

Tips to Prevent Transmission of Multidrug-Resistant Organisms in ALFs



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Multidrug-Resistant Organisms

Per the Centers for Disease Control and Prevention (CDC), multidrug-resistant organisms (MDROs) are microorganisms, predominantly bacteria, that are resistant to one or more classes of antimicrobial agents.



[https://www.cdc.gov/infectioncontrol/guidelines/mdro/background.html#:~:text=importance%20of%20MDROs-,MDRO%20Definition,of%20antimicrobial%20agents%20\(1\)](https://www.cdc.gov/infectioncontrol/guidelines/mdro/background.html#:~:text=importance%20of%20MDROs-,MDRO%20Definition,of%20antimicrobial%20agents%20(1))

“Antibiotic Resistance Threats in the United States” Report

CDC identified 18 drug-resistant pathogens that pose an “urgent,” “serious,” or “concerning” threat to public health.

<https://www.cdc.gov/drugresistance/pdf/threats-report/2019-annual-report/threats-report-508.pdf>

Urgent Threats

- Carbapenem-resistant *Acinetobacter*
- *Candida auris*
- *Clostridioides difficile*
- Carbapenem-resistant Enterobacteriaceae
- Drug-resistant *Neisseria gonorrhoeae*

Serious Threats

- Drug-resistant *Campylobacter*
- Drug-resistant *Candida*
- ESBL-producing Enterobacteriaceae
- Vancomycin-resistant *Enterococci*
- Multidrug-resistant *Pseudomonas aeruginosa*
- Drug-resistant nontyphoidal *Salmonella*
- Drug-resistant *Salmonella* serotype Typhi
- Drug-resistant *Shigella*

Wisconsin Reportable MDROs

In Wisconsin, three urgent threat pathogens and one serious threat pathogen are reportable.

