Guidelines: Onboarding and Reporting COVID-19 Electronic Lab Results

Texas DSHS CSV Submission

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Version 1.2

TEXAS Health and Human Services | Texas Department of State Health Services

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Background

The ideal standard for reporting electronic laboratory report (ELR) results to the Texas Department of State Health Services (DSHS) is through Health Level 7 International (HL7) data standards. Data submitted via HL7 adheres to strict standards for exchange, integration, sharing, and retrieval of electronic health information. Prior to COVID-19, DSHS only accepted ELRs via HL7 standard to ensure conformance to the highest data quality. The COVID-19 pandemic caused the need for an alternative method of lab reporting for facilities unable to meet the HL7 reporting standard. Accordingly, DSHS developed an alternative reporting method via the approved comma separated value (CSV) file format.

This document outlines the requirements and specifications for facilities submitting results in the 56-column CSV file format to DSHS for import into the Texas National Electronic Disease Surveillance System (NEDSS). NEDSS is the primary public health laboratory management and infectious disease surveillance system in Texas. NEDSS is a secure, collaborative infectious disease integration platform where local, regional, and state public health authorities manage. Data submitted through NEDSS is also transmitted to the Centers for Disease Control and Prevention (CDC).

Currently, there are three main types of tests conducted to identify SARS-CoV-2 including molecular, antigen, and serological (antibody) tests. Each test conducted is reportable to DSHS including positive, negative, and indeterminate results. This guide is designed to help orient both traditional and non-traditional lab facilities (e.g., facilities performing in-house testing that do not typically report to DSHS) through the process of registering, testing, and onboarding to DSHS via the approved CSV file format.

If a facility is currently submitting via CSV file format and prefers to change submission process to HL7, please email the Public Health Informatics & Data Exchange Group (COVID- 19ELR@dshs.texas.gov) to request this change.

Facilities may be able to create and extract reports from an electronic medical record (EMR) software or from a laboratory information management system (LIMS). ELRs may also be created manually. If completed manually, a facility would typically enter the data into an Excel spreadsheet and save the completed file in the required CSV (MS-DOS) file format. The file is transmitted to DSHS through a secure file transfer protocol (sFTP) connection. Facilities preparing to use this route must have a basic understanding of the standards of reporting, as well as technical ability to create and send the daily ELR file successfully.

Requirements for Reporting SARS-CoV-2 (COVID-19) Laboratory Results in Texas

State Requirements

On March 24, 2020, **Governor Greg Abbott issued an order** (since renewed) requiring every public and private entity conducting in-house/on-site SARS-CoV-2 (COVID-19) testing utilizing an FDA-approved test, including an emergency use authorization test, for human diagnostic purposes of COVID-19, to submit to the Texas Department of State Health Services (DSHS), as well as to their local health department, daily reports of all test results, including positive, negative, and indeterminate results. Lab results for COVID-19 are required to be reported through the **Texas Administrative Code Chapter 97** and the **Texas Health and Safety Code Chapter 81**.

Federal Requirements

The Coronavirus Aid, Relief, and Economic Security (CARES) Act and **the June 4 implementation guidance** require every COVID-19 testing site to report every diagnostic and screening test performed to detect SARS-CoV-2 or to diagnose a possible case of COVID-19 (e.g., molecular, antigen, antibody) to the appropriate state and/or local public health department, based on the individual's residence.

Ask on order entry (AOE) questions are additional questions that provide information about the patient's life context. There are seven AOE questions recommended by the CARES Act (**CARES Act Section 18115**) that have been adopted by the state of Texas. These additional data elements are present in the 56 column CSV template. Facilities that order tests electronically must ensure their EMRs (Electronic Medical Record) can collect and ingest this information.

Who is required to report?

All facilities or entities conducting in-house/on-site testing (tests that are not sent to a reference lab) for COVID-19 are required to report to DSHS and to their local health department. Facilities required to report include but are not limited to laboratories, hospitals, clinics, pharmacies, long term care facilities, schools, workforce settings, and other entities conducting in-house/on-site testing.

Tests performed by an off-site reference lab should be reported to DSHS by the performing lab.

What information is required to be reported?

All SARS-CoV-2 (COVID-19) test results are required to be reported. All results including positive, negative, and indeterminate results must be reported. This includes all point-of-care (POC) test results as well. Results for all persons tested in the state of Texas must be reported, regardless of the patients' residence. Additionally, results for any Texas residents tested outside of the state must be reported to DSHS.

DSHS provides submitters with resources, including a template and data dictionary, that demonstrate all data fields required for reporting. They also describe other data entry and formatting requirements.

When are lab results required to be reported?

Results are required to be reported within 24 hours of test being resulted.

To whom are lab results required to be reported?

Results are required to be reported to both DSHS at the state level and to the local health authority at the local level. All facilities conducting in-house/on-site reporting must register and report to DSHS. If a facility is in Texas the facility must also contact their **local health authority** to ensure they are compliant with the local

directive for reporting. Local health authority directives may vary from faxing to submitting an electronic lab report file directly to them. Note that DSHS does not accept COVID-19 results via fax, phone, or email.

How are lab results required to be reported?

