

September 27, 2021

Dear Laboratory Manager:

As the country is shifting towards new diagnostic and subtyping technologies, the Pennsylvania Department of Health's enteric disease team in the Bureau of Epidemiology and Bureau of Laboratories (BOL) would like to provide updated information. This document is intended to specify which bacterial enteric diseases are reportable, what needs to be submitted, why reporting is essential to disease surveillance and outbreak detection, and upcoming changes to reporting back to you.

An increasing number of enteric diseases are being detected by culture-independent diagnostic testing (CIDT). While these tests are useful for rapidly determining the cause of a patient's illness, they often lead to fewer bacterial isolates being cultured. Bacterial isolates are needed to determine the organism's strain or subtype, resistance patterns, and other characteristics. BOL has transitioned to whole-genome sequencing (WGS) for surveillance of foodborne clusters of illness caused by *Salmonella spp.*, Shiga toxin-producing *E. coli* (STEC), and *Listeria monocytogenes*. WGS analysis of these pathogens will be performed in real-time on primary isolates received from Pennsylvania's clinical, hospital, community health, and reference laboratories. These surveillance data provide the ability to detect and prevent outbreaks, track antimicrobial resistance, and monitor disease trends. Patient specimens with a positive CIDT for *Listeria*, *Salmonella*, Shiga toxin-producing *E. coli* (STEC), *Shigella*, *Vibrio*, and non-pestis *Yersinia* should be cultured to produce bacterial isolates.

A list of diseases that are reportable by state law (28 Pa. Code § 27.2) is attached to this correspondence. All enteric diseases on this list are reportable by the next workday for clinical laboratories. Positive laboratory results for these diseases must be submitted to DOH through PA-NEDSS or PA-ELR. Note that submitting an isolate to BOL does not fulfill reporting requirements. It is important that lab results are reported in a timely manner because they are used to initiate case investigations. Delays in reporting make it harder for patients to recall details needed for investigation, such as food items consumed during their incubation period.

In addition to reporting, clinical laboratories must submit certain isolates to BOL within five workdays of isolation. This includes isolates of *Salmonella*, Shiga toxin-producing *E. coli* (STEC), and *Shigella*. DOH also requests that isolates are submitted for *Listeria*, *Yersinia* and *Vibrio*. For submission of Shiga-like toxin producing *E. coli*, submit isolates, positive broth cultures or stool in Carey Blair for all CIDTs. Send stool and broth cultures with a cold pack and the isolates at ambient temperature. BOL performs culture isolation and PCR on STEC positive specimens. Complete the standard submission form and request "STEC."

The following is the list of submissions to submit to BOL:

- *Salmonella* isolates or positive *Salmonella* specimen
- *E. coli* (STEC) isolates, positive broth culture or stool in Carey Blair
- *Shigella* isolates or positive clinical specimen
- *Listeria*, *Vibrio* and *Yersinia* isolates

On July 1, 2020 BOL instituted a new reporting algorithm for *Salmonella* and STEC due to the retirement of conventional serotyping (H-typing) methods for STEC and *Salmonella*. We will do confirmatory testing and report the identification and serogroup. We will continue to report serotypes for a reporting scheme that strategically reports serotypes of the gravest public health consequence: the typhoidal and highly invasive *Salmonella* serovars including Typhi; Paratyphi A; Paratyphi B (tartrate negative or positive); Paratyphi C; I 4,12:b:- (tartrate negative or positive); Choleraesuis; and Typhisuis.

For a complete list of laboratory services along with submission forms, see the Microbiology Directory of Services located on the BOL's website (listed below) under Clinical Microbiology. There is no charge for any of the laboratory services. However, BOL does not have funding to cover the packaging and shipping costs. See the attached update specimen submission form. If you have any questions, please contact Sameera Sayeed, ssayeed@pa.gov or 484-870-6127.

