Comprehensive Laboratory Services Survey 2010

Section 1: Disease Prevention, Control and Surveillance

1. Does your laboratory collect information on turn around time (TAT) that is:

- Used internally (for laboratory quality assurance and improvement only)
- Used externally (to inform submitters to improve pre- and post-analytical quality assurance, or to measure overall program productivity)
- Used both internally and externally
- Does not collect TAT information → Please skip to question 2

1a. How many tests are monitored for TAT?

- All tests
- Most tests (≥50%)
- Some tests (<50%)

1.b. For what purpose does your laboratory collect testing on TAT? Please check all that apply

- Quality assurance/ improvement
- Measure productivity
- Marketing purposes
- Cost analysis per test
- Other, please specify

2. Does your laboratory participate in any of the following federal surveillance, information, or grant programs? Please check all that apply.

- Arbovirus Surveillance (ArboNet)
- Electronic Laboratory Exchange Network (Elexnet)
- Emerging Infections Program (EIP)
- Epidemiology Laboratory Capacity (ELC)
- Foodborne Diseases Active Surveillance Network (FoodNet)
- Health Alert Network (HAN)
- Influenza CDC/WHO Surveillance Network
- National Enteric Respiratory Virus Surveillance System (NERVSS)
- National Molecular Subtyping Network for Foodborne Disease Surveillance (PulseNet)
- Water Laboratory Alliance (WLA)
- Other (Please Specify):

3. Do state public health laboratory staff interact with (e.g., meet with or teleconference) the staff for the State Epidemiologist’s office on at least a weekly basis?

- Yes
- No
4. How many days a week is your laboratory available to process and culture specimens for tuberculosis?

- Five days a week (Monday–Friday)
- Six days a week (Monday–Saturday)
- Seven days a week (Monday–Sunday)
- Other, please specify:

5. Does your laboratory perform fluorochrome acid-fast smears on respiratory specimens submitted for mycobacterial testing?

- Yes
- No → please skip to question 6

5.a. How often are the results of the acid-fast smears reported to the health care provider within 24 hours from the receipt of specimen in the laboratory?

- Always
- Most of the time (≥50% of the time)
- Some of the time (<50% of the time)
- Never

6. Does your laboratory perform culture identification of *Mycobacterium tuberculosis* complex?

- Yes
- No → Please skip to question 7

6.a. How often is the culture identification of *Mycobacterium tuberculosis* complex reported to the submitter within 21 days of specimen receipt in the laboratory?

- Always
- Most of the time (≥50% of the time)
- Some of the time (<50% of the time)
- Never

7. Does your laboratory provide or assure testing for the following?

<table>
<thead>
<tr>
<th></th>
<th>Provide Testing</th>
<th>Assure Testing</th>
<th>Neither Provide nor Assure</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-line TB drug susceptibility testing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second-line TB drug susceptibility testing</td>
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</tr>
</tbody>
</table>
8. Does your laboratory perform direct Nucleic Acid Amplification Testing (NAAT) for *Mycobacterium tuberculosis* complex from a patient specimen?

- Yes, this testing is performed on all smear positive and qualified smear negative specimens
- Yes, this testing is performed only on smear positive specimens
- Yes, this testing is performed only upon provider request
- Other, please specify:
- Our laboratory does not provide this testing

9. Does your laboratory perform testing for *Chlamydia trachomatis*? Please check all that apply.

- Yes – Nucleic Acid Amplification testing (NAAT) ➔ Please skip to question 9.a.
- Yes – Nonamplified Nucleic Acid testing (DNA probe)
- Yes – Enzyme Immunoassay
- Yes – Culture
- Other, please specify
- No ➔ Please skip to question 10

9.a. Which specimen types are validated for NAAT Chlamydia screening in your laboratory?

- Self Collected Vaginal Swabs
- Rectal
- Pharyngeal
- Other, please specify
- None ➔ Please skip to question 9b

9.b. What are barriers for performing NAAT screening on the specimen types previously described? Please check all that apply.

