DATE: July 10, 2024
TO: Health Alert Network
FROM: Debra L. Bogen, MD, FAAP, Secretary of Health
SUBJECT: Pathogen Testing to Support Enteric Disease Outbreak Response Efforts
DISTRIBUTION: Statewide
LOCATION: Statewide
STREET ADDRESS: n/a
COUNTY: n/a
MUNICIPALITY: n/a
ZIP CODE: n/a

This transmission is a “Health Advisory” which provides important information for a specific incident or situation; may not require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, INFECTION CONTROL, NURSING AND LABORATORY STAFF IN YOUR HOSPITAL
EMS COUNCILS: PLEASE DISTRIBUTE AS APPROPRIATE
FQHCs: PLEASE DISTRIBUTE AS APPROPRIATE
LOCAL HEALTH JURISDICTIONS: PLEASE DISTRIBUTE AS APPROPRIATE
PROFESSIONAL ORGANIZATIONS: PLEASE DISTRIBUTE TO YOUR MEMBERSHIP

Summary

• There has been a recent and expected seasonal increase in enteric disease outbreaks nationwide, including several multistate *Salmonella* outbreaks that involve Pennsylvania cases.
• Providers are encouraged to order pathogen testing for patients with acute gastroenteritis symptoms, particularly those suspected to have acute bacterial gastroenteritis. Pathogen testing, including stool culture and culture independent diagnostic test (CIDT), supports public health’s ability to identify, track, and collect data around enteric disease outbreaks.
• When available, stool culture is preferred by public health to produce isolates for whole genome sequencing. Data generated using whole genome sequencing are essential for identifying Pennsylvania cases linked to both in-state and multistate outbreaks.
• If you have additional questions about this guidance, please contact DOH at 1-877-PA-HEALTH (1-877-724-3258) or your local health department.

In Pennsylvania, illnesses caused by enteric pathogens such as *Campylobacter*, *Salmonella*, shiga toxin-producing *E. coli*, *Shigella*, *Giardia*, *Vibrio* spp., and others follow a seasonal pattern, peaking during the warm summer months. This seasonal pattern also results in an increase in enteric disease outbreaks in both Pennsylvania and nationwide. As of June 21, 2024, cases of illness reported to the Pennsylvania Department of Health (DOH) during 2024 have been associated with 44 in-state and multistate outbreaks of enteric pathogens. Recent multistate outbreaks of *Salmonella* that include Pennsylvania cases have been associated with...
Charcuterie meats, cucumbers, and backyard poultry. Several other outbreaks are currently under investigation or may not have enough data available to identify a potential vehicle.

Most cases of acute gastroenteritis are self-limiting. Thus, patients and providers may opt out of pathogen testing. However, pathogen testing is essential as the first step to determine if the case is part of the outbreak and for tracking disease patterns, assessing, and responding to enteric disease outbreaks. Coupled with public health interviews with suspect cases, this information can inform public health actions such as identifying contaminated food products, implementing or advising on food safety practices, conducting recreational water testing, or crafting public health messaging to prevent further disease transmission.

When resources allow, pathogen testing is recommended for cases of acute gastroenteritis to support these public health actions. Additionally, for bacterial pathogens, culture tests are preferred in order to produce bacterial isolates. Bacterial isolates are necessary for whole genome sequencing which can determine the organism’s strain or subtype, resistance patterns, and other characteristics. Data generated through whole genome sequencing are the primary source of information used by public health to link cases to multistate outbreak investigations and therefore are essential for public health action.

Under the Pennsylvania State Law (28 Pa. Code § 27.2), isolates of, or specimens positive for, several enteric pathogens including Salmonella, Shiga toxin-producing E. coli (STEC), Shigella, and Shiga toxin are required to be submitted to the DOH Bureau of Laboratories (BOL) within five workdays of isolation or a positive test result. BOL also requests Listeria and Vibrio spp. isolates and positive specimens to assist with enhanced surveillance activities for these pathogens. Any unusual clusters of acute gastroenteritis should be reported to DOH even when testing is not available.

Isolates or specimens can be sent Monday through Thursday to:

PA Department of Health, Bureau of Laboratories
110 Pickering Way Exton, PA 19341
610-280-3464

Additional guidance on isolate or specimen submission to BOL can be found at the links below:

If you have additional questions about this guidance, please contact DOH at 1-877-PAHEALTH (1-877-724-3258) or your local health department.

For more information
DOH Foodborne Illness Website: https://www.health.pa.gov/topics/disease/Pages/Foodborne-Illness.aspx
Information of CDC-led outbreak investigations:
- https://www.cdc.gov/salmonella/outbreaks-active.html

For patient education

DOH created a short (2-minute) video that might help educate patients about the importance of enteric disease testing and the investigation process. Share this link with patients who might find it helpful: Watch this video.

Individuals interested in receiving future PA-HANs can register at: https://ondemand.mir3.com/han-pa-gov/login/.

Categories of Health Alert 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.

This information is current as of July 10, 2024 but may be modified in the future.