Lab results can either be reported via HL7 message format or via the 56-column CSV reporting template. To report test results, regardless of reporting method, facilities must first register with DSHS and then comply with each step of the process. Facilities will have to understand the required data templates, formatting, and data validity requirements as detailed in the COVID-19 lab reporting template and the COVID-19 lab reporting data dictionary.

Facilities should consult their local health department to ensure they are meeting their local health department directives.

Why are lab results required to be reported?

Complete and timely lab data is essential to COVID-19 mitigation efforts to reduce the spread of COVID-19.

Tips for Getting Started on Reporting COVID-19 Tests

All facilities should follow steps 1-6:

1. Ensure that the tests run by your facility are authorized by the FDA by visiting the FDA Emergency Use Authorization (EUA) website.
2. Be sure to register your facility with DSHS to report test results. You will be contacted by DSHS via email within 1-3 business days with further instructions.
3. Thoroughly review the following documents. These will be in the email we send you or you can find them at our submitter resources website. This will allow you to refer to resources quickly and easily.
   a. CSV Reporting Guidelines (this document)
   b. CSV clean reporting template
   c. Data dictionary
4. Design a plan for reporting. The plan should clearly define duties and expectations of all team members who will be involved in the lab reporting process.
5. Add the following email addresses to your contacts lists to ensure important communications are not labeled as spam:
   a. COVID-19ELR@dshs.texas.gov
   b. IDI@dshs.texas.gov (for HL7 reporting)
6. If you need help or guidance along the way, feel free to email either of the above addresses.

In addition to the tips above, non-traditional lab facilities and/or facilities primarily conducting Point-of-Care (POC) antigen testing should also follow the steps outlined below:

7. Verify that your CLIA number (e.g., ten digit ##D#######) is valid by using one or both websites:
   a. https://www.cdc.gov/clia/LabSearch.html
   b. https://qcor.cms.gov/main.jsp
   c. If your CLIA does not appear on these sites, we will reach out to you to inform you that the CLIA is not valid. When we do, please send us proof of CLIA registration. Make sure you have this documentation ready.
8. If you are not already conducting tests at your facility, create a workflow that ensures you are able to capture all the data elements listed in the CSV template and data dictionary.
   a. Assemble a team of experts to develop a plan for reporting from your facility. We recommend your team include some or all the following members:
      i. Healthcare professionals: e.g., nursing professional who understands the testing process and medical terminology
      ii. Personnel who are performing testing: e.g., individual who will identify days and times testing is conducted, data to be collected, and recording of data for reporting needs
      iii. Individual with technical knowledge: e.g., an administrator who can format spreadsheets to meet our requirements and who can enter data daily for reporting
      iv. Report writers: e.g., staff who can interpret the reporting guidelines, data dictionary, different codes, and other required components
   b. Documenting the overall workflow of testing at your facility may be helpful.
9. You can prepare for reporting by:
   a. Reviewing the required data fields and ensuring you know where those data elements will be obtained.
   b. Reviewing the data dictionary to ensure your data conforms to our requirements.
   c. Some fields require that you reference websites and other resources. Review the data dictionary to familiarize yourself with those resources.
10. Follow any guidance or instructions you receive from DSHS. You may receive requests for additional data or for corrections. Correspondence will be sent to the email address on file for your facility from the **COVID-19ELR@dshs.texas.gov** email account.

Registration

To begin the reporting of COVID-19 lab results to DSHS, please register online. Complete and submit the form. It is critical that the contact information, including name, email addresses, and phone numbers submitted are entered correctly on the form and are actively monitored by your organization. If this information changes, please notify us as soon as possible.

You will need the CLIA number for your facility. Please verify that your CLIA is correct. If you are registering with more than one reporting facility, please complete the registration process for each facility with a unique CLIA number. If you have many facilities to register, please email COVID-19ELR@dshs.texas.gov for guidance on how to best proceed.

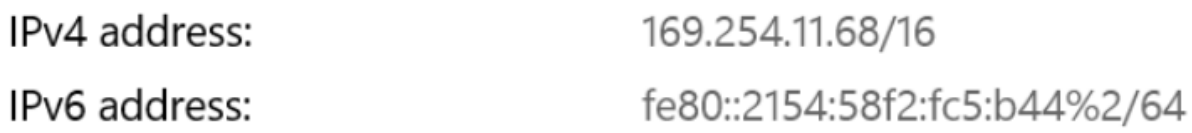
Next Steps:

Once the registration has been completed and submitted, the DSHS Public Health Informatics and Data Exchange Group will email the instructions for the onboarding process to the points of contact listed in the registration form. This is usually within 1-3 business days after registration submission.

As you await further instructions you can prepare by identifying your external or public internet protocol IP(s) address.