- Lack of specimen request
- Lack of specimens to perform validation
- Limited staff
- Reluctance to perform off label verification
- Other, please specify
- No barriers

10. Does your laboratory provide or assure testing for Pertussis (*Bordetella pertussis*)?

- Yes, provide testing
- Yes, assure testing
- Neither provide nor assure ➔ Please skip to question 11

10 a. Which of the following *Bordetella* species does your laboratory identify from clinical specimens, if present? Please check all that apply.

- *B. bronchiseptica*
- *B. holmseti*
- *B. parapertussis*
- *B. pertussis*
- Other: please specify
11. Which of the following methodologies does your laboratory perform for the identification of *Bordetella* sp. directly from clinical specimens? Please check all that apply.

- Culture to Regan Lowe or similar selective media
- Direct Fluorescent Antibody
- Polymerase Chain Reaction
- Other: please specify
- None of the above

12. Does your laboratory provide or assure testing for the following?

<table>
<thead>
<tr>
<th>Laboratory Test</th>
<th>Provide Testing</th>
<th>Assure Testing</th>
<th>Neither Provide nor Assure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viral Isolation for Influenza</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Viral Subtyping for Influenza</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

13. What method(s) are used to identify viral isolates for influenza? Please check all that apply.

- CDC rRT-PCR Influenza Panels
- CPE (Cytopathic Effect) & Hemadsorption
- DFA (Direct Fluorescent Antibody)
- Other (Please specify):
- Do not perform viral isolates

14. What method(s) are used to perform subtyping of influenza isolates? Please check all that apply.

- CDC rRT-PCR Influenza Panels
- IFA (Indirect Fluorescent Antibody)
- Hemagglutinin (HA) & Hemagglutination inhibition (HI)
- Other (Please specify):
- Do not perform subtyping

15. Does your state have any legal requirement for nongovernmental (e.g. clinical, hospital-based) laboratories within your state to send clinical isolates or specimens associated with reportable foodborne diseases to the state public health laboratory?

- Yes
- No
16. For which of the following isolates does your laboratory perform Pulsed-Field Gel Electrophoresis (PFGE) typing?

<table>
<thead>
<tr>
<th>Isolate</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Escherichia coli</em> O157:H7</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Listeria monocytogenes</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salmonella</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shigella</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

17. Does your laboratory provide or assure the following laboratory tests? Please check all that apply.

<table>
<thead>
<tr>
<th>Laboratory Test</th>
<th>Provide Testing</th>
<th>Assure Testing</th>
<th>Neither Provide nor Assure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arbovirus serology</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Hepatitis C serology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legionella serology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles serology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mumps serology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>N. meningitidis</em> serotyping</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plasmodium identification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salmonella serotyping</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shigella serotyping</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Varicella serology</td>
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</tbody>
</table>

18. Does your laboratory provide or assure testing for the following newborn conditions*? Please check all that apply.


<table>
<thead>
<tr>
<th>Newborn condition</th>
<th>Provide Testing</th>
<th>Assure Testing</th>
<th>Neither Provide nor Assure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Panel: OA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-MCC 3-Methylcrotonyl-CoA carboxylase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BKT Beta ketothiolase (mitochondrial acetoacetyl-CoA thiolase; short-chain ketoacyl thiolase; T2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CBL A,B Methylmalonic acidemia (Vitamin B12 Disorders)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GA-1 Glutaric acidemia type 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HMG 3-Hydroxy 3-methylglutaric aciduria (3-Hydroxy 3-methylglutaryl-CoA lyase)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>IVA Isovaleric acidemia (Isovaleryl-CoA dehydrogenase)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCD Multiple carboxylase (Holocarboxylase synthetase)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUT Methylmalonic acidemia (methylmalonyl-CoA mutase)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROP Propionic acidemia (Propionyl-CoA</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Carboxylase)

**Core Panel: FAO**

- **CUD** Carnitine uptake defect (Carnitine transport defect)
- **LCHAD** Long-chain L-3-hydroxyacyl-CoA dehydrogenase
- **MCAD** Medium-chain acyl-CoA dehydrogenase
- **TFP** Trifunctional protein deficiency
- **VLCAD** Very long-chain acyl-CoA dehydrogenase