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

<https://www.dhs.wisconsin.gov/hai/reportable-mdro.htm>

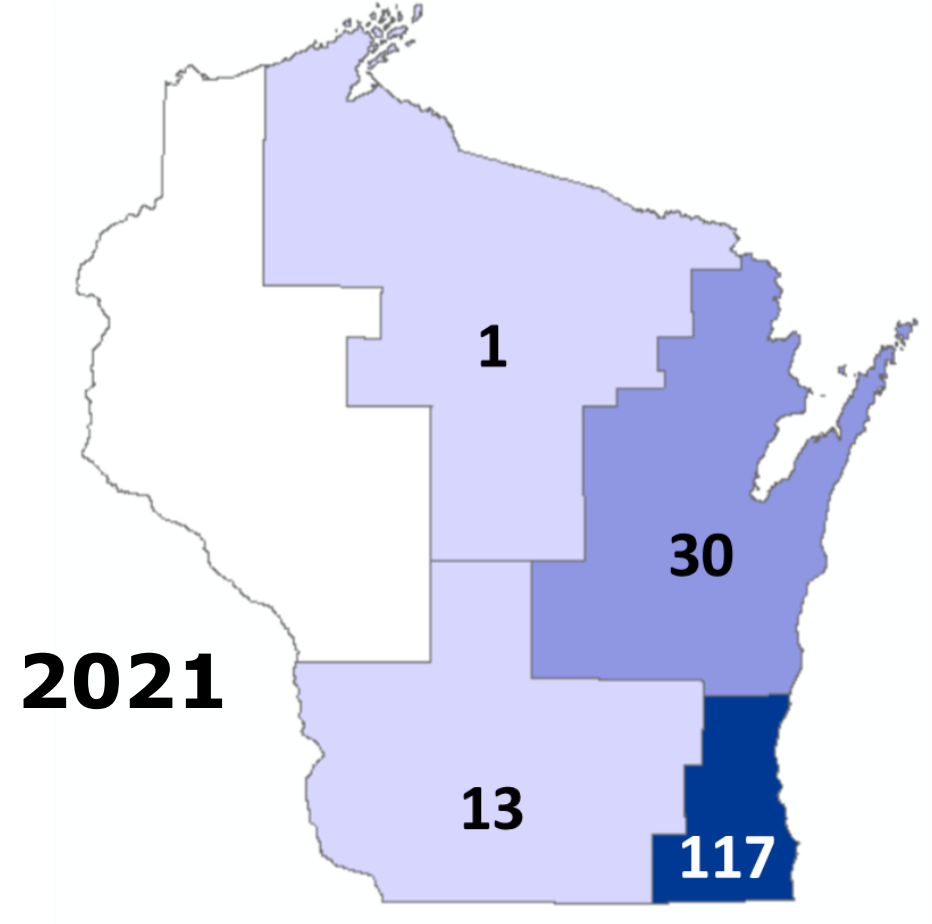
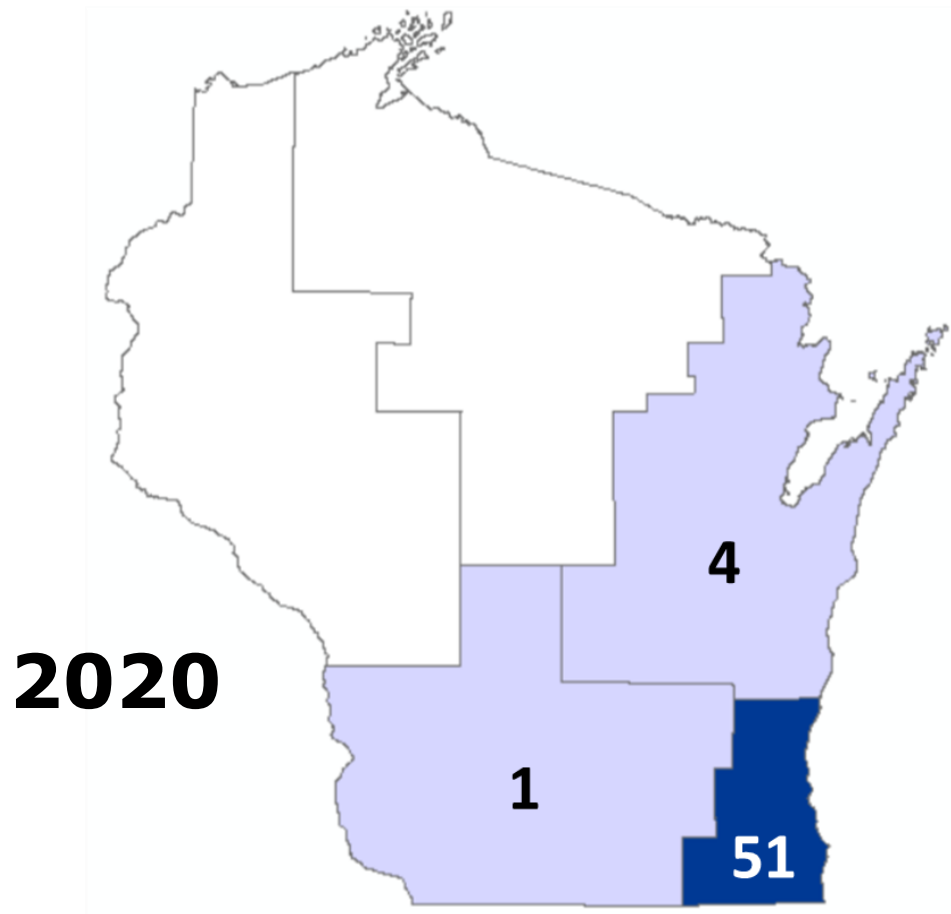
Wisconsin MDRO Data Snapshot

Reported cases* of CP-CRE, CP-CRPA, and *Candida auris* in Wisconsin in 2020 and 2021.

	2020	2021
CP-CRE	30	46
CP-CRPA	2	3
<i>Candida auris</i>	0	1

*Cases include both clinical and colonization screening isolates. Also, the numbers in the table and maps are not de-duplicated across years.