If you do not know your external or public internet protocol IP(s) address you can find it by doing the following:

1. Go to Google
2. Type “what is my IP” in the search prompt
3. The IP will appear and will look similar to the following:



Determine what your external/public IP is (we need the IPv4 or IPv6 address). After receiving the email from DSHS with the onboarding instructions, click “reply all” and send your external/public IP information. **Please note**: Provide either an appropriate legal @domain business email address or business handle email address to continue with the ELR onboarding process. The reporting legal facility name and CLIA number will be in the email *Subject* line. ***Please do not remove or change the subject line of the email.***

sFTP Client

Once we receive the external IP, we will send you an encrypted email containing your username to access our Secure File Transfer Protocol (sFTP). We will send a separate encrypted email containing your sFTP password. You will need that information to connect to the DSHS server. Credentialing issuance will take approximately 1-3 business days to process.

sFTP is a file protocol for transferring secure files over the web. To transfer files to our sFTP, you will need to have an sFTP client installed to send data securely.

Downloading a sFTP Client:
If you do not already have a sFTP client, you will need to obtain one. There are several free sFTP clients available for free download online. If applicable, you should consult with your Information Technology (IT) department prior to downloading. If you would like additional instructions on this, please send an email to **COVID-19ELR@dshs.texas.gov.**

Familiarizing Yourself with Reporting Expectations

Open all the attachments in the "Post ELR Info" email you received after registering.
If you have not yet received this email and more than 3 business days have passed since you submitted your registration form, then send an email to **COVID-19ELR@dshs.texas.gov**.

There should be at least three attachments included in the email:

1. This CSV Reporting Guidance document
2. A CLEAN template
3. DATA DICTIONARY

Learn more about each field by reviewing the column headers in the DATA DICTIONARY. The data dictionary will explain each field in more detail, including things to avoid and important rules for data entry.

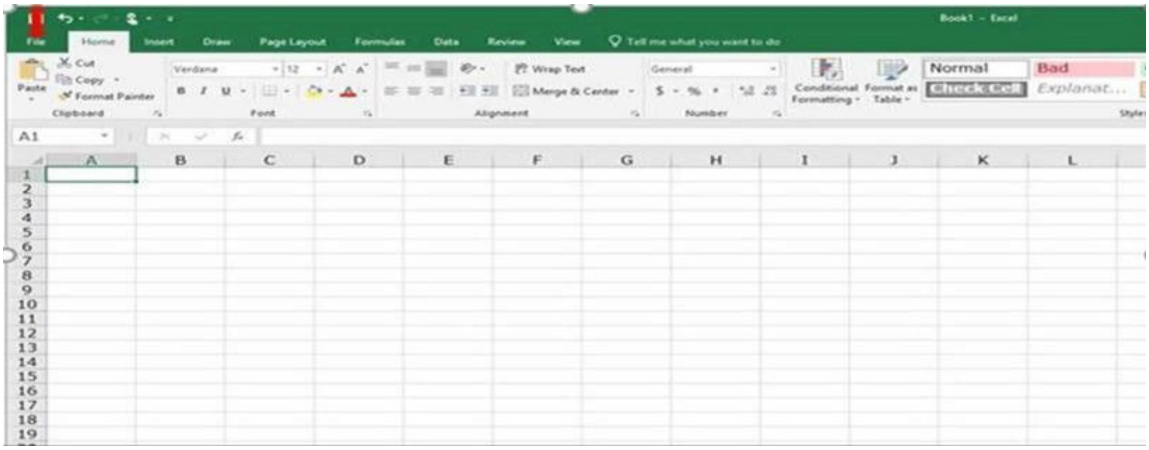
Once you understand the layout of the file, look over the CLEAN template. This file is where you can manually enter all your test entries and real patient results.

Note that the CLEAN template has 56 columns. Your own submissions ***must*** not deviate from the structure of our template. Please do not add, remove, or rearrange any columns.

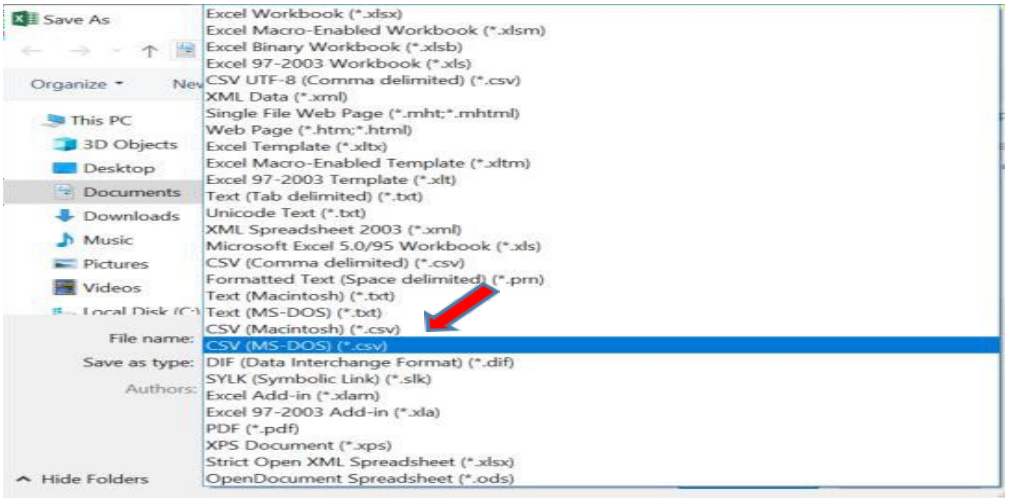
Saving a File in CSV (MS-DOS) Format:

Whether you are working on a test file or a production file, if you use Microsoft Excel to enter results into a file, always save your Excel spreadsheet in CSV (MS-DOS) file format. Below are instructions on how to save an Excel file in CSV (MS-DOS) format:

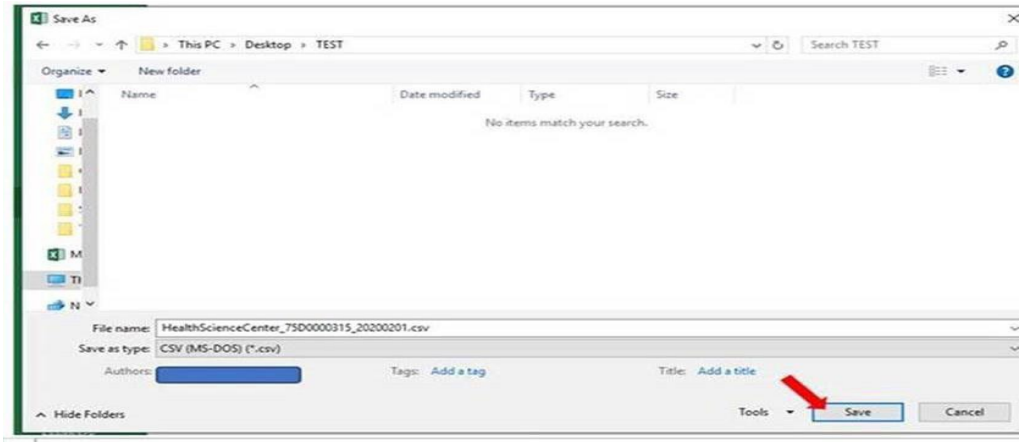
1. Select File



2. Select Save As. Under "Save as type," select **CSV (MS-DOS)(*.csv)**



3. Select **Save**



Data Requirements

Per CDC requirements, complete laboratory data must include the following data elements for both state and jurisdictional health departments. **To report these data requirements properly, complete the DSHS CSV template in accordance with the DSHS Data Dictionary guidance.**

1. Test ordered – use harmonized (Choose Ctrl and Click to follow link) Logical Observation Identifier Names and Codes (LOINC) codes provided by CDC
2. Device Identifier
3. Test result
4. Test Result date
5. Accession Number / Specimen ID
6. Patient age
7. Patient race
8. Patient ethnicity
9. Patient sex
10. Patient residence zip code
11. Patient residence county
12. Ordering provider name and NPI (National Provider Identifier) (as applicable)
13. Ordering provider zip code
14. Performing facility name and CLIA number
15. Performing facility zip code
16. Specimen Source – use appropriate LOINC codes
17. Date test ordered
18. Date specimen collected

Required demographic data:

19. Patient name (Last name, First name, Middle initial)
20. Patient street address
21. Patient phone number with area code
22. Patient date of birth
23. Ordering provider address
24. Ordering provider phone number

Ask on Order Entry (AOE) questions:

25. Is patient employed in healthcare? (Y/N/U)
26. Symptomatic as defined by CDC? (Y/N/U)
27. If patient is symptomatic, date of symptom onset? (MM/DD/YYYY)
28. Is patient hospitalized? (Y/N/U)
29. Is patient in Intensive Care Unit (ICU)? (Y/N/U)
30. Is patient a resident in a congregate care setting (nursing home, group home, homeless shelter, etc.)? (Y/N/U)
31. Is patient pregnant? (Y/N/U)

Device ID:

1. Depending on the type of test used, facilities can use either of the following:
   - Combination of the Manufacturer + Model **name**, as listed in the CDC LIVD Mapping Tool (Please do not include commas)
   - Primary Device Identifier (DI), as listed in the AccessGUDID website

- If using the Primary DI for the device ID, please make sure that this value is formatted properly. Excel tends to convert the value into a scientific notation, and if this value is not formatted correctly, the device ID will be reported with most of the last digits converted to zeros and fail validation. This is what must be done to correct the issue:
    - Enter the value for the device ID
    - Format the column for the device ID (right click on the column, choose Format Cells, select "Number", change decimal places to "0", and confirm
    - Save and close the file
    - View the text of the file (right click on the file, select open with, and choose Notepad). If the text of the file has the correct value, then the data has been stored correctly

Zip Codes:

- Depending on the location of the state, some zip codes may begin with a "0" (example: 0####). When the zip code starts with a zero, sometimes it is necessary to format the value to preserve the leading zero. Facilities can format the Zip codes by following these steps:
    - Enter the zip code in the proper column
    - Format the column for the zip code (right click on the column, choose Format Cells, select "Special", select "Zip Code", and confirm.
    - Save and close the file
    - View the text of the file (right click on the file, select open with, and choose Notepad). If the text of the file has the correct value with the leading zero, then the data has been stored correctly

Accession Numbers:

Facilities can choose several ways to devise accession numbers, but these numbers **MUST** be unique to each patient for each test for each day. Accession numbers **CANNOT** be shared or duplicated for any result with the same test and collection date.