**Core Panel: AA**

- **ASA** Argininosuccinate academia
- **CIT I** Citrullinemia type I (Argininosuccinate synthetase)
- **HCY** Homocystinuria (cystathionine beta synthase)
- **MSUD** Maple syrup urine disease (branched-chain ketoacid dehydrogenase)
- **PKU** Phenylketonuria/hyperphenylalaninemia
- **TYR-I** Tyrosinemia Type 1

**Core Panel: Hb Pathies**

- **HB S/A** S-βeta thalassemia
- **HB S/C** Sickle – C disease
- **HB S/S** Sickle cell disease

**Core Panel: Others**

- **BIO** Biotinidase
- **CAH** Congenital adrenal hyperplasia
- **CCCHT** Critical Congenital Cyanotic Heart Disease
- **CF** Cystic fibrosis
- **CH** Congenital hypothyroidism
- **GALT** Transferase deficient galactosemia (Classical)
- **HEAR** Hearing screening
- **SCID** Severe Combined Immunodeficiency

19. Is the laboratory testing to support newborn screening in your state integrated with a newborn screening program with follow up services?

- Yes
- No
Section 2: Integrated Data Management

20. Does your laboratory have a single or multiple Laboratory Information Management System (LIMS) that covers all functional areas of the laboratory (e.g., clinical, environmental, newborn screening, etc.)?

- Yes, a single enterprise wide LIMS
- Yes, multiple LIMS
- No → Please skip to question 22

20.a. Has your laboratory implemented the LIMS capability to electronically receive and report laboratory information (e.g., electronic test order and report with hospitals and clinical labs, surveillance data from PHL to Epidemiology)?

- Yes; bidirectional capability to receive and report
- Receive only
- Report only
- No electronic messaging capability at this time → Please skip to question 22

20.b Your laboratory has this capability with which of the following? Please check all that apply

- Agricultural Laboratories
- Centers for Disease Control and Prevention (CDC)
- Environmental Laboratories
- Hospital Laboratories
- Other health departments
- Physician Laboratories (POL)
- Other, please specify
- None of the above

21. Does your LIMS incorporate data standards (e.g., HL7, LOINC, SNOMED) or does your LIMS rely on a Data Integration Engine (e.g. Rhapsody, BizTalk, Mirth)?

- Yes, incorporated within the LIMS
- Yes, rely on Data Integration Engine
- Yes, mixture of LIMS and Data Integration Engine
- No data standards are supported at this time

22. Please select what types of IT professionals your laboratory has on staff. Please check all that apply.

- On-staff (laboratory employees)
- Contract specialists (through vendor or other 3rd party)
- Consolidated IT services (off site, non laboratory staff)
- No IT professionals on staff

23. Did your laboratory purchase or upgrade a LIMS within the last two years?

- Yes, purchased → Please skip to Section 3: Reference and Specialized Testing
- Yes upgraded → Please skip to Section 3: Reference and Specialized Testing
- No
24. Does your laboratory have a budget in place and a plan to purchase or upgrade a LIMS for your laboratory within next two years?

- Yes, purchase
- Yes, upgrade
- No
## Section 3: Reference and Specialized Testing

25. Does your laboratory provide or assure testing for the following diseases and/or organisms?

<table>
<thead>
<tr>
<th>Laboratory Test</th>
<th>Provide Testing</th>
<th>Assure Testing</th>
<th>Neither provide nor assure testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antimicrobial susceptibility testing confirmation for vancomycin resistant <em>Staphylococcus aureus</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anaplasmosis (<em>Anaplasma phagocytophilum</em>)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Babesiosis (<em>Babesia</em> sp.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botulinum toxin – mouse toxicity assay</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dengue Fever</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hantavirus serology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identification of unusual bacterial isolates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identification of fungal isolates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Klebsiella pneumoniae</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbapenemase (<em>bla</em>KPC) by PCR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legionella by culture or PCR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaria by PCR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norovirus by PCR</td>
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<td></td>
<td></td>
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<tr>
<td>Powassan Virus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rabies</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section 4: Environmental Health and Protection