CP-CRAB Cases in Wisconsin, 2020-2021

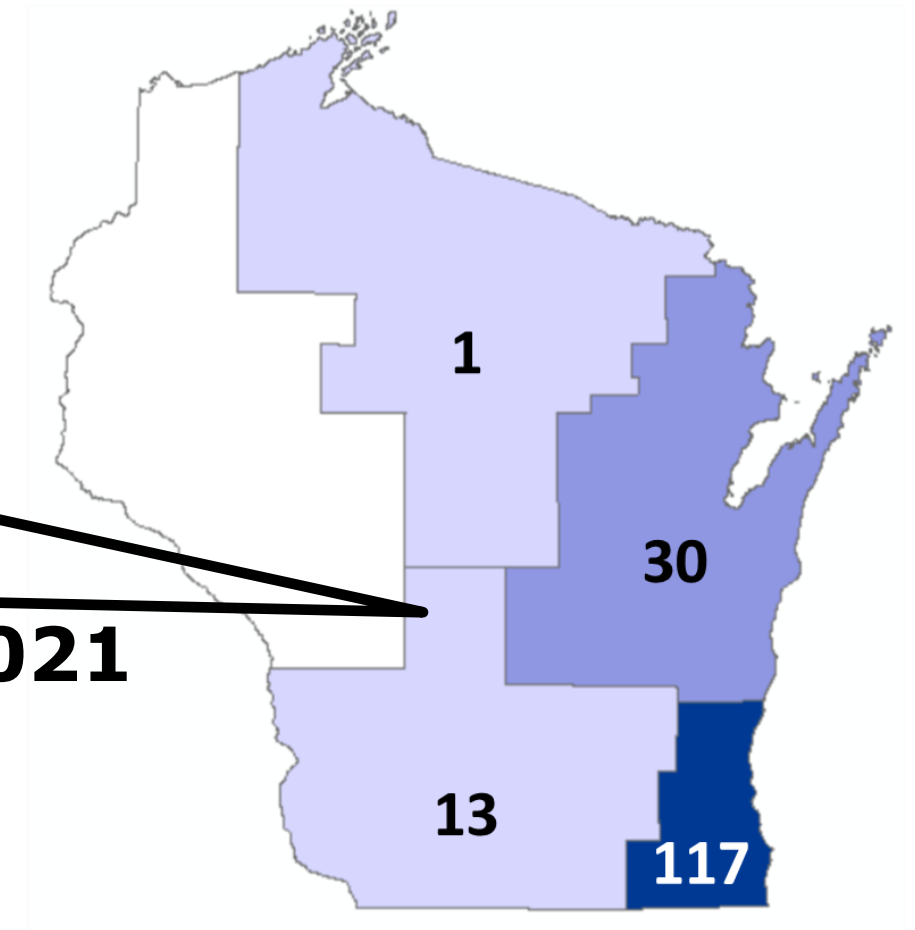


Data source: Wisconsin State Laboratory of Hygiene (WSLH)

CP-CRAB Cases in Wisconsin, 2021

Of the 134 individuals for which case history information was available, 121 or **90%** were either a **current or former long-term care facility (LTCF) resident**.

2021



Data source: WSLH

MDROs in LTCFs

- Residents who have a MDRO can:
 - Develop serious infections.
 - Remain colonized for long time periods.
 - Spread MDROs to others.
- Health care personnel can spread MDROs through contaminated hands and clothing.

[https://www.cdc.gov/infectioncontrol/guidelines/mdro/background.html#:~:text=importance%20of%20MDROs-,MDRO%20Definition,of%20antimicrobial%20agents%20\(1\)](https://www.cdc.gov/infectioncontrol/guidelines/mdro/background.html#:~:text=importance%20of%20MDROs-,MDRO%20Definition,of%20antimicrobial%20agents%20(1))

Tip #1: Resident Education

Educate residents who are colonized or infected with a MDRO on the importance of:

- Hand hygiene.
- Physical hygiene.
- Environmental cleaning and disinfection.
- Wound care.

Tip #2: Staff Education

Educate direct care, ancillary, and contracted staff on:

- Hand hygiene.
- Personal protective equipment (PPE) use.
- Cleaning and disinfection.



Tip #3: Rooming Considerations

- Provide the resident who is colonized or infected with a single room, if possible.
 - Cohort those with the same MDRO
- If roommates are unavoidable, pair with someone who is at lowest risk of acquiring the MDRO (e.g., independent with cares and without any indwelling medical devices or wounds).

Tip #4: Communication

- Provide clear and timely communication when a resident who is colonized or infected with an MDRO is transferred.
 - **This cannot be overstated.**
 - Communication failures have been identified as a key contributor to the spread of MDROs between facilities in Wisconsin and in other states.