- Accession numbers can be generated in several diverse ways:
    - A-YYYYMMDD#### - This process helps avoid duplication of accession numbers because of the date that changes every day.
    - If the same patient was tested more than once a day, then an extra number can be added at the end. i.e. A-YYYYMMDD1234-1

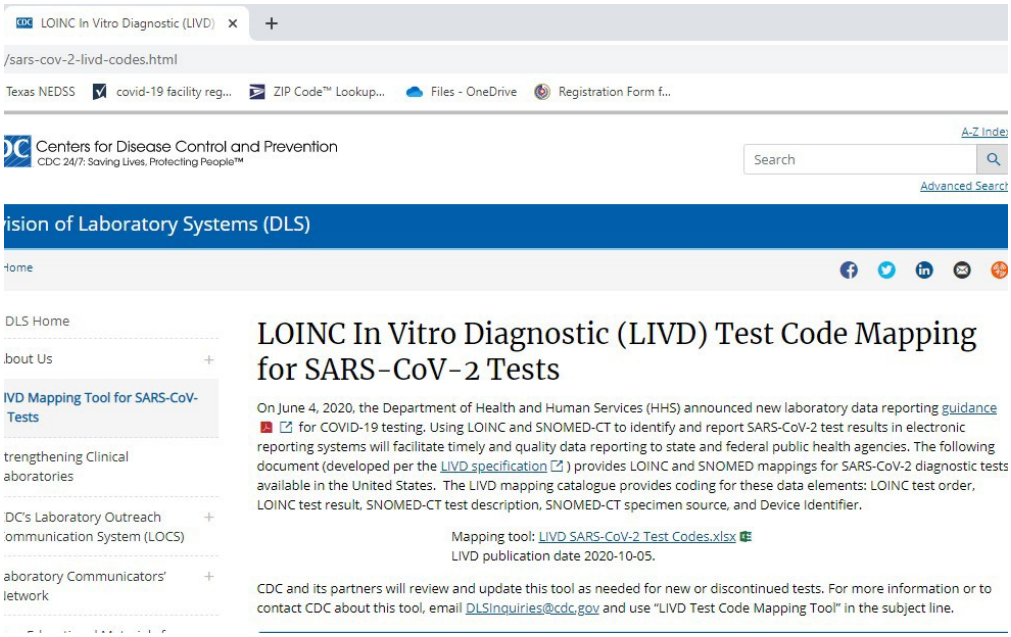
LOINC Code:

LOINC code is a unique identifying value for lab tests. If you are unfamiliar with LOINC, think of the code as a unique name that helps our software and epidemiologists distinguish between all the several types of SARS-CoV-2 tests that are being conducted. This is important because epidemiologists use this information to assist in case investigations, and our computer system uses it to catalog every lab result submitted to the state.

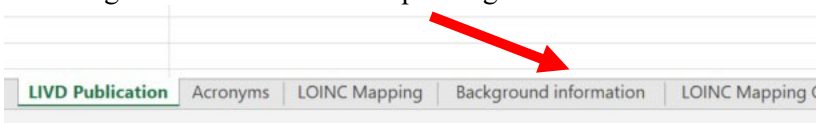
Below are instructions for identifying the LOINC code that corresponds to the lab tests you are conducting.

1. Visit the CDC LOINC In Vitro Diagnostic (LIVD) Mapping Tool.

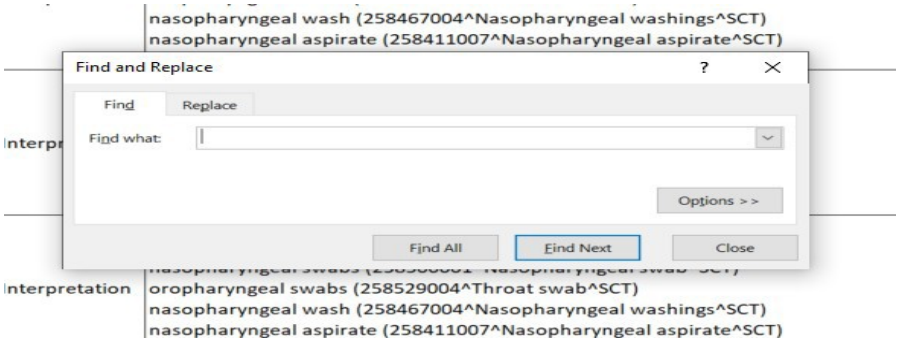
2. Click on the link next to "Mapping tool" to download the Excel document titled "LIVD SARS-CoV-2 Test Codes.xlsx"



