



Tennessee Department of Health Public Health Laboratory Newsletter

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Commissioner of Health

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2019 Reportable Disease Changes for Laboratories

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All healthcare providers (inpatient and outpatient), laboratories or other persons knowing or suspecting a reportable disease case are responsible for reporting to the health department. Healthcare providers and laboratories in the same healthcare facility both have a duty to report. The TN Reportable Disease List and Detailed Laboratory Guidance have been updated to reflect the changes for 2019. The updates are now available on the CEDEP Reportable Disease website: <https://www.tn.gov/health/cedep/reportable-diseases/>. The website includes the following important reporting guidance for 2019:

- List for Healthcare Providers and How To Report For Healthcare Providers
- List for Laboratories, How to Report For Laboratories and Detailed Laboratory Guidance
- Summary of Reporting Changes
- Letter from the Commissioner

The diseases, events and conditions reportable to Tennessee Department of Health by laboratories, including laboratories in healthcare facilities, are listed on page two. Please refer to the Detailed Laboratory Guidance for specific guidance. Important changes for laboratories for 2019 include:

- *Pseudomonas aeruginosa* (Carbapenem-resistant), *Chlamydia psittaci* and *Francisella species* (other than *F. tularensis*) have been removed from the reportable list.
 - *Pseudomonas aeruginosa*, Carbapenem-resistant, is no longer reportable, **but sample submission is required.**
 - *Francisella tularensis* remains reportable under Federal Select Agent Guidance. Please consult Rule-Out Refer submission guidance regarding *F. tularensis*.
- *Burkholderia mallei* and *Burkholderia pseudomallei* were added back to the reportable list for laboratories. Please refer to the Select Agent Rule-Out Refer submission guidance regarding *B. mallei* and *B. pseudomallei*.
- Single cases of pan-nonsusceptible organisms, unusual resistance mechanisms, or other emerging or unusual pathogens have been added as events of urgent public health concern that should be reported immediately.
- Isolate submission of *Acinetobacter* species (Carbapenem-resistant) is now required.
- Sample submission for *Coxiella burnetii* is now required.
- *Escherichia coli* (ESBL) and *Klebsiella* species (ESBL) are reportable from sentinel laboratories in Lewis, Marshall, Maury and Wayne counties.

Laboratories in healthcare facilities should refer to the document “How to Report: For Laboratories” for specific reporting guidance. Please contact CEDEP with questions related to the 2019 Reportable Disease List: 615-741-7247 (800-404-3006).

2019 Tennessee Reportable Disease List

for LABORATORIES

The diseases, events, and conditions reportable to Tennessee Department of Health (TDH) by laboratories, including laboratories in healthcare facilities, are listed below for 2019. Refer to Page 1 of this document for a list of diseases, events, and conditions reportable by healthcare providers. Laboratories should refer to the Detailed Laboratory Guidance document for additional guidance on reportable tests and results, and specimen/isolate submission to the Tennessee Department of Health Laboratory.

Report Via Fax

- Local/Regional Health Offices:
<https://www.tn.gov/health/health-program-areas/localdepartments.html>
- State/CEDEP: (615) 741-3857

Report Online

- All conditions should be reported online through NBS beginning February 4, 2019:
<https://hssi.tn.gov/auth/login>.
- To sign up for NBS online reporting, please fill out the REDCap survey: <https://redcap.health.tn.gov/redcap/surveys/?s=8L7CMW4M>.



Regular Reporting

PH-1600 only in 1 week (all diseases)



Phone immediately + PH-1600 in 1 week



Phone next business day + PH-1600 in 1 week

Special Reporting



All blood lead test results must be reported electronically or via fax. For more information, refer to <https://www.tn.gov/health/health-program-areas/mch-lead-for-providers.html> or email UT Extension at leadtrk@utk.edu for assistance.



Refer to the Detailed Laboratory Guidance for catchment area and/or send questions to HAI.Health@tn.gov.

Specimen or Isolate Submission

Required:

Requested:

Outbreaks and Events of Urgent Public Health Concern:

- Disease clusters or outbreaks !
- Single cases of pan-nonsusceptible organisms, unusual resistance mechanisms, or other emerging or unusual pathogen* !

