Division of Epidemiology–Disease Surveillance and Investigation

January 10, 2019

Health Notice for District of Columbia
Health Care Providers and Clinical Laboratories

CALL FOR CASES: Antibiotic-Resistant Infections Following Invasive Medical Procedures in Mexico

Summary
The Centers for Disease Control and Prevention (CDC) has identified ten Verona Integron-mediated Metallo-β-lactamase-producing (VIM) carbapenem-resistant Pseudomonas aeruginosa (CRPA) infections among adult patients returning to the United States (U.S.) after undergoing invasive procedures (e.g. endoscopy, surgery) in Mexico. Seven patients reported receiving bariatric surgery in Tijuana, Baja California, Mexico between September 2018 and November 2018. Out of these seven, six reported undergoing surgery at Grand View Hospital in the city of Tijuana.

VIM-CRPA is a multidrug resistant organism that has the ability to easily transfer its antibiotic resistance to other bacteria through genetic material, called plasmids. VIM-CRPA is primarily found in healthcare facilities but is not commonly seen in the United States. The purpose of this Health Notice is to increase awareness and provide testing and reporting guidance to identify patients that may be a part of this outbreak.

This health notice contains requested actions for the following healthcare roles:
1. Inpatient and outpatient healthcare providers (pg 1-2)
2. Acute care and subacute care infection control professionals (pg 2-3)
3. Clinical laboratories (pg 3)

1) Requested Actions for Inpatient and Outpatient Healthcare Providers
A. Assess the potential for additional VIM-CRPA cases among past and current patients
i. Clinicians should inquire about previous surgical procedures obtained in Mexico since January 1, 2018 and obtain cultures whenever appropriate or possible.

ii. Patients from whom VIM-CRPA is isolated (regardless of specimen source) should be asked about receipt of healthcare outside the U.S. (both elective [medical tourism] and unplanned care) in the 6 months prior to positive culture.

B. Report cases to DC Health
i. Report confirmed or suspected cases of VIM-CRPA surgical site infections that are in patients following invasive procedures in Mexico to DC Health by submitting a Notifiable Disease and Condition Case Report Form using our
online reporting system, DC Reporting and Surveillance Center (DCRC): https://doh.dc.gov/service/infectious-diseases

ii. Contact DC Health at DOH.HAI@dc.gov for additional guidance, including specimen collection and infection control.

2) Requested Actions for Acute and Subacute Care Infection Control Programs

A. Assess the potential for additional VIM-CRPA cases among past and current patients
   i. Review records and identify patients with wound infections in which CRPA was identified (since January 1, 2018).
   ii. Patients from whom VIM-CRPA is isolated (regardless of specimen source) should be asked about receipt of healthcare outside the U.S. (both elective [medical tourism] and unplanned care) in the 6 months prior to positive culture.

B. Report cases to DC Health
   i. Report confirmed or suspected cases of VIM-CRPA surgical site infections that are in patients following invasive procedures in Mexico to DC Health by submitting a Notifiable Disease and Condition Case Report Form using our online reporting system, DC Reporting and Surveillance Center (DCRC): https://doh.dc.gov/service/infectious-diseases
   ii. Request that your clinical laboratory send CRPA isolates (that are associated with patients who are suspected or confirmed to have had invasive procedures in Mexico in the past 6 months) to the DC Public Health Laboratory (PHL) for confirmatory testing.
   iii. Contact DOH.HAI@dc.gov to coordinate sample submission and for additional guidance, including specimen collection and infection control.

C. Screen patients for carbapenem-resistant Enterobacteriaceae (CRE) or CRPA who are admitted to your facility and have had recent healthcare exposure outside the U.S.
   i. CDC continues to recommend rectal screening for carbapenemase-producing organisms in patients admitted to healthcare facilities in the U.S. following an overnight stay in a healthcare facility outside the U.S. (within the 6 months prior to their current admission).
   ii. Mechanism testing for CRE and CRPA and rectal screening for carbapenemases is available free of charge via the ARLN (https://www.cdc.gov/drugresistance/solutions-initiative/ar-lab-network.html).
iii. Contact DOH.HAI@dc.gov to discuss or initiate this screening process.

3 Requested Actions for Clinical Laboratories
A. Submit CRPA or VIM-CRPA isolates to the DC PHL that are associated with patients who traveled to Mexico in the 6 months preceding their specimen collection.
   i. DC Health recommends that clinical laboratories work closely with their infection control counterparts to identify future, past, or potentially overlooked CRPA isolates that are associated with a surgical procedure conducted in Mexico.

ii. Please submit one wound or blood culture isolate, from each suspected or confirmed patient, that meets the following criteria (no more than one isolate per month):

   - Resistant to any carbapenem antibiotic following current CLSI M100 guidelines
     
     | Antibiotic   | MIC (µg/ml) |
     |--------------|-------------|
     | doripenem    | ≥ 8         |
     | imipenem     | ≥ 8         |
     | meropenem    | ≥ 8         |

   -- OR --

   - Found to be a carbapenemase-producer via Carba-NP test, mCIM, MBL-screen, PCR, or other phenotypic or genotypic carbapenemase test.

iii. Contact the DC Public Health Laboratory at LAB.HAI@dc.gov for additional guidance related to isolate submission, including the use of a courier.

Additional Information and Resources


Please contact the DC Health
Division of Epidemiology–Disease Surveillance and Investigation at:
Phone: 202-442-8141 (8:15am-4:45pm) | 844-493-2652 (after-hours calls)
Fax: 202-442-8060 | Email: doh.epi@dc.gov