



Department of Health

Mike DeWine, Governor
Jon Husted, Lt. Governor

Amy Acton, M.D., MPH, Director

DATE: March 6, 2019

TO: Ohio Microbiology Laboratory Directors and Infection Preventionists

FROM: Sietske de Fijter, MS, State Epidemiologist and Chief, Bureau of Infectious Diseases *SdF*

CC: Health Commissioners, Medical Directors and Directors of Nursing of Ohio Local Health Jurisdictions

SUBJECT: Request for Bacterial Isolates or Patient Specimens

This memorandum is to renew our request that the following bacterial isolates, or patient specimens of public health importance be sent to the Ohio Department of Health (ODH) Laboratory. The ODH Laboratory performs assays, such as confirmatory identification, serotyping, pulsed-field gel electrophoresis (PFGE), and whole genome sequencing (WGS). These culture-based assays are invaluable tools in outbreak detection and investigation.

The implementation of culture independent diagnostic tests (CIDT) may result in fewer isolates being available for characterization to aid in epidemiological investigations. If your laboratory is implementing CIDT for detection of enteric pathogens and plans to discontinue culture when CIDT detects the presence of a pathogen, please send your enteric broth for STECs or stool specimens preserved in Cary Blair for any of the enteric pathogens listed below (except *Shigella*) to the ODH Laboratory. Further information about CIDT can be found at:

http://www.aphl.org/AboutAPHL/publications/Documents/FS_CIDTFactSheet_Feb2015.pdf.

Please send the following pathogens to ODH Lab. Refer to Attachment 1 for additional details. The forms to submit can be found as Attachment 2 ([Microbiology Specimen Submission Form](#)) and Attachment 3 ([Antimicrobial Resistance and Susceptibility Testing Submission Form](#)).

- Carbapenem-resistant (non-susceptible) organisms (except *Acinetobacter*)
- Colistin-resistant *Enterobacteriaceae*
- *Haemophilus influenzae*, < 5 yrs. of age, from normally sterile sites only
- *Legionella* spp.
- *Listeria monocytogenes*, from normally sterile sites only
- *Mycobacterium tuberculosis* complex
- *Neisseria meningitidis*, from normally sterile sites only
- *Salmonella*
- Shiga toxin-producing *E. coli* (including O157)
- *Shigella*, only those with ciprofloxacin MIC of 0.12–1 µg/mL
- Vancomycin-resistant *Staphylococcus aureus*
- *Vibrio* spp.

The table below shows the number of cases of select diseases reported in Ohio in 2018 and the corresponding number of isolates identified:

| Agent | Number of Cases Reported in 2018 | Number of Isolates Identified in 2018 |
|--|----------------------------------|---------------------------------------|
| Carbapenemase-producing CRE | 393 | 589 |
| <i>Haemophilus influenzae</i> (<5 yrs old) | 23 | 22 |
| <i>Listeria monocytogenes</i> | 30 | 18 |
| <i>Neisseria meningitidis</i> | 8 | 8 |
| <i>Salmonella</i> spp. | 1504 | 1632 |
| Shiga toxin-producing <i>E. coli</i> (including O157) | 546 | 333 |
| <i>Vibrio</i> spp. | 52 | 14 |
| Reflects isolates identified by ODH Laboratory, CDC or the Wisconsin State Public Health Laboratory. Isolates from out-of-state residents are included. There may be more than one isolate per case. CP-CRE became reportable March 22, 2018. Data from 2018 is preliminary. | | |

Specimen Requirements and Forms to use with bacterial isolates or clinical specimens being sent to the ODH Laboratory:

Submit with ODH Microbiology Specimen Submission Form ([HEA 2530](#)) or Antimicrobial Resistance and Susceptibility Testing Submission Form ([HEA 2535](#)) as indicated in Attachment 1. Note that each field on the form marked with an asterisk (*) is required information. If the submitting lab used a CIDT, please indicate the CIDT method used on the submission form.

Shipping to the ODH Laboratory:

Ship in compliance with federal regulations and local guidelines. Refer to the ODH [Microbiology Client Services Manual](#) for more information.

Please ship to: Attention: Specimen Receiving-Microbiology, Ohio Department of Health Laboratory, Building 22, **8995** E. Main Street, Reynoldsburg, OH 43068. Telephone number: 888-634-5227 (888-ODH-LABS).