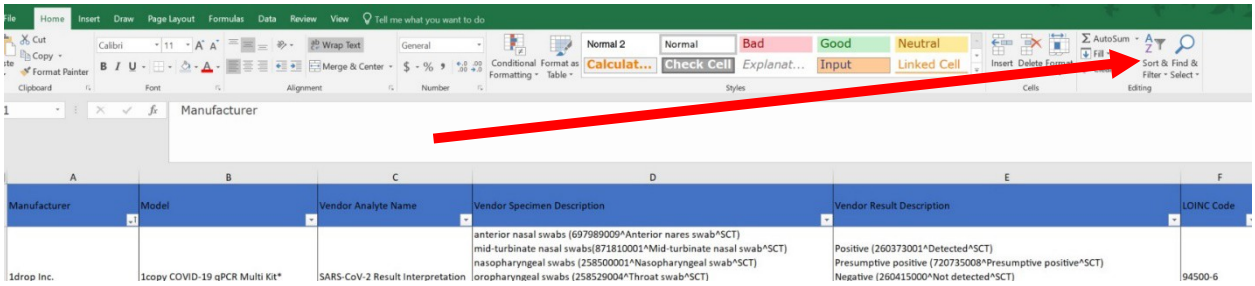
3. You should check back on this website weekly to see if there have been any updates by checking the LIVD publication date underneath the download link.
4. After downloading the file to your computer, open the file in Excel.
5. Look at the bottom of the file – there should be several tabs to choose from. Click on the tab called "LOINC Mapping." This will take you to a sheet that lists most available devices used for COVID-19 testing and each of their corresponding LOINC codes.



6. Now you can search this sheet for the device you are using. The easiest way to do this is to search for the manufacturer of the test – this should be located somewhere on the packaging of the test or on a device itself.
7. Once you have found the manufacturer name, hit Ctrl and F on your keyboard at the same time to pull up a search bar. Alternatively, you can click on the "Find & Select" function on the Excel toolbar, and then click "Find."
   a. Search tool



b. "Find & Select"



8. Type in the manufacturer in the search bar and hit Enter on your keyboard. This will take you to the first row on the spreadsheet where your manufacturer is listed. You will see in the second row the models of test kits/devices from the manufacturer.
9. Scroll until you find the test kit or device you are using (and make sure it is next to the right manufacturer). Then, scroll or look to the right until you find the corresponding LOINC code in the column labeled "Test Performed LOINC code." (not LOINC order code). **THIS IS THE LOINC CODE YOU ENTER IN THE LOINC CODE COLUMN OF YOUR CSV FILE.**
10. Look one more cell to the right and you will see the LOINC long name (not LOINC order code long name). **THIS IS THE TEXT YOU ENTER IN THE LOINC TEXT COLUMN OF YOUR CSV FILE** (make sure to remove any commas, if any).

Creating a Test File:

1. Make a copy of the CLEAN template by saving it as a CSV (MS-DOS) file type document.
2. Name this copy using the following naming convention:
   TEST_Your site full legal name_the site's legal CLIA number_ current submitted date (e.g., YYYYMMDD)

   ALWAYS INCLUDE THE WORD "TEST" IN TEST FILE NAMES.

3. Make sure all 56 column headers are present. In Microsoft Excel, you will see headers extending to column BD.

4. Enter 2-5 lines of fictitious patient test results. Fill out each required field. This part of the process is a qualifying event. You must submit a file that is exactly what your real file would look like, but with fictitious patient information (the fictitious information must still be valid). Do **not** enter actual, real test results until the test file is approved.

5. When you are finished entering your fictitious test results, save the document.

At this point, you should review your test data to make sure of the following:

6. Are there blank cells?
   a. If the field is required, the cell should not be blank. See the DATA DICTIONARY for more information on which fields are required, optional and may be left blank.
   b. The DATA DICTIONARY provides guidance on which fields can accept placeholder values if a certain piece of information is unknown.
7. Are there 56 columns of data? Does the data go all the way to column BD or BH (variant) in Excel?
   a. Anything more or fewer than 56 columns will automatically error out.
8. Does your test data look like a real patient record?
   a. You should not simply type "test" in all the fields. You should pretend that you are submitting a real patient test result and create a name and identifying information.

9. Are your dates in the right format?
    a. We only accept dates in the **MM/DD/YYYY** format. It is okay if your dates do not have leading zeroes.
10. Does your LOINC code match the type of test you are conducting?
    a. See the DATA DICTIONARY for more guidance on selecting a LOINC code.
11. Are state, sex, race, and ethnicity values capitalized and abbreviated?
    a. These must be capitalized and abbreviated. See the DATA DICTIONARY for a full list of acceptable values.

Save your test file again, making sure to follow the naming convention in step (1) of these instructions.

Now you may move on to submitting your test file via sFTP for our review.

Test File Transfer using sFTP Client

Utilizing your sFTP client, connect to our server. The first time you connect, the application will ask you to accept the certificate from our site. Choose Accept.

Next, you will enter the username and password provided by DSHS. The protocol or port is sFTP or 22.
Once you have successfully logged in to your sFTP Client, you are ready to transfer your test file. All files should be uploaded to the root directory of the sFTP (do not create your own folder).

Validation of Test File:

Once your test file has been validated and approved by DSHS, we will provide your facility the next steps to submit production files. This may take 3-5 business days.

DO NOT submit actual lab results until DSHS has approved your facility to do so.

If your test file passed validation, you will receive the following email from **COVID- 19ELR@dshs.texas.gov:**

"For this site to start submitting "production files," DSHS will need the following from you:

a) Do you have any backlogged files to report?
   a. **If yes**, what is the
      - *date range of the backlog (any files that were not previously reported to us electronically (sFTP))?*
      - *total number of backlog records you will be reporting?*
      - *total number of backlog "positives?"*
      - *test type (PCR (Polymerase Chain Reaction), antibody, antigen, etc.,)?*
      - *jurisdiction(s) impacted (e.g., statewide, selected counties, etc.,)?*
   b. **If no**, then please let us know **immediately!**

Please respond as soon as possible. Once DSHS receives a response, you will receive instructions for sending the first production file.