Pennsylvania Department of Health List of Reportable Diseases

PA Code, Title 28, Chapter 27: <http://www.pacode.com/secure/data/028/chapter27/chap27toc.html>
Updates to Chapter 27 requiring electronic reporting: <http://www.pabulletin.com/secure/data/vol33/33-20/941.html>
and <http://www.pabulletin.com/secure/data/vol35/35-45/2051.html>

1. AIDS (Acquired Immune Deficiency Syndrome) \$
2. Amebiasis
3. **Animal bite #**
4. **Anthrax #**
5. An unusual cluster of isolates
6. **Arboviruses (includes Colorado tick fever, Crimean-Congo hemorrhagic fever, dengue, Eastern equine encephalitis, St. Louis encephalitis, West Nile virus infection, Yellow fever, et al.) #**
7. **Botulism (all forms) #**
8. Brucellosis
9. Campylobacteriosis
10. **Cancer ^**
11. CD4 T-lymphocyte test result with a count <200 cells/microliter, or a CD4 T-lymphocyte % of <14% of total lymphocytes \$
12. Chancroid
13. Chickenpox (*Varicella*)
14. *Chlamydia trachomatis* infections
15. **Cholera #**
16. **Congenital adrenal hyperplasia (CAH) (<5y/old)**
17. Creutzfeldt-Jakob Disease
18. Cryptosporidiosis
19. **Diphtheria #**
20. Encephalitis (all types)
21. **Enterohemorrhagic *E. coli* (shiga toxin-producing *E. coli* or STEC) # ***
22. **Food poisoning outbreak #**
23. **Galactosemia (<5y/old)**
24. Giardiasis
25. Gonococcal infections
26. Granuloma inguinale
27. Guillain-Barre syndrome
28. ***Haemophilus influenzae* invasive disease # ***
29. **Hantavirus pulmonary syndrome #**
30. **Hemorrhagic fever #**
31. Hepatitis, viral, acute and chronic cases
32. Histoplasmosis
33. HIV infection \$
34. Influenza (laboratory-confirmed only)
35. **Lead poisoning #**
36. **Legionellosis #**
37. Leprosy (Hansen's Disease)
38. Leptospirosis
39. Listeriosis
40. Lyme disease
41. Lymphogranuloma venereum
42. Malaria
43. **Maple syrup urine disease (MSUD) (<5y/old)**
44. **Measles (Rubeola) #**
45. Meningitis (all types--not limited to invasive *Haemophilus influenzae* or *Neisseria meningitidis*)
46. **Meningococcal invasive disease # ***
47. Mumps
48. Perinatal exposure of a newborn to HIV
49. Pertussis (whooping cough)
50. **Phenylketonuria (PKU) (<5y/old)**
51. **Plague #**
52. **Poliomyelitis #**
53. **Primary congenital hypothyroidism (<5y/old)**
54. Psittacosis (ornithosis)
55. **Rabies #**
56. Respiratory syncytial virus
57. Rickettsial diseases/infections (includes Rocky Mountain Spotted Fever, Q fever, rickettsialpox, typhus, Ehrlichiosis)
58. Rubella (German measles) and congenital rubella syndrome
59. Salmonellosis *
60. **Severe Acute Respiratory Syndrome (SARS) #**
61. Shigellosis *
62. **Sickle cell hemoglobinopathies (<5y/old)**
63. **Smallpox #**
64. *Staphylococcal aureus*, Vancomycin Resistant (VRSA) or Intermediate (VISA) invasive disease
65. Streptococcal invasive disease (Group A)
66. *Streptococcus pneumoniae*, drug resistant invasive disease
67. Syphilis (all stages)
68. Tetanus
69. Toxic shock syndrome
70. Toxoplasmosis
71. Trichinosis
72. Tuberculosis, suspected or confirmed active disease (all sites) including the results of drug susceptibility testing
73. Tularemia
74. **Typhoid fever #**

For healthcare practitioners and healthcare facilities, all diseases are reportable within 5 work-days, unless otherwise noted.

Healthcare practitioners and healthcare facilities must report within 24 hours.

\$ Clinical laboratories, all diseases are reportable by next work-day, unless otherwise noted.

\$ Clinical laboratories must report within 5 days of obtaining the test result.

* In addition to reporting, clinical laboratories must also submit isolates to the state Laboratory within 5 work-days of isolation.

^ Hospitals, clinical laboratories, and healthcare facilities must report within 180 days.

BLUE Not currently reportable via PA-NEDSS

Please note that certain broad categories such as #22 (Food Poisoning Outbreak) should be construed to mean all such illnesses, even if the etiology is either not otherwise listed here, or a specific etiology cannot be determined. Further, all disease outbreaks and/or unusual occurrences of disease are reportable within the Commonwealth. Finally, note that local jurisdictions may require reports of additional conditions not listed here within their jurisdictions.