*See Appendix A of the M100 Performance Standards for Antimicrobial Susceptibility Testing

<i>Acinetobacter</i> species: Carbapenem-Resistant ^{eip} !	<i>Legionella</i> species !
<i>Anaplasma phagocytophilum</i> , species	<i>Listeria</i> species !
<i>Babesia</i> species	Measles virus !
<i>Bacillus anthracis</i> !	Meningitis: Other Bacterial !
<i>Bordetella pertussis</i> !	Middle East Respiratory Syndrome Coronavirus (MERS-CoV) !
<i>Borrelia burgdorferi</i>	Mumps virus !
<i>Brucella</i> species !	<i>Mycobacterium leprae</i> !
<i>Burkholderia mallei</i> !, <i>pseudomallei</i> !	<i>Mycobacterium</i> nontuberculous species (extra-pulmonary only) !
California/LaCrosse serogroup viruses	<i>Mycobacterium tuberculosis</i> complex (<i>M. tuberculosis</i> , <i>M. bovis</i> , <i>M. canettii</i> , <i>M. africanum</i> , <i>M. microti</i>) !
<i>Campylobacter</i> species !	<i>Neisseria gonorrhoeae</i>
<i>Candida auris</i> (includes rule-out) !	<i>Neisseria meningitidis</i> !
Chikungunya virus !	<i>Plasmodium</i> species !
<i>Chlamydia trachomatis</i>	Poliovirus !
<i>Clostridium botulinum</i> or botulinum toxin: Foodborne !, Wound !, Infant !	Rabies virus: Animal, Human !
<i>Clostridium difficile</i> ^{eip} !	Ricin toxin !
<i>Clostridium tetani</i> !	<i>Rickettsia</i> species (other than <i>R. typhus</i>)
Colistin-resistant gram negative bacteria !	Rubella virus !
<i>Corynebacterium diphtheria</i> !, <i>ulcerans</i> !	St. Louis Encephalitis virus
<i>Coxiella burnetii</i> !	<i>Salmonella</i> : Typhi !, other species !
<i>Cryptosporidium</i> species !	<i>Shigella</i> species !
<i>Cyclospora</i> species !	<i>Staphylococcus aureus</i> : Enterotoxin B-producing (pulmonary) !, Methicillin-Resistant Invasive Disease ^{eip} , Toxin-producing (TSST-1), Vancomycin Non-Susceptible (All Forms) !
Dengue virus	<i>Streptococcus agalactiae</i> Invasive Disease
<i>Ehrlichia</i> species	<i>Streptococcus pneumoniae</i> Invasive Disease !
<i>Enterobacteriaceae</i> : Carbapenem-Resistant (all genera) !	<i>Streptococcus pyogenes</i> : Invasive Disease !, Toxin-producing !
<i>Enterococcus</i> species: Vancomycin-Resistant Invasive Disease	<i>Treponema pallidum</i> : Congenital !, Other
<i>Escherichia coli</i> : Extended Spectrum Beta Lactamase-Producing ^{eip} !	<i>Trypanosoma cruzi</i>
<i>Escherichia coli</i> : Shiga toxin-producing !	Variola virus (Orthopox virus) !
Equine Encephalitis viruses: Eastern !, Venezuelan !, Western	<i>Vibrio cholerae</i> !, species !
<i>Francisella tularensis</i> !	Viral Hemorrhagic Fever viruses (including Ebola, Lassa, Marburg) !
<i>Haemophilus influenzae</i> !	West Nile virus
Hepatitis A virus !	Yellow Fever virus !
Hepatitis B virus	<i>Yersinia pestis</i> !, species !
Hepatitis C virus	Zika virus !
Human Immunodeficiency Virus	
Influenza A virus: Novel !	
<i>Klebsiella</i> species: Extended Spectrum Beta Lactamase-Producing ^{eip} !	
Lead Levels !	

More information about reporting is available on the Reportable Diseases website at <https://www.tn.gov/health/cedep/reportable-diseases.html>. For questions, contact CEDEP at (615) 741-7247 or (800) 404-3006.

