

Lab Technology Assessment

This brief assessment was developed to assess the current impact of new test technologies. It addresses the impact of technology change on infectious disease surveillance (case definition and classification).

Please submit one completed response per jurisdiction. The assessment will take approximately 10-15 minutes to complete. Additional time may be needed to contact personnel in various program areas to obtain all of the information needed to complete the assessment. All responses are confidential and any information made public will have no jurisdiction-specific information. Aggregate, de-identified results will be shared with you.

1. Jurisdiction:

2. Name of person completing assessment:

3. Email address of person completing assessment:

4. Have you encountered laboratory reports diagnostic for reportable infectious diseases which do not meet laboratory criteria for the relevant case definition (no culture isolate, test not listed in case definition, etc.)?

- ☐ Yes
- ☐ No
- ☐ Unsure

Lab Technology Assessment

5. If Yes, test results for what situations (check all that may apply):

- ☐ Enteric bacterial pathogens
- ☐ Enteric parasites
- ☐ Respiratory bacteria
- ☐ Respiratory viruses
- ☐ Bacteremia
- ☐ Point-of-care or rapid test
- ☐ Not applicable
- ☐ Other (please specify)

6. For tests indicated in question #5, list specific laboratory test type(s) you have encountered:

7. When you encounter a “new” laboratory test result not listed in the case definition (or if you do), do you (would you)? [check all that apply]:

- ☐ Mark as “non-reportable” and set aside
- ☐ Keep track of it separate from what you report for state/local surveillance and to CDC (i.e. track internally)
- ☐ Classify as “suspect” or “possible”
- ☐ Classify as “probable”
- ☐ If clinical criteria satisfied, treat as equivalent to the case definition laboratory criteria
- ☐ Send to CDC with some classification
- ☐ Other (please specify)

Lab Technology Assessment

8. How do you classify *Neisseria meningitidis* infection case patients identified only with PCR test results?

- ☐ Keep track of it separate from what you report for state/local surveillance and to CDC (i.e. track internally)
- ☐ Classify as "suspect" or "possible"
- ☐ Classify as "probable"
- ☐ If clinical criteria satisfied, treat as equivalent to the case definition laboratory criteria
- ☐ Send to CDC with some classification
- ☐ Other (please specify)

9. Do you report *Haemophilus influenzae* type B infection cases identified only with PCR test results to the CDC through the NNDS?"

- ☐ Yes
- ☐ No
- ☐ Unsure

10. What is the estimated % of *H. influenzae* type B infection cases that are reported to you with a PCR laboratory report only?

- ☐ 0%
- ☐ 1-5%
- ☐ 6-15%
- ☐ 16-25%
- ☐ > 25%

11. Does your public health laboratory offer PCR testing for *Neisseria meningitidis*?

- ☐ Yes
- ☐ No
- ☐ Unsure

12. Does your public health laboratory offer PCR for *H. influenzae* type B?

- ☐ Yes
- ☐ No
- ☐ Unsure

13. In the event of a non-culture test result for a reportable disease for which the case definition stipulates an isolate for classification, do you (would you)?:

- ☐ Request an isolate be obtained
- ☐ Require an isolate to be obtained (regulation or rule)
- ☐ Request an isolate be voluntarily submitted to the public health laboratory for confirmation
- ☐ Require an isolate be submitted to the public health laboratory (regulation or rule)
- ☐ None of the above

14. Have you considered mechanisms for reporting of (any) point-of-care or rapid tests to your health department?

- ☐ No
- ☐ Considered or considering*
- ☐ In process of development*
- ☐ Required*

*Please explain

Lab Technology Assessment

15. Please choose the best answer (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree) for each of the following questions:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. I consider non-culture diagnostic tests to be a future problem for public health surveillance	☐	☐	☐	☐	☐
b. I consider non-culture diagnostic tests to be a current problem for public health surveillance	☐	☐	☐	☐	☐
c. I consider point-of-care tests to be a future problem for public health surveillance	☐	☐	☐	☐	☐
d. I consider point-of-care tests to be a current problem for public health surveillance	☐	☐	☐	☐	☐
e. CDC should define alternative test results as an acceptable case classification pending revision of case definition laboratory criteria	☐	☐	☐	☐	☐
f. CSTE should define alternative test results as an acceptable case classification pending revision of case definition laboratory criteria	☐	☐	☐	☐	☐

Lab Technology Assessment

16. On a scale of 1 to 5, with 1 being least important and 5 most important, how would you rate the following consequences of new laboratory test methods?

	1	2	3	4	5
a. Test result does not match laboratory criteria for case definition	☐	☐	☐	☐	☐
b. Need for consistency in surveillance across jurisdictions	☐	☐	☐	☐	☐
c. Clinicians and patients accepting the results as diagnostic	☐	☐	☐	☐	☐
d. Potential inability to classify cases by laboratory criteria	☐	☐	☐	☐	☐
e. Loss of reported test result because of point-of-care/rapid test	☐	☐	☐	☐	☐
f. Need for frequent revision of case definitions to keep up with laboratory method changes	☐	☐	☐	☐	☐
g. Lack of knowledge of validity of the test (sensitivity/specificity)	☐	☐	☐	☐	☐
h. Lack of information about test methodology and interpretation of results	☐	☐	☐	☐	☐
i. Loss of bacterial isolates for molecular epidemiology	☐	☐	☐	☐	☐
j. Difficulty keeping up with mapping of new results for electronic laboratory reporting	☐	☐	☐	☐	☐

17. Please include any additional comments or suggestions you may have.

All responses are confidential and any information made public will have no jurisdiction-specific information. Aggregate, de-identified results will be shared with you.

CSTE appreciates your time spent in completing this brief assessment. If you have any questions, please contact Nicole Bryan at the CSTE National Office at nbyran@cste.org or 770-458-3811.