producing Organisms (EpiNet)

Additional note on CPO reporting requirements: In alignment with current reporting requirements for CP-CRAB and CP-CRPA, and per DPH BCD memo 2022-05, carbapenemase-producing carbapenem-resistant Enterobacterales (CP-CRE) is now a Category II reportable disease condition in Wisconsin. Additionally, infection preventionists are no longer required to report cases of CRE in the National Healthcare Safety Network (NHSN) due to the availability of information in WEDSS.



Candida auris: Clinical microbiology laboratories are asked to submit all non-albicans isolates of Candida to WSLH for *Candida auris* testing, which will form the basis for identifying cases. Results confirmed by WSLH will be automatically sent to WEDSS to support public health and clinical response.

For additional details on laboratory reporting criteria and surveillance case definitions, see <u>DPH Memo 2022-06</u> and Communicable Disease Case Reporting and Investigation Protocol: *Candida auris* (EpiNet).

What Does this Mean for my Acute Care Facility?

The response when a patient is identified as infected or colonized with one of the newly reportable MDROs is the same as for other MDROs. Acute care facilities should:

- Flag the patient chart per your facility's usual procedure for MDROs. This is for internal awareness during the current admission as well as future admissions.
- Assess the risk of transmission within the facility.
 - At what point was the patient placed in contact precautions?
 - Was any shared medical or other equipment used with this patient?
- Consult with your local health department or the HAI Program regarding the need for screening of other patients.
- Ensure processes are in place to communicate the patient's MDRO status upon transfer to another health care facility or ancillary service, including long-term care facilities.

For questions, contact the Wisconsin Healthcare-Associated Infections Prevention Program at dhswihaipreventionprogram@dhs.wisconsin.gov or 608 267-7711.