For more details about the laboratory tests and results, specimen or isolate submission requirements, and catchment areas for individual pathogens, please refer to the 2019 Reportable Diseases in Tennessee: Detailed Laboratory Guidance.

TDH Lab Services Clinical Laboratory Requisition Revised

The TDH Laboratory Services Clinical Laboratory Requisition (PH-4182) has been revised. The fillable PDF requisition may be downloaded from the Laboratory Services webpage:

<https://www.tn.gov/health/health-program-areas/lab.html>

Please note that all required fields must be completed. Final test reports cannot be issued if required information is missing.

New Drug Susceptibility Testing of Beta-Lactam Resistant *Enterobacteriaceae*

TDH Division of Laboratory Services, as the Southeast Antibiotic Resistance Lab Network Regional Laboratory, is one of four funded pilot labs to perform new drug susceptibility testing of beta-lactam resistant *Enterobacteriaceae*. In November of 2018, TDH laboratory personnel attended a HP D300e Digital Dispenser Training with CDC representatives and HP senior applications specialists. The HP D300e Digital Dispenser is an adapted inkjet printing technology used to dispense drugs into microtiter trays to:

- Prepare reference BMD panels for drug MIC testing
- Perform susceptibility testing to improve care for patients infected with pan-resistant or nearly pan-resistant *Enterobacteriaceae*
- Help ensure new drugs are used appropriately
- Provide results within 3 days of sample receipt

Healthcare facilities and providers may request this testing from their AR Lab Network Regional Laboratory. Hospital laboratories are also encouraged to submit the *Enterobacteriaceae* isolates that meet the following criteria:

- Non-susceptible to all beta-lactams, including either ceftazidime-avibactam or meropenem-vaborbactam. These isolates may be metallo-beta-lactamase producing isolates with few effective treatment options.

Or

- *Enterobacteriaceae* that are found to possess NDM, VIM or IMP using a molecular test.

It is recommended that hospital laboratories submit a copy of the initial AST results and/or molecular results to confirm inclusion criteria have been met. Facilities or providers should use clinical submission requisition PH-4182 when submitting samples to TDH Laboratory Services for testing. For initial testing, the following drugs/drug combinations will be used: Ceftazidime/avibactam, Aztreonam, Aztreonam/avibactam and Aztreonam/ceftazidime/avibactam.

*Submitted by: Xiaoraong Qian, Ph.D.
Assistant Director, Molecular Biology*

Ref: CDC AR Laboratory Network: New Drug Susceptibility Test of beta-lactam Resistance Enterobacteriaceae. October 2nd, 2018.

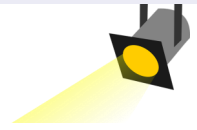
TDH Division of Laboratory Services ARLN Webpage:

<https://www.tn.gov/health/health-program-areas/lab/tn-arln.html>

SPOTLIGHT ON SAFETY

Strengthening Biosafety and Biosecurity in Laboratories

Summary Report 2018



After gaps and deficiencies in the nation's ability to safely work with high consequence and emerging pathogens were recently identified, the Association of Public Health Laboratories and the Centers for Disease Control and Prevention initiated a three year program to strengthen the culture of safety in public health and clinical labs across the nation.

In the spring of 2016, 110 public health laboratories were surveyed to identify biosafety practices and gaps. A follow-up survey was conducted in the fall of 2017 to identify progress. The report for these surveys was released in November 2018.

Clinical and public health laboratories are responsible for protecting staff from exposure to infectious and hazardous agents, and it is essential that workers possess the necessary skill sets to safely work with these agents. It is also essential that a biosafety program be considered as important as quality assurance in the laboratory. Biosafety training, competency and evaluation of process should be valued and implemented in all clinical and public health labs.

During the last 3 years, much work has been done to strengthen outreach and assist with biosafety training between the public health laboratory and the clinical laboratories. This work has been possible funding by the ELC Cooperative Agreement Federal Grant.