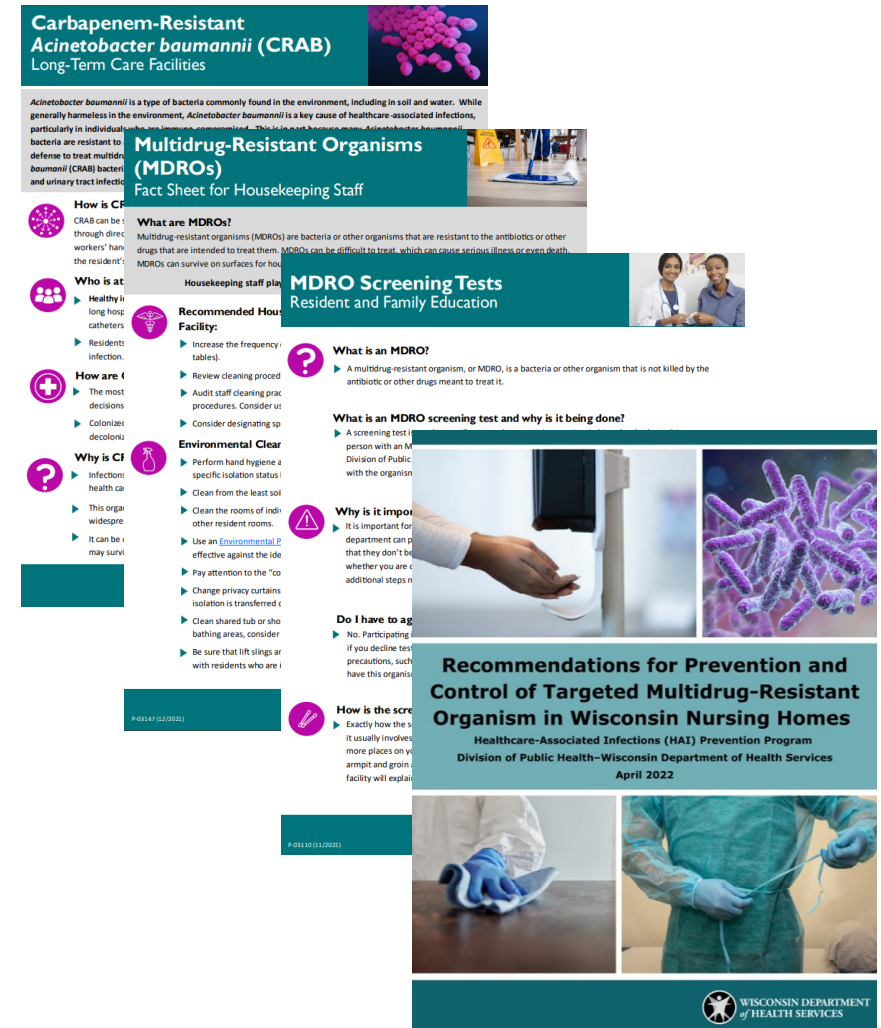
Tip #4: Communication

- Implement a communication system.
 - Verbal report and inclusion of disease status on face sheet/transfer paperwork
 - CDC, [Inter-Facility Infection Control Transfer Form](#)
- Ensure proper communication for ancillary services.
- Ensure you know all incoming residents' MDRO status.
- Consult with HAI Program or public health if you have questions.

HAI Program Resources for Facilities

Wisconsin DHS Reportable MDROs webpage

- *Nursing Home MDRO Response Guide*
- MDRO response fact sheets
 - Fact sheets for staff
 - Fact sheets for residents and families
 - Some fact sheets available in English and Spanish
- Recordings of educational sessions on MDROs



Questions?

HAI Prevention Program Contacts

HAI Prevention Program

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608-267-7711

HAI Prevention Program Staff Contacts

<https://www.dhs.wisconsin.gov/hai/contacts.htm>

<https://www.dhs.wisconsin.gov/hai/ip-education.htm>

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HAI Infection Prevention Education

The resources below are intended to connect health care facility infection preventionists (IP) with education materials to support their role in preventing, detecting, and responding to healthcare-associated infections.

IPs play an essential role in facility infection prevention policy development, surveillance, and risk assessment.

IPs serve as a resource to other staff and programs within their facilities.

In addition to the state in-person trainings and online references below, there are a number of links to trusted education resources, including the Center for



The [IP Starter Kit](#) provides Infection Preventionists a brief background and resources for some of the many infection