What to do if you identify a targeted multidrug resistant organism (MDRO) case in your hospital or nursing home

In Washington, targeted MDROs include:
- Carbapenem-resistant Enterobacterales (e.g., Escherichia, Klebsiella, and Enterobacter), Pseudomonas, and Acinetobacter with a carbapenemase (e.g., KPC, NDM, VIM, IMP or OXA-48)
- Pan-resistant organisms
- Vancomycin-resistant Staphylococcus aureus (VRSA)
- Candida auris

1. Contain and prepare

☐ Immediately place patient/resident with targeted MDRO in transmission-based precautions following guidance from your local health jurisdiction and ensure the following:
  - Sign on door indicates required transmission-based precautions and shows proper personal protective equipment (PPE) to don when entering the room. See Contact Precautions Sign and Enhanced Barrier Precautions Sign.
  - PPE is readily available for donning before entering the room, and there is a trash can inside the room near the exit to discard PPE prior to exiting the room.
  - Hand sanitizer and/or dedicated staff hand-washing sink is conveniently located for use before, during, and after caring for the patient/resident.
  - Use of dedicated or disposable medical equipment to the extent possible. Store dedicated equipment in the patient’s room, not in isolation cart.
  - Staff are performing proper cleaning and disinfection of any shared equipment (for C. auris, see EPA List P) and there is a clear process in place for distinguishing clean from dirty.

☐ Provide just-in-time staff education regarding the organism, mode of transmission, prevention measures, and risk to patients and staff. Use the following resources:
  - Healthcare Facility Staff Education for Rare Antibiotic-Resistant Germs (Word)
  - Candida auris Healthcare Staff Education (CDC)

☐ Notify Environmental Services of targeted MDRO and ensure use of an effective disinfectant (for C. auris, see EPA List P) for the correct contact time.
If the patient/resident has a roommate, place both case and roommate in private rooms, if possible, with both on transmission-based precautions following guidance from your local health jurisdiction (LHJ). If private rooms are not available, the best short-term option is to keep the roommates together both on transmission-based precautions and consult with LHJ.

If a nursing home has not yet implemented enhanced barrier precautions (EBP) for residents with MDROs, wounds or indwelling devices, it is important to implement EBP now. See guidance from CDC and the Enhanced Barrier Precautions Sign.

Reinforce and audit adherence to proper hand hygiene, use of PPE, and environmental cleaning and disinfection.

Notify your local health jurisdiction (LHJ), if not already aware, and follow their directions.

LHJ___________________ Contact________________
Phone #________________ Fax #__________________

If this is a known case of a targeted MDRO that was flagged on admission and placed on appropriate contact precautions, you do not have to proceed with response actions unless directed to by your LHJ. For newly identified cases, please proceed to section 2.

2. Assess risk factors for MDRO acquisition and transmission to others

Within 72 hours of case identification, complete the Targeted MDRO Investigation Worksheet (see pages 5-6) to the best of your ability, and email or fax to your LHJ.

Request a consultative on-site assessment of infection prevention in your facility to receive customized recommendations. Your LHJ can schedule the visit for you.

3. Identify additional cases

Within 72 hours of case identification, review your facility’s surveillance for this organism (genus and species with similar resistance profile) over the prior year.

- Note the usual incidence of this organism (cases per month) and whether there has been an increase in cases.
- If you do not have access to this information, request a summary from your lab.

In order to learn whether this organism has spread within your facility, work with your LHJ to identify patients/residents who should be screened for this organism.

- Roommates and those who shared a bathroom with the case should always be screened, even if they have been discharged from the facility.
- In most situations, screening should also include at least one of the following:
  1. Patients/residents currently on the hallway, wing or unit (Point Prevalence Survey [PPS]) – preferred option, OR
  2. Patients/residents currently on the unit with risk for MDRO acquisition (e.g., bedbound, high levels of care, indwelling device, wound, or mechanical ventilation), OR
  3. Patients/residents still in the facility who were on the unit at the same time as the case with an overlap of at least 72 hours, OR
4. Patients/residents still in the facility with risk for MDRO acquisition and who were on the unit with an overlap of at least 72 hours as the case.

*If screening will take more than 72 hours to complete, Public Health recommends option 1 above. Options 1 and 2 result in more patients being screened but require fewer resources and less time to identify those to be screened. Options 3 and 4 frequently delay screening and often result in few to no epi-linked patients being available for screening.*

- In certain situations, patients/residents who are currently in the room or bed space where the case was previously inpatient.
- In some situations, all patients/residents in the facility should be screened.

