



Algorithm for Reporting and Submitting Isolates of Carbapenem-Resistant Enterobacteriaceae (CRE) to ADHS

If any of the following is true, report to ADHS and submit isolates to ASPHL.

Enterobacteriaceae resistant to any of the following antibiotics, using the current CLSI breakpoints*:

- Meropenem (MIC ≥ 4 mcg/ml)
- Imipenem (MIC ≥ 4 mcg/ml)**
- Doripenem (MIC ≥ 4 mcg/ml)
- Ertapenem (MIC ≥ 2 mcg/ml)

Carbapenemase producer by phenotypic testing:

- Carbapenem Inactivation Method (CIM)
- Modified Carbapenem Inactivation Method (mCIM)
- Modified Hodge Test (MHT)
- Carba NP
- Metallo- β -Lactamase Testing

Carbapenemase producer by molecular testing (e.g., PCR/ Xpert Carba R):

- *Klebsiella pneumoniae* Carbapenemase (KPC)
- New Delhi Metallo- β -Lactamase (NDM)
- Verona Integron-encoded Metallo- β -Lactamase (VIM)
- Imipenemase (IMP) Metallo- β -Lactamase
- Oxacillinase-48-type Carbapenemase (OXA-48)

Reporting instructions A.A.C. R9-6-204 Visit <http://azdhs.gov/labreporting>.

When should I report? CRE report should be reported within 5 working days of obtaining a positive test result.

How should I report? Use [ELR](#) or [Laboratory Reporting Form](#).

Who should receive the report? Arizona Department of Health Services (ADHS), Infectious Disease Epidemiology, 150 N. 18th Avenue, Suite 140, Phoenix, AZ 85007

Fax: (602) 364-3199

Isolate Submission Instructions Visit <http://www.azdhs.gov/preparedness/state-laboratory/index.php#shipping-receiving>.

What should I submit? Submit isolate and drug susceptibility testing results to Arizona State Public Health Laboratory (ASPHL) for confirmatory testing.

Where should I submit? 250 N. 17th Avenue, Phoenix, Arizona 85007-3231 Tel: (602) 542-1188 Fax: (602) 364-0758

*Note: Laboratories should use the updated CLSI MIC cutoffs to determine reporting and submitting isolates to public health, independent of the susceptibility interpretation. MIC values that are only reported as 'greater than' a breakpoint are interpretable as 'greater than or equal to' a one scale increase of the breakpoint. For example, a MIC >1 mcg/ml can be considered equal to MIC ≥ 2 mcg/ml.

**Note: Do not use imipenem for *Proteus* spp., *Providencia* spp. or *Morganella* spp.