Shipping Accounts:

ODH maintains several accounts with commercial courier services that are available to clinical laboratories to ship isolates and clinical specimens to the ODH Laboratory.

Carbapenem-resistant organisms account: A FedEx account is available for shipping carbapenem-resistant organisms. To use this account, contact Rebekah Carman at rebekah.carman@odh.ohio.gov.

Enteric specimen accounts: The following shipping methods are available to both clinical laboratories and local health departments to ship enteric isolates and CIDT-positive stool specimens and Cary Blair stool specimens.

UPS: Call the Ohio Department of Health Laboratory at (614) 644-2563 to request UPS shipping labels; shipping labels will be emailed to you for printing and attachment to your package(s) to be shipped. Follow your facility's UPS shipping procedures or call UPS at 800-PICK-UPS (800-742-5877). Use for Exempt Human Specimens or Category B shipments only.

Mercury Services: Call (800) 527-2187; request pickup for delivery to the Ohio Department of Health Laboratory. Use for Exempt Human Specimens, Category B or Category A shipments; includes enteric specimens or isolates, parasitology (*Cryptosporidium* and *Giardia*), and food samples.

Priority Dispatch: Call (800) 817-4844; request pickup for delivery to the Ohio Department of Health Laboratory. Use for Exempt Human Specimens, Category B or Category A shipments; includes enteric specimens or isolates, parasitology (*Cryptosporidium* and *Giardia*), and food samples.

Reporting:

Sending in the isolate does not constitute a report of the positive finding. Meningococcal and cholera cases are Class A diseases and need to be reported immediately by telephone to the [local health district](#). All others described above are Class B diseases and are reported by the end of the next business day after finding the positive lab result.

See [Know your ABCs](#) for a list of reportable diseases and the timeframes for reporting.

General Comments:

Click [here](#) to see the Annual Summary of Infectious Diseases for Ohio, 2016.

Click [here](#) to find contact information for local health districts.

If there are any questions, please do not hesitate to call: ODH Laboratory at 1-888-ODH-LABS or 614-728-0544 for questions relating to microbiology, shipping and handling or the ODH Bureau of Infectious Diseases at 614-995-5599 for questions relating to epidemiology, reporting of infectious diseases and public health management.

By submitting isolates and clinical specimens described in this letter to the ODH Laboratory, you are supporting the mission of the Ohio Department of Health to: Protect and improve the health of all Ohioans by preventing disease, promoting good health and assuring access to quality care. Your support is greatly appreciated.

ATTACHMENT 1.

Please send the following pathogens to ODH Lab.

| PATHOGEN | SOURCE | SEND ISOLATE TO ODH LAB? (1) | SEND CLINICAL SPECIMEN? (1) | FORM |
|---|----------------------------------|--|--|--|
| <i>Campylobacter</i> | From any clinical site | No-unless specially requested for outbreak investigation | No, unless specially requested for outbreak investigation; submit CB | HEA 2530 |
| Carbapenem-resistant (non-susceptible) organisms (2) | From any clinical site | Yes (except <i>Acinetobacter</i>) | No | HEA 2535 |
| Colistin-resistant <i>Enterobacteriaceae</i> (3) | From any clinical site | Yes | No | HEA 2535 |
| <i>Haemophilus influenzae</i> , < 5 yrs. of age (4) | From normally sterile sites only | Yes | Yes, if unable to recover organism from normally sterile site | HEA 2530 |
| <i>Legionella</i> spp. | From any clinical site | Yes | No, unless specially requested for outbreak investigation | HEA 2530 |
| <i>Listeria monocytogenes</i> | From normally sterile sites only | Yes | No | HEA 2530 |
| <i>Mycobacterium tuberculosis</i> complex (5) | From any clinical site | Yes | Yes, if unable to recover organism | HEA 2530 |
| <i>Neisseria meningitidis</i> (6) | From normally sterile sites only | Yes | Yes, if unable to recover organism | HEA 2530 |
| <i>Salmonella</i> | From any clinical site | Yes | Yes, if lab does not perform culture of CIDT-positive specimen, submit CB | HEA 2530 |
| Shiga toxin-producing <i>E. coli</i> (including O157) | From any clinical site | Yes | Yes, if lab does not perform culture of CIDT-positive specimen, submit CB or enteric broth | HEA 2530 |
| <i>Shigella</i> (7) | From any clinical site | Varies (see footnote 7 below for details) | No, unless specially requested for outbreak investigation; submit CB | HEA 2530 or 2535 |
| Vancomycin-resistant <i>Staphylococcus aureus</i> (8) | From any clinical site | Yes, ship directly to CDC (see below for details) | No | HEA 2530 |
| <i>Vibrio</i> species (9) | From any clinical site | Yes | Yes, if lab does not perform culture of CIDT-positive specimens, submit CB | HEA 2530 |
| <i>Yersinia enterocolitica</i> | From any clinical site | No-unless specially requested for outbreak investigation | No, unless specially requested for outbreak; submit CB | HEA 2530 |

