The pages that follow contain information critical to protecting the health of your patients and the citizens of Colorado.

HAN ADVISORY

Number of pages including cover:  5

Subject: Advisory-Screening Screening recommendations for antimicrobial-resistant pathogens following international travel and healthcare abroad - July 9, 2019

Message ID:  7/9/2019 4:45:00 PM
Recipients:  HAN Community Members.
From: TRI-COUNTY HEALTH DEPARTMENT
Adams, Arapahoe and Douglas County, Colorado

Recipient Instructions: Tri-County Health Department is forwarding you the attached HAN. You may have already received this broadcast if you are on the CDPHE distribution list, however, we wanted to ensure you did not miss this important information. No response is required.

Categories of Health Alert Network Messages:
Health Alert: Conveys the highest level of importance; warrants immediate action or attention.
Health Advisory: Provides important information for a specific incident or situation; may not require immediate action.
Health Update: Provides updated information regarding an incident or situation; unlikely to require immediate action.
Info Service/Public Health Brief: Provides general information that is not necessarily considered to be of an emergent nature.

You may download a copy of this HAN from the TCHD website at http://www.tchd.org/259/Health-Alert-Network
HEALTH ALERT NETWORK BROADCAST
MESSAGE ID: 07092019 16:00
FROM: CO-CDPHE
SUBJECT: HAN Advisory – Screening recommendations for international travel and healthcare exposures
RECIPIENTS: Local Public Health Agencies / IPs / EDs / ID Physicians / Laboratories
RECIPIENT INSTRUCTIONS: Local Public Health Agencies - please forward to healthcare providers

HEALTH ADVISORY CLARIFICATION | Screening recommendations for antimicrobial-resistant pathogens following international travel and healthcare abroad | July 9, 2019

This HAN replaces the HAN Advisory issued July 8, 2019 and provides clarification on the method for identifying patients at risk and how to get assistance with laboratory testing.

Healthcare providers: Please distribute widely in your office

Key points

- If, during routine clinical care involving an overnight stay, a patient is identified as having a previous overnight stay in a healthcare facility outside the U.S., CDPHE advises consideration of screening for selected organisms. The purpose is to identify colonized patients and implement infection control measures to prevent transmission.
  - Consider screening for carbapenemase-producing bacteria in patients who have had an overnight stay in a healthcare facility outside the U.S. in the previous one year.
  - Consider screening for Candida auris in patients who have had an overnight stay in a healthcare facility outside the U.S. in the previous one year, especially if in a country with documented C. auris cases (https://www.cdc.gov/fungal/candida-auris/tracking-c-auris.html). Strongly consider screening when patients have had such inpatient healthcare exposures outside the U.S. and have infection or colonization with carbapenemase-producing bacteria.
- Contact CDPHE at 303-692-2700 to assist with coordination of screening and testing free of charge through the CDC Antibiotic Resistance Laboratory Network (ARLN), and for consultation regarding appropriate patients for screening; all necessary screening and shipping supplies can be shipped directly to your facility. Suspected C. auris should be reported to CDPHE at 303-692-2700 or after hours at 303-370-9395.
Background information

International healthcare exposures can put patients at risk for acquisition of certain antimicrobial-resistant pathogens, such as multidrug-resistant *Pseudomonas aeruginosa*, carbapenem-resistant Enterobacteriaceae, and *Candida auris*. A recent example is carbapenemase-producing *P. aeruginosa* isolated from patients with a history of surgical procedures in Tijuana, Mexico (https://www.cdc.gov/mmwr/volumes/68/wr/mm6820a4.htm).

Carbapenemase-producing bacteria are of particular concern to public health due to the potential for transmission of organisms and the plasmids on which the carbapenemases are carried, as well as the high levels of resistance to antibiotics and associated mortality rate of up to 50%. Carbapenemases are enzymes that break down carbapenem antibiotics and make them ineffective. Known carbapenemases include KPC (*Klebsiella pneumoniae* carbapenemase), NDM (New Delhi metallo-beta-lactamase), VIM (Verona integron-mediated metallo-beta-lactamase), IMP (imipenemase metallo-beta-lactamase), and OXA (oxacillinase-like carbapenemase). Carbapenemase-producing bacteria and carbapenemases can be spread among patients in healthcare settings through direct patient contact and contact with contaminated surfaces and medical equipment. They can also spread between healthcare facilities when patients are transferred and not maintained on contact precautions. Patients can remain colonized (carry the bacteria on their body but have no symptoms of infection) with carbapenemase-producing bacteria for long periods of time. Patients with overnight healthcare stays abroad may be at risk of being colonized or infected with carbapenemase-producing bacteria.

