

Laboratory

CSTE DSWG Data Element Specific Team

08/09/2024



Council of State and Territorial Epidemiologists

Please mute phone/ headset/ computer audio!

Agenda

- Welcome & Announcements
- Laboratory data element discussion and polling
- Next Steps
- Wrap-Up & Adjourn

DEST Opportunities for Participation



- The Data-element Specific Team (DEST) Interest Sign-Up sheet has been updated to include known future data classes:
- Reporting Source
 - First call 8/16
- Social Determinants of Health
 - First call 9/20
- Race/Ethnicity/Tribal Affiliation

Link to Sign-Up sheet:

<https://app.smartsheet.com/b/form/3da89d48bda94fc7a33c4a8a505fe54a>

If you have signed up previously but feel you are not getting the emails/meeting invites that you expected to get, please reach out directly to llane@j michael consulting.com.

- Out for DSWG-level review:
 - Exposures, Risk Factors, and Underlying Conditions
 - Signs, Symptoms, and Clinical Manifestations
- Coming soon for DSWG-level review
 - Disability
- Coming soon for DEST-level review
 - Identifiers
 - Medications

NOTE:

All drafts released for DEST/DSWG review are drafts and the resulting recommendations passed to CSTE for final steps have not been made available. Please do not pass on draft documents as final products.

Meeting ground rules



- Discussion Guidelines
 - "Raise" your hand
 - Use the chat to provide feedback and ask questions
 - When called, state your name and affiliation
 - Stay on point, be brief, and within the context of the discussion in progress
 - 80/20 consensus
 - Co-Chairs/moderators' prerogative to move the discussion forward as needed
 - [Post-meeting survey](#) provided for additional input
 - Be courteous and be open to new ideas
- **Active participation encouraged for all!**
 - Chats, voting, comments, etc.
 - Includes STLT jurisdictions + CDC Programs + CSTE, etc.

In-scope vs Out-of-scope



What this is:

- Discussion about data elements/classes which are:
 - collected at the jurisdiction and sent to CDC for surveillance purposes
 - Abstracted, calculated, or derived from a combination of electronic sources, patient interviews and chart abstractions
- Collaborative consensus building about the best ways to approach the transmission of public health data in a standardized way

What this is not:

- Discussion of data elements for research studies
- Recommendations for public facing surveys
- Limitations on what can be collected for a data element within a jurisdiction
- Recommendations for how to ask about data elements in a case interview
- Implementation guidance

Laboratory Data Elements (Part 1)



Laboratory in two parts...



- Goal: Standardized Laboratory Reporting Group
- Today's call is only the first of at least two calls related to laboratory information in case notifications.
 - Test Performed
 - Test Results
 - Specimen Type (if time allows)
 - Specimen Source Site (if time allows)
- Future data elements listed on upcoming slide

Laboratory: Current State



- Lyme/TBRD v1 MMG

Data Element Name	Data Element Description	Data Type	Value Set Name
START: Epidemiology Laboratory Repeating Group			
Test Type	Epidemiologic interpretation of the type of test(s) performed for this case	Coded	Lab Test Type (Lyme)
Test Result	Epidemiologic interpretation of the results of the test(s) performed for this case. This is a qualitative test result (e.g., positive, negative, not done).	Coded	Lab Test Interpretation
Test Result Quantitative	Quantitative Test Result Value. Provide titer (if applicable).	Text	N/A
Result Units	Units of measure for the Quantitative Test Result Value	Coded	Units of Measure
Organism Name	Species identified through testing	Coded	Organism (Lyme)
Specimen Type	This indicates the type of specimen tested.	Coded	Specimen Type (Lyme)
Specimen Collection Date/Time	Date of collection of laboratory specimen used for diagnosis of health event reported in this case report. Time of collection is an optional addition to date.	DateTime	N/A
END: Epidemiology Laboratory Repeating Group			

Laboratory: Current State



- COVID-19 v1.2 MMG

Data Element Name	Data Element Description	Data Type	Value Set Name (VADS Hyperlink)
START: Epidemiology Laboratory Repeating Group Section			
Test Type	Epidemiologic interpretation of the type of test(s) performed for this case	Coded	Lab Test Type (COVID-19)
Specimen Source	This indicates the source of the specimen tested	Coded	VPD Specimen Type
Test Result	Epidemiologic interpretation of the results of the test(s) performed for this case. This is a qualitative test result. (e.g, positive, detected, negative)	Coded	Lab Test Interpretation (VPD)
Test Result Quantitative	Quantitative Test Result Value	Text	N/A
Result Units	Units of measure for the Quantitative Test Result Value	Coded	Units of Measure
Specimen Collection Date	Date of collection of laboratory specimen used for diagnosis of health event reported in this case report.	DateTime	N/A
Performing Laboratory Specimen ID	A laboratory generated number that identifies the specimen related to this test	Text	N/A
Performing Laboratory Type	Performing laboratory type	Coded	Performing Laboratory Type (VPD)
WGS ID Number	Genomic sequencing ID number.	Text	N/A
END: Epidemiology Laboratory Repeating Group Section			

Laboratory: Current State



- CDC Minimal Data Necessary (MDN) for Case Notifications

Data Element Name	Data Element Description
Test Name	Type of test(s) that was performed on the specimen collected
Test Result	Documented findings of the analysis of a tested specimen. Includes both structured and unstructured (narrative) components.
Specimen Type	Substance being sampled or tested. Examples include but are not limited to nasopharyngeal swab, whole blood, serum, urine, and wound swab.