26. Does your laboratory provide or assure testing for the following environmental matrices?

<table>
<thead>
<tr>
<th>Test Matrix</th>
<th>Provide Testing</th>
<th>Assure Testing</th>
<th>Neither provide nor assure testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drinking water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hazardous waste</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private well-water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recreational water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soil and/or solid waste</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Underground storage tanks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste water</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

27. Does your laboratory provide or assure testing for the following types of contaminants in environmental samples? Please check all that apply.

<table>
<thead>
<tr>
<th>Type of Contaminant</th>
<th>Provide Testing</th>
<th>Assure Testing</th>
<th>Neither provide nor assure testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asbestos</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross alpha and gross beta</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inorganic compounds (e.g. nitrates)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microbials</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persistent organic pollutants</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Pesticides (including organophosphates)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radiologic agents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volatile organic compounds</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
28. Does your laboratory provide testing for the following analytes in human specimens? Please check all that apply.

<table>
<thead>
<tr>
<th>Analytes</th>
<th>Provide Testing</th>
<th>Assure Testing</th>
<th>Neither provide nor assure testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross alpha and gross beta</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metals</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Lead</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Pesticides</td>
<td></td>
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<td></td>
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<tr>
<td>Pharmaceuticals</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Radiologic agents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volatile organic compounds</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

29. Does your laboratory perform any industrial hygiene or occupational health testing? Please check all that apply.

- Yes, industrial hygiene
- Yes, occupational health
- No
Section 5: Laboratory Improvement and Regulation

30. Does your state have laws or mandates for the licensure, certification or accreditation of any laboratories that engage in testing of public health significance in clinical or environmental settings? Please check all that apply.

- Yes for licensure
- Yes for certification
- Yes for accreditation
- No → Please skip to question 32

30.a. Does the responsibility for licensing, certifying and/or accrediting laboratories reside with the state public health laboratory? Please check all that apply.

- Yes for licensure
- Yes for certification
- Yes for accreditation
- No (please provide the responsible agency in your state):

31. Which types of laboratories does your state license, certify and/or accredit? Please check all that apply.

<table>
<thead>
<tr>
<th>Type of laboratories</th>
<th>License</th>
<th>Certify</th>
<th>Accredit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical—Under federal (CMS) regulations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical—Under state regulations</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Forensic/Toxicology—e.g., Alcohol/drug testing</td>
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<tr>
<td>Milk/dairy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental (NELAC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental (NonNELAC)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Other (Specify)</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

32. Which of the following provide certification or accreditation of your state public health laboratory? Please check all that apply.

- American Association for Laboratory Accreditation (A2LA)
- American Industrial Hygiene Association (AIHA)
- American Society of Crime Laboratory Directors (ASCLD)
- Clinical Laboratory Improvement Amendments (CLIA)
- College of American Pathologists (CAP)
- Environmental Protection Agency (EPA)
- Food & Drug Administration (FDA)
- National Environmental Laboratory Accreditation Conference (NELAC)
- Society of Forensic Toxicologists (SOFT)
- The Joint Commission (TJC)
- United States Department of Agriculture (USDA)
- Other, please specify:
- None of the above
33. Which of the following International Organization for Standardization (ISO) certifications does your laboratory have? Please check all that apply.

- ISO 17025
- ISO 15189
- None

34. Is your state public health laboratory registered by CDC under the Select Agent Rule?

- Yes
- No
- Application pending

35. Does your state public health laboratory have a USDA/APHIS permit for the importation and transportation of controlled materials, organisms and vectors?

- Yes
- No
- Application pending

36. Has your public health laboratory sponsored laboratory safety trainings, seminars or workshops for the laboratory community in your state or region within the last two years?

- Yes
- No

37. Has your laboratory administered any proficiency testing, split samples or round robin exercises for the laboratory community in your state or region within the last two years?