☐ Understand the screening procedure: a rectal swab or skin swab is tested free of charge at the Public Health Laboratories (PHL).
  - PHL will ship you all the screening materials with detailed instructions and a prepaid return shipping label.
  - Each sample submitted to PHL must be accompanied by a requisition form that includes patient identifiers. The forms must be filled out in an online order entry system called Electronic Test Ordering and Reporting (ETOR). Your LHJ will provide information about how to access ETOR.
  - Samples must be collected correctly and using the appropriate swab. Follow the instructions precisely.

☐ Determine if your facility requires informed consent from patients/residents before screening. If yes, obtain consent from patient/resident or from their designated power of attorney.
  - You may use this script for obtaining consent and answering FAQs for CRE screening, or script for obtaining consent for C. auris screening. If needed, to adapt the script and FAQs specifically for your situation, request help from state or local public health.

☐ Identify staff who can perform specimen collection, and whether additional assistance from local or state public health is needed.

☐ Train and educate staff on proper specimen collection.

☐ Work with your LHJ to determine date and time to collect specimens (must be coordinated with public health lab) and how they will be delivered to the lab.

☐ If your facility requires help with any aspect of screening (i.e., paperwork, obtaining consent, sample collection, packaging, shipping), ask for assistance from local or state public health.

4. Managing additional cases

☐ Designate a staff person to be responsible to receive, track, and respond to results.
☐ All newly identified positive cases should be placed on transmission-based precautions.
  ○ If more than 1 case in the facility, cohort patients/residents as long as they have only the same organism (species, genus, resistance mechanism).
  ○ If possible, assign designated staff to care only for cases. This is particularly important for *Candida auris*.

☐ Provide ongoing staff education to ensure they are aware of infection control risks and need for proper PPE and hand hygiene. Use the following resources:
  ○ *Healthcare Facility Staff Education for Rare Antibiotic-Resistant Germs (Word)*
  ○ *Candida auris Healthcare Staff Education (CDC)*

5. **Educate patients or residents, next of kin, and other caregivers**

☐ Each patient/resident who is identified as being infected or colonized with the targeted MDRO and their close contacts (i.e., next of kin, power of attorney, or other caregivers) should be educated about the organism and how to prevent transmission to others. Use the following resources:
  ○ *CRE patient/resident notification document*
  ○ *Candida auris Fact Sheet for Patients and Families (CDC)*

6. **Responding to an MDRO outbreak**

☐ Notify your facility leadership including medical director.

☐ Determine whether you should notify your regulatory agency of an outbreak in your facility.
  ○ *Long Term Care Facilities reporting to DSHS*
  ○ *Hospitals reporting to HSQA*

☐ Working with your LHJ, consider using this alert notification to inform current and prospective patients/residents and their families of the outbreak and how your facility is responding to keep them safe.

☐ Working with your LHJ, determine if transmission likely occurred in the facility and, if so, the likely route. Implement appropriate mitigation actions.

☐ In coordination with your LHJ, plan for ongoing screening in your facility. The usual schedule is every 2 weeks until no new positive cases are identified during two rounds of screening.

7. **Returning to normal operations**

☐ Perform ongoing surveillance for MDROs and other infections.

☐ Report to public health if cases are increasing and an outbreak is suspected.

☐ Continue to train staff and audit infection prevention practices, particularly any lapses that allowed transmission to occur.

To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (*Washington Relay*) or email civil.rights@doh.wa.gov.
# Targeted MDRO Investigation Worksheet for Healthcare Facilities

*Instructions: To the best of your ability, within 72 hours of case identification, complete this worksheet and fax to your local health jurisdiction. When faxing, use a cover sheet to protect personally identifiable information.*

<table>
<thead>
<tr>
<th>Name of facility ___________________________</th>
<th>Address ____________________________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility phone number _________________________</td>
<td>Fax number ___________________________________________</td>
</tr>
<tr>
<td>Facility contact person _________________________</td>
<td>Facility contact phone number __________________________</td>
</tr>
</tbody>
</table>

## Targeted MDRO Information

<table>
<thead>
<tr>
<th>Genus/species _______________________________</th>
<th>Carbapenemase detected _______________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specimen source ____________________________</td>
<td>Date of collection <em><strong>/</strong></em>/____</td>
</tr>
</tbody>
</table>