Below are a few resources available as a result of this federal grant:

- Website and on-line training:
 - www.aphl.org/biosafety
 - www.cdc.gov/labtraining
- Biosafety guidance: [*Clinical Laboratory Preparedness and Response Guide*](#)
- [Rule-Out Refer bench cards](#)

Public health laboratories will continue to work toward strengthening biosafety and biosecurity in house and by engaging clinical labs. These efforts require skilled personnel and funding. The threat of elimination of federal funds will jeopardize our ability to retain biosafety professionals and outreach staff.

Full report of the above summary, visit the [Culture Shift: Strengthening Biosafety and Biosecurity in Laboratories, A Report of the 2017 APHL Biosafety and Biosecurity Survey](#)

*Submitted by:
Rolinda Eddings MT(ASCP), Safety Officer*

Newborn Screening Expanded Hours

The Newborn Screening Laboratory now performs testing seven days per week. Samples may be collected and shipped for weekend testing.

Department Hours:	Monday—Friday:	8:00 a.m.—4:30 p.m.
	Saturday—Sunday:	7:00 a.m.—3:30 p.m.

For questions, related to Newborn Screening testing, please call 615-262-6353.

Cryptosporidium Sample Submission Changes

TDH, Division of Laboratory Services has moved PCR testing for *Cryptosporidium* to the Nashville laboratory effective immediately. Specimens should be shipped with cold packs to maintain storage requirements. Specimens must be submitted for testing within a month of collection. Avoid delivery to the laboratory on Saturdays, Sundays or Holidays.

Please send all positive specimens to:

Tennessee Department of Health
Laboratory Services
630 Hart Lane
Nashville, TN 37216

Acceptable sample types for testing:

1. Unfixed stool at 4°C/frozen
2. Cary-Blair at 4°C
3. Zinc PVA at room temp
4. Total Fix at room temp
5. Potassium dichromate at 4°C

Questions concerning *Cryptosporidium* samples should be directed to Dorothy Baynham at 615-262-6366.

TRAINING NEWS

CDC ONLINE TRAINING

New Informatics Training Courses

APHL and CDC have created two new introductory informatics courses, told through the journey of a single tuberculosis specimen making its way through the laboratory. Courses are free and offer Continuing Education Units. <https://www.cdc.gov/labtraining/training-courses/laboratory-informatics-introductory-courses.html>

Life of a Specimen - Introduces the learner to the pre-analytic, analytic and post-analytic phases of a specimen such as:

- The roles of various personnel
- Data relationships
- Data quality and standards
- Generation and flow of information

Life of a Result - Teaches students the characterization of the recipients of laboratory data, data and results storage, and the communication of data and results (especially electronically) to various stakeholders.

Biothreat Preparedness Training For Sentinel Laboratories

These intermediate-level, interactive courses focus on the Laboratory Response Network (LRN) protocols for bioterrorism agent identification. The curriculum includes 5 modules: *Bacillus anthracis*, *Brucella* species, *Burkholderia* species, *Yersinia pestis* and *Francisella tularensis*. Each module is approved for 1 – 1.5 hours of P.A.C.E continuing education credit. For more information on these training courses, please visit: <https://www.cdc.gov/labtraining/training-courses/biothreat-preparedness-sentinel/index.html>

EMPLOYEE NEWS

New Employees

Welcome!

OCTOBER 2018

Chanice Wilkes —PH Lab Technician—ARLN

Daphne Arthur—PH Lab Scientist—Newborn Screening

DECEMBER 2018

Lily Vaden —PH Lab Scientist —Serology

Brandy Cartmell—Public Health Administrator 2—Administration

Congratulations!

PROMOTIONS

DECEMBER 2018

Kathe Legg — Procurement Officer 2—Administration

Darlene McDuffie—Administrative Assistant 3—Newborn Screening

Brian Eaton—CT Coordinator—Chemical Terrorism



RETIREMENTS

NOVEMBER 2018

Mark Young — CT Coordinator—Chemical Terrorism

Tennessee Department of Health Division of Laboratory Services

630 Hart Lane
Nashville, TN 37216
615-262-6300

The Mission of Laboratory Services is to provide high quality analytical services of medical and environmental testing and to achieve the Mission of the Department of Health.

<https://www.tn.gov/health/health-program-areas/lab.html>



Department of Health. Authorization No. 343472

Website only