

January 26, 2017

## Changes in Multi-Drug Resistant Organism (MDRO) Reporting Requirements

### Actions Requested

- **Be aware that beginning January 2017, Washington State Department of Health (DOH) is requesting submission of the following for multidrug resistant organisms (MDRO):**
  - Carbapenem-resistant (CR) *Pseudomonas* species and CR-*Acinetobacter* species
  - Colistin-resistant *E. coli*, *Klebsiella*, *Enterobacter*, *Pseudomonas* and *Acinetobacter*
  - Unusual *Candida* species e.g., *C. auris*, *C. glabrata*, *C. haemulonii*, and any *Candida* not identified when species identification is performed (i.e., not in laboratory database)
- **Submit clinical isolates of the above to Washington State Public Health Laboratories (PHL) for testing** for carbapenemase production, plasmid-mediated colistin-resistance, or other resistance.
- **Use Standard and Contact precautions for patients infected or colonized with these organisms** and ensure appropriate daily as well as terminal cleaning and disinfection of the patient's room.
- **Report any confirmed plasmid-mediated colistin resistance or carbapenemase production in *E. coli*, *Klebsiella*, *Enterobacter*, *Pseudomonas* or *Acinetobacter*** to the Kitsap Public Health District within 1 business day.

For questions, please contact our Communicable Disease staff at 360-728-2235.

### Background

This expanded surveillance for MDROs (*see attached Table*) is in addition to the systematic surveillance for carbapenem-resistant Enterobacteriaceae (CRE), which has been ongoing since 2012. PHL receives approximately 15-30 CRE isolates per month, almost 12% of which produce a carbapenemase. Over the past several years, PHL has identified carbapenemase production in *Pseudomonas* and *Acinetobacter* in several Washington patients, including in two recent patients without international travel – which is unusual.

Over the past year, plasmid-mediated colistin resistance (*mcr-1*) has been identified in Enterobacteriaceae in humans and animals in many countries, including in the U.S. (though none yet in Washington). Since Colistin is a last resort antibiotic, plasmid-mediated carbapenemase plus colistin-resistance in Gram-negative bacteria may result in untreatable infections. Findings of *E. coli* carrying the *mcr-1* gene and of multidrug resistant *Candida auris* in the U.S. prompted the Centers for Disease Control and Prevention (CDC) to request that these organisms be reported to public health since these and other emerging mechanisms of antibiotic resistance are a serious threat to health.

### Resources

- Washington State Department of Health Table: Resistance Criteria for Washington State MDRO Surveillance (*attached*)
- Washington State Public Health Laboratories “*Elaborations*” newsletter on expanded surveillance for MDRO (page 3): [www.doh.wa.gov/Portals/1/Documents/2700/505068-2016NovDec.pdf](http://www.doh.wa.gov/Portals/1/Documents/2700/505068-2016NovDec.pdf)
- Washington State Department of Health historical CRE surveillance reports: [www.doh.wa.gov/DataandStatisticalReports/DiseasesandChronicConditions/CommunicableDiseaseSurveillanceData/CRESurveillance](http://www.doh.wa.gov/DataandStatisticalReports/DiseasesandChronicConditions/CommunicableDiseaseSurveillanceData/CRESurveillance)
- CDC Health Alert regarding *mcr-1* (June 2016): <https://emergency.cdc.gov/han/han00390.asp>
- CDC Clinical Alert regarding *C. auris* (June 2016): [www.cdc.gov/fungal/diseases/candidiasis/candida-auris-alert.html](http://www.cdc.gov/fungal/diseases/candidiasis/candida-auris-alert.html); and follow-up report: [www.cdc.gov/mmwr/volumes/65/wr/mm6544e1.htm?s\\_cid=mm6544e1\\_w](http://www.cdc.gov/mmwr/volumes/65/wr/mm6544e1.htm?s_cid=mm6544e1_w)