Other lab-related data elements:

- Earliest Specimen Collection Date Associated with a Positive Lab Result
- Earliest Result Date of a Positive Lab Result

Proposed Data Elements: Part 1



Data Element	Definition	Value Set
Test Performed	Code for the lab test or analysis that was performed on the specimen	LOINC (ORDER_OBS= "Observation" OR "Both")
Test Result	Qualitative or quantitative results for test performed. This can include various types of results such as numeric, coded, text, or other types relevant to the specific result.	SNOMED-CT (for coded results)
Test Result – Units of Measure	Units of measure for the test result value, if applicable.	Unified Code for Units of Measure
Test Result – Reference Range	Reference range of the test result, if applicable.	N/A

Proposed Data Elements: Future Call



- Specimen Type (*today if time allows*)
- Specimen Source Site (*today if time allows*)
- Test Method
- Specimen Collection Date
- Date/Time of Lab Result
- Whole Genome Sequencing (WGS) ID Number

Proposed Data Element: Test Performed



Data Element	Definition	Value Set
Test Performed	Code for the lab test or analysis that was performed on the specimen.	Any valid LOINC code plus Other with the option to specify.

- CDC would be able to accept all valid LOINC codes
- No local codes accepted outside of the Other text option
- No condition-specific lists

Proposed Data Element: Test Performed



Data Element	Definition	Value Set
Test Performed	Code for the lab test or analysis that was performed on the specimen.	Any valid LOINC code plus Other with the option to specify.

Discussion Points:

- Definition – comments/concerns?
- Value Set
 - lack of Local codes?
 - Large potential value set?

Proposed Data Element: Test Result



Data Element	Definition	Value Set
Test Result	Qualitative or quantitative results for test performed. This can include various types of results such as numeric, coded, text, or other types relevant to the specific result.	SNOMED-CT (for coded results), includes Other to capture

- Data type would be specified in the OBX-2
- Value set would include APhL SCT extension codes (previously PLR codes)
- No condition-specific lists

Proposed Data Element: Test Result



Data Element	Definition	Value Set
Test Result	Qualitative or quantitative results for test performed. This can include various types of results such as numeric, coded, text, or other types relevant to the specific result.	SNOMED-CT (for coded results), includes Other, specify to capture

Discussion Points:

- Can all test type results (coded organism/coded epidemiological interpretive/quantitative) be sent via one unifying data element?
- Value Set
 - lack of Local codes

Polling process



- Poll questions will be shown first on a slide before the poll opens
 - Opportunity for clarifications & questions
- There will be an opportunity for limited discussion on questions with a big split, as time allows
- Participant voting

DSWG membership has grown to include many experts and interested participants. The following guidance is requested for participating in polling:

 - Only STLTs (State, Territorial, Local, and Tribal) and Federal authorities should vote.
 - Contractors and individuals from other organizations are requested to abstain from voting unless they have specific and relevant expertise in the topic.
 - Comments and discussion are welcomed by all, but voting remains with the STLTs and federal authorities.

Poll 1 – Standardized Lab Group



For jurisdictional partners only:

Is a standardized lab group in which all types of lab results are sent in the same set of data elements and Test Results are all sent via one data element something which would be feasible in your surveillance system?

- Yes
- No
- Unsure
- I need to consult with others at my jurisdiction.

Proposed Data Element: Units of Measure/Reference Range



Data Element	Definition	Value Set
Test Result – Units of Measure	Units of measure for the test result value, if applicable.	Unified Code for Units of Measure
Test Result – Reference Range	Reference range of the test result, if applicable.	N/A

Points of Discussion:

- Concerns or questions?
- Are these core data elements?
- How do people feel about abnormal flag (OBX-8) as a potential data element?

Poll 2 – Units of Measure as Core



Do you think that Units of Measure as defined below should be included as a core surveillance data element for a standardized laboratory block?

- Yes
- No
- Unsure

Data Element	Definition	Value Set
Test Result – Units of Measure	Units of measure for the test result value, if applicable.	Unified Code for Units of Measure

Poll 3 – Reference Range as Core



Do you think that Reference Range as defined below should be included as a core surveillance data element for a standardized laboratory block?

- Yes
- No
- Unsure

Data Element	Definition	Value Set
Test Result – Reference Range	Reference range of the test result, if applicable.	N/A

Proposed Data Elements: Specimen Type/Source Site



Data Element	Definition	Value Set
Specimen Type	The type of specimen used in testing the resulted lab test.	SNOMED Specimen hierarchy
Specimen Source Site	This indicates the anatomical source of the specimen tested.	SNOMED Body Site hierarchy

- Acknowledgement that these codes would depend on them being sent to public health
- Other, specify option would be included for both
- No expectation of these being derived from LN code

Proposed Data Elements: Specimen Type/Source Site



Data Element	Definition	Value Set
Specimen Type	The type of specimen used in testing the resulted lab test.	SNOMED Specimen hierarchy
Specimen Source Site	This indicates the anatomical source of the specimen tested.	SNOMED Body Site hierarchy

Discussion points:

- How useful are these data elements? How readily available?
- Questions/Comments on value sets?
- Should these be included as core surveillance data elements in a standardized laboratory group?

Next Steps



- Next Laboratory Reporting call on 9/13.
- Upcoming team meetings:
 - 8/16 1-2pm ET– Reporting Source
 - 9/20 1-2pm ET – first SDOH DEST call
 - [Link to Sign Up](#)
- The next large DSWG call will be on 30 August 2024.

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