- Yes
- No
Section 6: Policy Development

38. Does your laboratory regularly provide data to assist in the development of health policy at the following levels? Please check all that apply.

- Local (City or County)
- State
- Federal
- None of the above

39. Does your laboratory director or designee regularly participate in establishing health policy for the state? For example, participating in the development or review of public health guidelines.

- Yes
- No

40. Does your laboratory director or designee regularly participate in developing state specific standards for health related laboratories? For example, participating in the development and oversight of regulations that govern laboratory operations.

- Yes
- No

41. Is the laboratory director part of the state health official’s management team? For example, does the laboratory director regularly meet with the state health director/commissioner?

- Yes
- No

42. Does the laboratory director or designee contribute to the promulgation of state rule making?

- Yes
- No

43. Is the laboratory director or designee responsible for developing and justifying the laboratory budget?

- Yes
- No

44. Was your state involved in any of the following process(es)?

- National Public Health Performance Standards Program (NPHPSP)
- Public Health Accreditation Board (PHAB)
- Other, please specify:
- No ➔ please skip to section 7

45. Was your laboratory or laboratory staff actively involved in the process?

- Yes
- No
Section 7: Public Health Related Research

46. Has your laboratory developed or evaluated new technologies or methodologies in the advancement of public health laboratory practice?
   - Yes
   - No ➔ Please skip to question 47

46.a Did you write up and share with the laboratory community what you developed or evaluated?
   - Yes
   - No

47. Has your laboratory partnered in the conduct of applied or practice-based research with other public health disciplines?
   - Yes
   - No ➔ Please skip to the question 48

47.a What other disciplines did you partner with? Please check all that apply.
   - Environmental Health
   - Epidemiology
   - Maternal and Child Health
   - Newborn Screening Program
   - Occupational Health
   - Public Health Statistics
   - Radiological Health
   - Other (please specify) ___________________________
   - None of the above

48. Does your laboratory have a formal research-supporting relationship (e.g. regular meetings, mutual participation on advisory bodies, and sharing infrastructure for basic or applied research purposes) with a university engaged in research?
   - Yes
   - No

49. Does your laboratory have a formal research-supporting relationship with an academic health center in your state or region?
   - Yes
   - No
50. Has your laboratory (individually or in partnership) applied for grant funding to support any type of research?

- Yes
- No → Please skip to the question 51

50.a. Was your grant application funded?

- Yes
- No → Please skip to question 51

50.b. What type of grant-funded research were you involved with? Please check all that apply.

- Applied
- Basic
- Clinical
- Systems and services
- Translational
- Other, please specify

51. Have any of your laboratory scientists published in peer-reviewed journals, submitted abstracts or posters to scientific meetings, or presented at professional meetings?

- Yes
- No

52. Has your laboratory applied for funding that supports the advancement of public health laboratory science and practice from a source other than the CDC?

- Yes
- No → Please skip to section 8

52.a. From what agencies did you seek funding? Please check all that apply.

- Association of Public Health Laboratories (APHL)
- Environmental Protection Agency (EPA)
- National Institutes of Health (NIH)
- United States Department of Agriculture (USDA)
- Other, please specify
Section 8: Training and Education

53. Which of the following is provided by the state or your laboratory in support of state public health laboratory staff? Please check all that apply.

- In-house training sessions/workshops
- Leave-time offered for scientific meetings, seminars and workshops outside of the worksite
- Travel costs offered for scientific meetings, seminars and workshops outside of the worksite
- Leadership training for supervisors and managers
- Other, please specify:
- None of the above

54. Does your laboratory have a designated State Laboratory Training Coordinator?

- Yes
- No → Please skip to question 55

54.a. What percentage of time does the State Laboratory Training Coordinator spend on performing training activities?

- 0–25%
- 26–50%
- 51–75%
- 76–100%

55. Has your laboratory sponsored or co-sponsored training activities within the past two years?

- Yes
- No

56. Is continuing education for your professional laboratory staff required by the following? Please check all that apply.

