How to Report COVID-19 Laboratory Data

The public health response to COVID-19 depends on comprehensive laboratory testing data. These data will contribute to understanding disease incidence and testing coverage, and can contribute to the identification of supply chain issues for reagents and other material. The information below outlines reporting requirements for laboratories.

CDC is working with state health departments to collect SARS-CoV-2 laboratory testing data that they already receive from most clinical laboratories. CDC also receives SARS-CoV-2 testing data directly from state and local public health laboratories, a few large commercial laboratories, and its own laboratories. For assistance with reporting SARS-CoV-2 testing results, please send an email to DLSinquiries@cdc.gov.

State public health laboratories and select large commercial laboratories that currently report directly to CDC should continue sending that data.

U.S. Hospitals

All U.S. hospital laboratories should submit their COVID-19 testing information via electronic messages or file uploads to their state or large local health department, which in turn sends deidentified reports to CDC. In an effort to reduce the burden placed on U.S. hospital laboratories, CDC will handle submission of the data to the federal Department of Health and Human Services' HHS Protect System.

Reporting to State or Local Health Departments

All U.S. hospital laboratories should report COVID-19 laboratory test information to their state health or local health department by following their normal protocol for reporting reportable conditions. Numerous states made COVID-19 a reportable condition in January 2020. Additionally, on April 5, 2020, the Council of State and Territorial Epidemiologists issued an interim position statement that created a standardized case definition and made COVID-19 a nationally notifiable condition. The document outlines disease-specific data elements that are expected to be included when reporting cases of COVID-19 to public health agencies.

Additionally, electronic reporting options are available to reduce burden on hospital staff. Hospital laboratories that are not currently reporting electronically to their state or local health department and want assistance in establishing electronic reporting can contact CDC's Emergency Operations Center, Laboratory Working Group at eocevent405@cdc.gov.

Reporting to the U.S. Department of Health and Human Services' HHS Protect System

Any U.S. hospital laboratory that is reporting to their state or local health department will not need to also report to the HHS Protect System. However, U.S. hospital laboratories that opt to report directly to the HHS Protect System are requested to report aggregate test information in accordance with the instructions provided by HHS Secretary Azar in an April 10, 2020 letter .

Detailed information about what to report to the HHS Protect System can be found in the HHS letter. Questions about the HHS Protect System can be submitted to Protect-ServiceDesk@hhs.gov.

How to report using standard terminology

CDC has posted a LOINC In-Vitro Diagnostic (LIVD) Test Code Mapping Guide for SARS-CoV-2 test results for clinical laboratories and instrument manufacturers for tests with emergency use authorization from the U.S. Food and Drug Administration (FDA). This specification supports the use of standardized LOINC and SNOMED Clinical Terms (CT) codes to improve the accuracy of reporting tests for the SARS-CoV-2 virus. Using these harmonized LOINC and SNOMED-CT codes helps ensure that the same type of test is represented uniformly across the United States.

For those COVID-19 tests that have not yet received FDA emergency use authorization, CDC encourages test developers and laboratories that use SARS-CoV-2 tests to work together to obtain appropriate and interoperable LOINC and SNOMED-CT codes for reporting purposes.

LOINC codes should be used to represent the "question" a viral test asks of a specimen (e.g., does this specimen have SARS-CoV-2 RNA?), and SNOMED-CT codes should be used to represent the diagnostic "answer" (e.g., what was detected?). More background on these terminology standards can be found here:

- LOINC Term
- SNOMED CT

Whenever possible, laboratories should use standard codes that already exist. Before requesting a new code, search the list of currently available LOINC for SARS-CoV-2 tests. If a LOINC test code cannot be identified whose attributes appropriately match the test for which coding is needed, new terms can be submitted, and a new code requested through the LOINC.

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