If there are problems or errors in the test file, we will contact you to resolve the issue. We will go through this process until the file is corrected and accepted.

File Validation Issues

Facilities that do not adhere to data dictionary and submission template will face file validation issues. Failed validation leads to data resubmission, and backlog of files that can further hinder reporting timelines. Therefore, it is pertinent that facilities adhere to ALL guidelines provided in this document. When records or files fail, facilities can refer below for further guidance to correct identified errors and resubmit the records/files.

Reasons for Failed Files:

- File was submitted in an incorrect file type (e.g., .txt, .xlsx, .hl7). All records must be submitted as .csv files to be validated. If interested in HL7 reporting, please contact COVID-19ELR@dshs.texas.gov
- Sites sFTP client transfer resume function is enabled causing the file to covert from .csv to .txt
- File was not submitted in the 56-column format.
- Commas in any field will automatically reject the file. No commas or spaces are allowed; special characters should be used minimally.
- Empty rows or columns will result in file errors.
- LOINC codes that do not correspond to the correct test name or vice versa.
- LOINC text describes the LOINC code and is not accepted unless the Code and text are sent together with the file. Each LOINC code must accompany valid text.
- All date fields must conform to the date format MM/DD/YYYY. (Leading zeroes are not required.)
- Specimen ID must have a value. Null or missing values are not accepted.
- Non-unique specimen IDs are not accepted.
- Specimen Type value must be present.
- Addresses cannot have null values. Must use acceptable placeholder values for entry if no address information available. Refer to the footnote of the data dictionary for permitted values.
- Phone number must be a ten-digit number in the following format: ###-###-####. For unknown values, use 999-999-9999.
- Sex, race, and ethnicity must be entered in the accepted abbreviated format values defined in the data dictionary.
- Accession Number must be unique ID for each lab order.
- Same patient cannot have the same test on the same day using the same accession number.

Reasons for Failure Specific to AOE Questions:

- Responses do not conform to acceptable responses (Y, N, U); not abbreviated or other invalid values
- Blank required fields – all the AOE fields are required except for date of symptom onset
  - If the patient is not symptomatic or data of symptom is unknown, please leave the date of symptom onset blank
- Date of symptom onset not in correct date format (MM/DD/YYYY)

Production File Development

Before creating your production file, answer the following question: Did you receive an email explicitly giving you permission to submit production files?

a. If yes, continue to step 1 below.

b. If no, DO NOT SUBMIT A PRODUCTION FILE, as you have yet to pass the testing phase.

1. Make a copy of the CLEAN template by saving it as a CSV (MS-DOS) document in a folder of your choosing. Name this copy using the following conventions:
2. ***Your site's full legal name_the site's legal CLIA number_ current submitted date (e.g., YYYYMMDD)***
3. Make sure all 56 column headers are present. In Microsoft Excel, the headers extend to column BD.
4. As with the test data, begin entering real patient test results line by line. The only difference is that now you are entering real test results for real patients/staff instead of mock test results for mock patients.
5. When you are finished entering your real test results, save the document.
6. At this point, you should review your production data to make sure of the following:
   a. Are there blank cells? If the field is required, the cell should not be blank. See the DATA DICTIONARY for more information on which fields are required and which are optional may be blank.
   b. Are there 56 columns of data? Does the data extend to column BD in Excel? Anything more or fewer than 56 columns will automatically error out.
   c. Are your dates in the right format? We only accept dates in the MM/DD/YYYY format. It is okay if your dates do not have leading zeroes.
   d. Does your LOINC code match the type of test you are conducting? See the DATA DICTIONARY for more guidance on selecting a LOINC code. Also, browse the official list of valid COVID-19 LOINC codes here.
   e. Are state, sex, race, and ethnicity values capitalized and abbreviated? These must be capitalized and abbreviated. See the DATA DICTIONARY for a full list of acceptable values.
7. Save your file again, making sure to follow the naming convention in step (2) of these instructions.
8. Submit your production file via sFTP client for validation. All files should be uploaded to the root directory of the sFTP (do not create your own folder).

Production File Transfer

You will initiate the transfer of your production file utilizing your sFTP client. Upon prompt, you will enter the username and password provided by DSHS. The protocol or port is sFTP or 22. Once you have successfully logged in to your sFTP Client, you are ready to transfer your production file.

All files should be uploaded to the root directory of the sFTP (do no create your own folder).

If any issues are identified in your data submission, an email summarizing any errors will be sent. Please be sure to follow any instructions on resubmission of any failed records or files.

Frequently Asked Questions (FAQ)

Please note that the directives offered here are regarding fulfilling your state reporting obligations to the Texas Department of State Health Services (DSHS). Be sure to reference your local health authority for any local reporting directives.

Registration

My facility is already submitting COVID-19 results to the local health department. Do I still have to submit to DSHS?
Yes, the State of Texas is a dual reporting state. Facilities must follow both local *and* state mandates for reporting.

