

Multistate cluster of VIM-producing carbapenem-resistant

Pseudomonas aeruginosa (VIM-CRPA) October 2022

The Centers for Disease Control and Prevention (CDC) is investigating a multistate cluster of VIM-producing carbapenem-resistant *Pseudomonas aeruginosa* (VIM-CRPA). As of October 25, 2022, 34 isolates from 32 case-patients in 6 jurisdictions (CA, CT, NM, NY, UT, WA) have been identified; 28 isolates are part of 4 facility clusters. Isolates in this cluster are ST 1203, harbor blaVIM-80 and blaGES-9 (a combination not previously observed in the United States) and are closely related by whole genome sequencing (WGS) analysis. Dates of specimen collection are from May 2022 to present. Isolates have been identified from clinical cultures of sputum, urine, wounds, blood, and corneas, and from rectal swabs collected for surveillance. These specimens were collected in both outpatient and inpatient healthcare settings. There are no known epidemiological links between patients from different states. Investigations to identify common exposures among facilities with clusters of cases are underway.

CDC is asking states to reach out to our clinical lab partners to request *P. aeruginosa* isolates with the following associated resistance patterns:

- carbapenem resistance (imipenem, meropenem, or doripenem)

and

- non susceptible to cefepime and ceftazidime

and

- ceftolozane-tazobactam resistance (if tested)

Clinical laboratories should consider submitting these isolates to [REDACTED] for carbapenem resistance mechanism testing and whole genome sequencing. Due to the current multistate cluster, clinical laboratories that identify VIM-CRPA are encouraged to save the isolate and submit to [REDACTED] for further characterization.

Should a case match into this cluster, the [REDACTED] will notify the [REDACTED] unit to follow-up with the appropriate local health department.

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]