- State law/regulation
- Laboratory policy
- Other, please specify:
- Not required

57. Has your laboratory provide any of the following during the past two years? Please check all that apply

- Hosted a fellow
- Hosted a graduate student
- Trained international students
- Provided continuing education training to other laboratories (public or private) staff in your state
- Partnered with academic institutions for training of students
- None of the above
Section 9: Partnerships and Communication

58. Has the state public health laboratory director or designee given any presentations regarding the state public health laboratory functions/services within your state during the past two years?

- Yes
- No

59. Does the laboratory director or designee meet/teleconference on a regular basis (at least quarterly) with other public health laboratory directors/representatives within your state or region?

- Yes
- No

60. Does your laboratory employ an individual whose sole responsibility is to promote partnerships between public and private laboratories within your state (e.g. Laboratory Program Advisor)?

- Yes
- No

61. Does your laboratory have a current directory of testing services available to your clients?

- Yes
- No

62. Which of the following communication tools are used by your laboratory director or designee to send regular communications to clinical or hospital laboratories and other health-care organizations in your state? Please check all that apply.

- Electronic newsletter
- Emails
- Facebook
- Faxes
- Paper newsletter
- Twitter
- Other, please specify
- None of the above
63. Does your laboratory director or designee regularly meet/teleconference with the following? Please check all that apply.

- Local health departments
- Maternal and child health program staff
- Newborn screening program staff
- State Agricultural/Veterinary laboratory staff
- State department of public safety staff
- State environmental health official
- State HIV/STD program staff
- State public health information officer
- State terrorism preparedness lead
- State Tuberculosis program staff
- Other, please specify
- None of the above

64. Is there a Laboratory Advisory Council (or equivalent) that provides guidance and feedback for your overall laboratory operations?
- Yes
- No

65. Does your laboratory conduct any laboratory testing with any tribal agencies (e.g. Indian Health Services, Native American Nations, etc)?

- Yes
- No → Please skip to section # 10

   65.a. Please list the agency (ies).
Section 10: Food Safety

66. For which of the following organisms, does your laboratory provide or assure testing for clinical specimens to assist with foodborne disease outbreak investigations? Please check all that apply.

<table>
<thead>
<tr>
<th>Organisms</th>
<th>Provide Testing</th>
<th>Assure Testing</th>
<th>Neither provide nor assure testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacillus cereus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brucella sp.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campylobacter sp.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clostridium botulinum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clostridium perfringens</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cryptosporidium sp.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyclospora cayetanensis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listeria monocytogenes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norovirus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salmonella sp.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shigella sp.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staphylococcus aureus (from stool)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEC non-O157</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEC O157</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vibrio sp.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yersinia enterocolitica</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

67. For which of the following organisms, does your laboratory provide or assure testing for in food and or water samples to assist with foodborne disease outbreak investigations? Please check all that apply.

<table>
<thead>
<tr>
<th>Organisms</th>
<th>Assure</th>
<th>Provide</th>
<th>Neither assure nor provide testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacillus cereus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brucella sp.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campylobacter sp.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clostridium botulinum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clostridium perfringens</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cryptosporidium sp.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyclospora cayetanensis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listeria monocytogenes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norovirus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salmonella sp.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shigella sp.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staphylococcus aureus (from stool)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>STEC non-O157</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEC O157</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vibrio sp.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yersinia enterocolitica</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
68. Does you laboratory perform Pulse-Field Gel Electrophoresis (PFGE) on isolates recovered from food samples?
   ○ Yes
   ○ No

69. Does your laboratory provide or assure for the following tests in food samples? Please check all that apply.

<table>
<thead>
<tr>
<th>Test</th>
<th>Provide Testing</th>
<th>Assure Testing</th>
<th>Neither provide nor assure testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergens</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arsenic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biotoxins</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyanide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy metals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Histamines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marine toxins</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oil dispersants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pesticides/residues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polyaromatic hydrocarbons</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfites/sulfates/nitrites</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volatile and semi-volatile organic compounds</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

70. Which of the following, if any, present significant barriers to your laboratory’s ability to test food samples related to foodborne illness? Please check all that apply.