## Patient/Resident Information

<table>
<thead>
<tr>
<th>Name/MRN ______________________________________</th>
<th>Date of Birth <em><strong>/</strong></em>/____</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of admission <em><strong>/</strong></em>/____</td>
<td>Date of discharge <em><strong>/</strong></em>/____</td>
</tr>
<tr>
<td>Name of best historian (self, next of kin, POA) ________________</td>
<td>Phone number ________________</td>
</tr>
<tr>
<td>Reason for Admission ____________________________________________</td>
<td>Underlying conditions ____________________________________</td>
</tr>
<tr>
<td>Case location prior to this admission (home address, or facility name &amp; address) ________________________________</td>
<td></td>
</tr>
</tbody>
</table>

## Risks for Acquisition & Transmission

List any other known MDROs (e.g., C diff, MRSA, VRE) and dates detected ________________

Transmission-based precautions during this admission?

- No transmission-based precautions (move to next section)  
- Yes, this person was on transmission-based precautions
  - Were transmission-based precautions (TBP) in place for entire duration of admission?  
    - Yes  
    - No
  - Dates TBP in place ___/___/____ through ___/___/____
  - Was patient/resident isolated to room?  
    - Yes  
    - No
  - Type of precautions
    - Aerosol Contact (COVID)
    - Airborne
    - Contact
    - Droplet
    - Enteric
    - Enhanced-barrier

List all room numbers and dates of stay while in your facility

- Room number_________ from ___/___/____ through ___/___/____
- Room number_________ from ___/___/____ through ___/___/____
- Room number_________ from ___/___/____ through ___/___/____

Roommates during this admission?

- No roommates (move to next section)  
- Yes, this person had roommate(s)
  1. Name________________________ DOB ___/___/____ Shared room ___/___/____ through ___/___/____
  2. Name________________________ DOB ___/___/____ Shared room ___/___/____ through ___/___/____
  3. Name________________________ DOB ___/___/____ Shared room ___/___/____ through ___/___/____

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Targeted MDRO Investigation Worksheet for Healthcare Facilities (continued)

RISKS FOR ACQUISITION & TRANSMISSION (continued)

If roommates have been discharged/transfered, list date and disposition (e.g., home, or name of facility).
1. Roommate’s initials_____ Date of discharge/transfer__/__/____ to ________________________________
2. Roommate’s initials_____ Date of discharge/transfer__/__/____ to ________________________________
3. Roommate’s initials_____ Date of discharge/transfer__/__/____ to ________________________________

Indicate services provided during admission:

☐ Respiratory therapy (e.g., nebulizer, suctioning, BIPAP or CPAP)
☐ Mechanical ventilation ☐ Wound care ☐ PT/OT ☐ Dialysis ☐ Other:___________________________

Indicate indwelling devices during admission:

☐ Midline catheter/PICC line ☐ Central venous catheter ☐ Other central line ☐ PEG ☐ Foley
☐ Other invasive urinary catheter (e.g., suprapubic, nephrostomy) ☐ ET tube ☐ Trach ☐ Ostomy
Other:________________________________________

If dialysis outside your facility, name and address of facility_______________________________

Level of care required for activities of daily living________________________________________

Hospitalizations during past 90 days and name of facilities

☐ No hospitalizations (move to next section) ☐ Yes, this person was hospitalized
  • Name of facility________________________ Dates __/__/___ through __/__/____
  • Name of facility________________________ Dates __/__/___ through __/__/____
  • Name of facility________________________ Dates __/__/___ through __/__/____

Surgeries or other invasive procedures during past 90 days and name of facilities

☐ No surgery/procedure (move to next section) ☐ Yes, this person had surgery/procedure
  • Name of facility________________________ Date __/__/___ Type of procedure ______________________
  • Name of facility________________________ Date __/__/___ Type of procedure ______________________
  • Name of facility________________________ Date __/__/___ Type of procedure ______________________

Long term care facility stay during past 90 days and name of facilities

☐ No LTCF stay (move to next section) ☐ Yes, this person was in a LTCF
  • Name of facility________________________ Dates __/__/___ through __/__/____
  • Name of facility________________________ Dates __/__/___ through __/__/____
  • Name of facility________________________ Dates __/__/___ through __/__/____

International travel in past 90 days

☐ No international travel ☐ Yes, this person traveled internationally
  • Name of country________________________ Dates __/__/___ through __/__/____
  • Name of country________________________ Dates __/__/___ through __/__/____
  • Name of country________________________ Dates __/__/___ through __/__/____