*Candida auris* is an emerging fungal infection that is often resistant to multiple antifungal medications and is commonly misidentified with standard clinical laboratory technology. *C. auris* typically causes severe, invasive infections, particularly among patients who have had prolonged healthcare exposures and comorbidities. Mortality for patients with invasive *C. auris* infection can be as high as 60%. Patients can remain colonized with *C. auris* for long periods of time, and *C. auris* can persist on surfaces in healthcare environments. This can result in the spread of *C. auris* between patients in healthcare facilities. *C. auris* has caused large outbreaks in healthcare settings both within the U.S. and internationally. In the U.S., outbreaks have occurred in healthcare facilities, mainly in the New York City, New Jersey, and Chicago areas. To date, the CDC has received reports of over 600 cases of *C. auris* in the U.S. In addition, over 30 countries have reported *C. auris* cases. Patients with overnight healthcare stays abroad may be at risk of being colonized or infected with *C. auris*, especially if patients are also colonized or infected with a carbapenemase-producing bacteria. *C. auris* has not yet been identified in Colorado.

Recommendations / guidance

Overnight stay in a healthcare facility outside the U.S. can be a risk factor for acquisition of some multidrug-resistant organisms. **If, during routine clinical care involving an overnight stay, a patient is identified as having a previous overnight stay in a healthcare facility outside the U.S., CDPHE advises consideration of screening for selected organisms. The purpose is to identify colonized patients and implement infection control measures to prevent transmission.**

- Consider screening for carbapenemase-producing bacteria in patients who have had an overnight stay in a healthcare facility outside the U.S. in the previous year. Consult with CDPHE for appropriate methodology, supplies, and testing that can be performed via public health laboratories free of charge.
Consider screening for C. auris in patients who have had an overnight stay in a healthcare facility outside the U.S. in the previous year, especially if in a country with documented C. auris cases (https://www.cdc.gov/fungal/candida-auris/tracking-c-auris.html). Strongly consider screening when patients have had such inpatient healthcare exposures outside the U.S. and have infection or colonization with carbapenemase-producing bacteria. C. auris co-colonization with these organisms has been observed regularly. Consult with CDPHE for appropriate methodology, supplies, and testing that can be performed via public health laboratories free of charge.

- When screening is performed, preemptively place the patient on contact precautions while waiting for the results of testing; reinforce adherence to hand hygiene and contact precautions for all healthcare personnel and staff; and, should the patient be transferred to another healthcare facility, ensure that the results of testing, or pending test results, are communicated to the receiving facility.
- If screening for C. auris, preemptively implement appropriate environmental cleaning and disinfection procedures until the results of testing are complete (https://www.cdc.gov/fungal/candida-auris/c-auris-infection-control.html).

In addition, healthcare facilities can consider C. auris screening in patients who have been hospitalized or admitted to a healthcare facility in regions within the U.S. that have had cases of C. auris, such as New York City, New Jersey, and Chicago. A decision to screen patients in these situations should be made in consideration of the most recent epidemiology and patient risk factors, as well as consultation with CDPHE. See https://www.cdc.gov/fungal/candida-auris/tracking-c-auris.html for up to date information on the epidemiology of C. auris.

Carbapenemase-producing organisms and C. auris, including suspected C. auris, are reportable conditions in Colorado via laboratory reporting. C. auris has not yet been identified in Colorado. When these organisms are reported, CDPHE conducts additional testing and works closely with facilities to prevent and contain spread among patients within and among facilities by providing guidance and recommendations related to infection control practices and screening of contacts. The determination of who to screen should be made in consultation with CDPHE, and can involve roommates, patients determined to be at highest risk, or unit or facility-wide screening, depending on the epidemiology, patient risk factors, and adherence to infection control practices. More information on guidance for containment of multidrug-resistant organisms can be found here: https://www.cdc.gov/hai/containment/guidelines.html.

Contact CDPHE at 303-692-2700 to assist with coordination of screening and testing free of charge through the CDC Antibiotic Resistance Laboratory Network (ARLN), and for consultation regarding appropriate patients for screening; all necessary screening and shipping supplies can be shipped directly to your facility. Suspected C. auris should be reported to CDPHE at 303-692-2700 or afterhours at 303-370-9395.

For more information

- CDC Candida auris: https://www.cdc.gov/fungal/candida-auris/index.html
- CDC Multidrug-Resistant Organism Management:
  https://www.cdc.gov/infectioncontrol/guidelines/mdro/index.html
● CDC Carbapenem-Resistant Enterobacteriaceae: https://www.cdc.gov/hai/organisms/cre/index.html
● CDC Infection Control Guidelines: https://www.cdc.gov/infectioncontrol/guidelines/index.html

CDPHE Disease Reporting Line: 303-692-2700 or 303-370-9395 (after hours)