CIDT – Culture Independent Diagnostic Test

CB – Cary Blair (C&S) transport medium

[HEA 2530](#) – Microbiology Specimen Submission Form

[HEA 2535](#) – Antimicrobial Resistance and Susceptibility Testing Submission Form

NOTE: If you have trouble accessing the ODH website, try using Google Chrome, Opera, Safari or the latest version of Microsoft Edge as your browser.

Footnotes

(1) Refer to the [ODHL Client Services Manual](#) for specific information.

(2) **Carbapenem-resistant organisms:** Submit all carbapenem-resistant (non-susceptible) *Enterobacteriaceae* (CRE) and carbapenem-resistant (non-susceptible) *Pseudomonas aeruginosa* (CRPA) recovered from any clinical site. Exclude CRPA from patients with cystic fibrosis. Include organisms that test as non-susceptible to any carbapenem antibiotic (i.e., doripenem, ertapenem, imipenem, or meropenem with MIC interpretation of intermediate or resistant).

(3) **Colistin-resistant *Enterobacteriaceae*:** Submit any *Enterobacteriaceae* with a colistin MIC > 4 µg/ml from any source.

(4) ***Haemophilus influenzae*:** Submit all isolates from normally sterile sites (blood, CSF or other normally sterile body fluids only) in persons <5 years of age to ODH Lab. Isolates from patients 5 years of age or older can also be submitted if serotyping is desired. *H. influenzae* isolates will be sent to the Wisconsin State Public Health Laboratory for characterization. In addition to the [ODH Microbiology Form](#) (HEA 2530), submit the [Wisconsin VPD Submission Form](#).

(5) ***Mycobacterium tuberculosis* complex:** Submit one isolate from each patient for genotyping. When submitting *Mycobacterium tuberculosis* isolates, please specify if susceptibility testing is being requested in addition to genotyping.

(6) ***Neisseria meningitidis*:** Submit all isolates from normally sterile sites (blood, CSF or other normally sterile body fluids only). *N. meningitidis* is especially sensitive to changes in temperature and delays in transport. Please ship a fresh subculture on chocolate or sheep blood agar slants by overnight carrier. Ship Monday through Thursday- do not ship on Fridays. In addition to the [ODH Microbiology Form](#) (HEA 2530), submit the [Wisconsin VPD Submission Form](#).

(7) ***Shigella* species:** Submit *Shigella* isolates with a ciprofloxacin MIC of 0.12–1 µg/mL for further phenotypic and genetic testing. In the event of an outbreak, ODH may request submission of outbreak-related isolates.

(8) **Vancomycin-resistant *Staphylococcus aureus* (VRSA)** from any site (MIC results of ≥ 8): please submit the isolate directly to the Centers for Disease Control and Prevention (CDC). Complete the [CDC Specimen Submission Form 50.34](#) electronically, and then print it. (Do not write on the form by hand.) Request Test Order Code 10223 and Test Order Name: Bacterial Antimicrobial Susceptibility Testing. Place a free text note in the last box on page 2 of the form ("Previous laboratory results" section) with your findings and what drug you want CDC to test/verify results for. Please contact the Bureau of Infectious Diseases, Outbreak Response and Bioterrorism Investigation Team (ORBIT) at 614-995-5599 prior to shipping VRSA isolates. The package should be shipped overnight to: CDC, Attention: STAT (VRSA); 1600 Clifton Rd, NE; Atlanta, GA 30333. For specimens shipped directly to CDC, please fax or e-mail a copy of the CDC Specimen Submission form to ODH Laboratory (fax 614-387-1505 or ODHLABS@odh.ohio.gov, subject line: ATTN-Microbiology-CDC STAT form).

(9) ***Vibrio* species:** Submit all *Vibrio* species including the recently reclassified *Photobacterium damsela* (formerly *Vibrio damsela*) and *Grimontia hollisae* (formerly *Vibrio hollisae*).