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Salmonella Typhimurium outbreak

California State Laboratory Announces Carbapenem Resistance Testing

On August 21, the Microbial Disease Laboratory (MDL) of the California Department of Public Health announced that bacterial culture isolates identified as E coli. Klebsiella pneumoniae or oxytoca, Enterobacter spp, or Pseudnomonas aeruginosa may be submitted for both modified Carbapenem Inactivation Method (mCIM) and carbapenamase gene detection by PCR. Isolates must be resistant to at least one carbapenem, such as imipenem, ertapenem, doripenem, or meropenem.

Before submission, consultation with the California Department of Public Health HealthCare-Associated infections program (MAIprogram@cdph.ca.gov) is required and isolates must be received at the County of San Luis Obispo Public Health Laboratory for subsequent referral to MDL.

Carbapenemase-resistant enterobacteria (CRE) or carbapenemase-resistance Ps. aeruginosa (CRPA) that tested negative for known carbapenemase genes by a validated molecular method but are positive by a phenotypic test may indicate a novel or unusual mode of resistance and can be submitted. Such isolates may also be sent to a reference laboratory of the CDC-sponsored Antibiotic Resistance Laboratory Network (ARLN). The regional laboratory serving Pacific states is the Washington State Public Health Laboratory. Isolates can be submitted for PCR testing only and for whole genome sequencing. PCR test results will take 3-7 days, while the mCIM test requires 6-14 days to complete.

Déjà vu Lab-Related Salmonella Outbreak

The U.S. Centers for Disease Control and Prevention (CDC) has reported a multistate *Salmonella* Typhimurium outbreak linked to microbiology laboratories. Fully 24

Commented [TK1]: The previous sentence mentions whole genome sequencing. Should this be WGS?

people working in clinical, commercial, and teaching laboratories in 16 states have been infected. Curiously, this strain has previously been tied to lab-related exposures in 2011 and 2014.

While six of the infected individuals were hospitalized, no deaths have been reported. Of 13 people who were interviewed, nine had lab exposures. Those sickened in the outbreak reported behaviors during lab work that may have increased the risk of *Salmonella* infections, including not wearing gloves or lab coats, not washing hands, and using the same writing utensils and notebook outside of the laboratory.

After an outbreak in 2011, the CDC issued guidelines www.cdc.gov/salmonella/2011/lab-exposure-1-17-2012.html

for handling microorganisms safely in teaching labs. In its recent announcement,, the agency said the outbreak highlights the potential risk of *Salmonella* infection from working in microbiology labs, adding that all students and staff in clinical and teaching laboratories should receive safety training.

You're Invited: CAPHLD Institute November 6-8 in San Luis Obispo
The 68th Annual Institute of the California Association of Public Health Laboratory
Directors (CAPHLD) will be held at the Embassy Suites in San Luis Obispo, from
Monday, November 6 through Wednesday, November 8. The theme of the meeting
will be "A Culture of Resilience: Adapting to New Technologies." In addition to news,
updates, and networking opportunities, it offers a symposium on Tuesday, November
7, with continuing education opportunities for laboratory directors, public health
microbiologists and clinical laboratory scientists. The institute promises excellent
opportunities for learning and connecting with colleagues from this specialized field.
Learn more and register at http://www.caphld.org.

Commented [TK2]: Could we include a link to the guidelines?