   ○ Lack of available staff
   ○ Lack of trained staff
   ○ Lack of necessary equipment
   ○ Lack of necessary reagents and supplies
   ○ Lack of epidemiological follow-up
   ○ Not in core mission
   ○ Other, please specify
   ○ None of the above

71. Do you have a dedicated laboratory space for testing food samples which is physically separate from clinical sample testing?

   ○ Yes
   ○ No

72. Does your laboratory have a written plan for coordination and communication with any other agency in your jurisdiction in the event of a foodborne disease emergency?

   ○ Yes
   ○ No→ Please skip to question 73
72.a. Is the plan with any of the following agencies? Please check all that apply

- State or local agriculture program
- State/local environmental health program
- State/local epidemiology program
- State/local food regulatory agency
- State/local public health program
- Other- please specify:

73. Does your laboratory participate in the Food Emergency Response Network (FERN)?

- Yes
- No→ Please skip to section 11

73.a In which of the following FERN disciplines do you participate? Please check all that apply.

- Microbiology
- Chemistry
- Radiology
- Other- please specify
Section 11: Public Health Preparedness and Response

74. Within the last two years, did your laboratory sponsor any Laboratory Response Network for Bioterrorism (LRN –B) sentinel clinical laboratory training in your state?

- Yes
- No

75. Does your laboratory have ready access to current contact information as well as the capabilities of all sentinel clinical laboratories in your state? Please check all that apply.

- Yes, have contact information
- Yes, have capabilities
- No

76. Do you provide or assure that a performance measurement system is in place to assess the competency of sentinel laboratories to rule out BT agents (using mock/surrogate agents)? Please check all that apply.

- Yes, using the College of American Pathology Laboratory Preparedness Exercise (CAP-LPX)
- Yes, using a in-house prepared challenge
- Yes, using another mechanism; specify: ________________
- No

77. Have you utilized your rapid method [e.g. Health Alert Network (HAN), blast e-mail or fax] to send messages to your LRN sentinel laboratories and other partners? Please check all that apply.

- Yes, for outbreaks
- Yes, for routine updates
- Yes, for training events
- Other, please specify:
- No

78. In case of an emergency, does your laboratory have any of the following in place? Please check all that apply.

- A 24/7/365 contact system
- An intra-state courier system (non-mail) that is available 24 hours/day for emergency specimen pick-up and delivery
- A continuity of operations plan (COOP)
- A surge capacity plan
- Other; please specify:
79. Which of the following describe your laboratory? Please check all that apply.

- LRN-B, Reference Laboratory
- LRN-C, Level 1 Laboratory
- LRN-C, Level 2 Laboratory
- LRN-C, Level 3 Laboratory
- LRN-R Laboratory
- ERLN Laboratory
- Other-please specify
- None of the above

80. Does your laboratory provide or assure testing for the following sample types in the event of suspected chemical terrorism?

<table>
<thead>
<tr>
<th>Sample types</th>
<th>Provide testing</th>
<th>Assure testing</th>
<th>Neither provide nor assure testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical specimens</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Samples</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

81. Please indicate the number of preparedness exercises that your SPHL conducted or participated in during the last two years.

<table>
<thead>
<tr>
<th>Table-top Exercises</th>
<th>Drills</th>
<th>Functional Exercise</th>
<th>Full-Scale Exercise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioterrorism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Terrorism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-hazards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pandemic flu preparedness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radiological Terrorism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other, please specify</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

82. Within the last two years, in which of the following LRN Proficiency testing categories did your laboratory participate and what percentage were a passing grade?

<table>
<thead>
<tr>
<th>Passed &gt;50% of proficiency tests</th>
<th>Passed 50% of proficiency tests</th>
<th>Passed &lt; 50% of proficiency tests</th>
<th>Did not participate in proficiency testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRN-B, Reference Laboratory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LRN-C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other: please specify:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>