My facility is already submitting COVID-19 results to the National Healthcare Safety Network (NHSN). Do I still have to submit to DSHS?
If you are reporting your results to NHSN, you do not need to report to DSHS, as NHSN will report your results to the state.

My facility is already submitting COVID-19 results to the Centers for Disease Control and Prevention (CDC)'s Simple Report. Do I still have to submit to DSHS?
If you are reporting your results via SimpleReport, you do not need to report to DSHS, as USDS will report your results to the state

How do I begin the process of submitting COVID-19 results to the state?
The first step is to register your site(s) here. After registration, we will send you the necessary documents and instructions for reporting your results to DSHS.

I have registered my facility(s); how do we proceed?
Texas DSHS will reach out to you with instructions for next steps after receiving your registration form and confirming that your CLIA is valid.

Can I fax email, mail, or phone **you my facility's results?**
Per the Federal CARES Act, sites are required to report results submitting HL7 or CSV files via sFTP.

Can I email DSHS my facility's results in a spreadsheet?
E-mail is not a secure method for protected health information (PHI) transfer or patient identifying information (PII), Texas DSHS will not accept reports via this method.

My facility is conducting point-of-care antigen tests. We are not a traditional lab facility. Does our facility still have to report test results to the state?
Yes. You are required to submit all COVID-19 test results to the state. The Facility Onboarding User Guide details how non-traditional facilities can register to report to the state.

How often do I have to report COVID results to Texas DSHS? Do I have to report over the weekend?
Each facility is responsible for accurately reporting COVID results to the state within 24hrs of receiving results. If your facility is not open on a weekend or holiday, reports must be submitted on the next business day.

Can our facility submit weekly reports instead of daily?
Reports **MUST** be submitted daily. Timely reporting is extremely important and necessary as our public health agency personnel has to take action to mitigate the spread of infectious disease within the communities.

Testing

I registered, submitted my IP, and connected successfully to the sFTP client. Can our facility start submitting test results?
Before sending reports, your facility must first submit a test file to ensure your facility is compliant with the submission template guidelines and data dictionary. Only if the test file passes validation without any issues, will we approve your facility to submit actual test results.

How should facility test files be structured?
Test files MUST be a .csv file and records MUST resemble real data. Utilize the CSV template and enter test records in accordance with the data dictionary. Please reference the example file naming convention to replace with ***Test_Your site's full legal name_the site's legal CLIA number_ current submitted date (e.g., YYYYMMDD)*** prior to submitting your file.

Does our facility only submit positive test results?
Facilities are required to submit **ALL** test results, including positive, negative and indeterminates, to DSHS. Contact your local health authority for their requirements for reporting.

Which COVID-19 tests should our facility report to DSHS?
Results for all COVID-19 tests must be reported:

- Antigen
- PCR
- Antibody
- Genetic sequencing (contact COVID-19ELR@dshs.texas.gov if your facility is performing genetic sequencing tests)
- POC - Point of Care (can be antigen, PCR, or antibody)
- SARS-CoV-2 component of panel tests that includes additional tests (e.g., flu A, + flu B, RSV)

How does our facility report panel tests?
If the panel test your facility conducts includes tests for COVID-19, please report **ONLY** the results for the SARS-CoV-2 component of the panel. Ensure that you are reporting the LOINC code corresponding to the SARS-CoV-2 component. Do not use the LOINC order code of panel tests.

One-time Backlog

Do I include the time range that I wasn't submitting results in the file name of my backlog?
Yes, the file name should include the start date and end date. ***Backlog_Your site's full legal name_ site's legal CLIA number_start date_end date (e.g., YYYYMMDD)***

When did Texas DSHS stop accepting paper submissions?
The backlog would be from 2022 to present if you have never reported to us electronically before. Since 3/2020, we required facilities to submit results electronically. If facilities were not reporting the results to us via HL7 or CSV, the facility has been out of compliance.

How far back does my facility have to backlog?
The backlog file should only contain labs from 1/1/2022 to present.

Production

What is the LOINC? What LOINC code should the facility utilize?

Logical Observation Identifiers Names and Codes (LOINC) is a common language (set of identifiers, names, and codes) for identifying health measurements, observations, and documents. The **LOINC** website provides current codes for all reporting.

- **Instructions for finding the correct LOINC_Code**
  - Please visit this link https://www.cdc.gov/csels/dls/sars-cov-2-livd-codes.html and download Mapping tool: LIVD SARS-CoV-2 Test Codes.xlsx
  - Once downloaded, open the document and click on the LOINC Mapping tab.
  - Search for the manufacturer and model of the instrument/test kit you are using. You can do this by clicking "Find and Select" or using the Ctrl+F command to search.
  - Scroll to the corresponding column "Test Performed LOINC Code" and use the code for the test you are performing.

What is the Device_Identifier and where can the facility locate the ID? Is this a required field to report?

The combination of Manufacturer and Model name of the device, as listed in the CDC LIVD Mapping Tool is adequate for device identifiers (remove any commas, if present). Your facility may also use primary DI number, as listed in the Access GUDID website. This is a required field and the data dictionary lists each field which is required to report.

- **Instructions for finding the correct Primary DI Number:**
  - Please go to Access GUDID website to look up the "Primary DI Number" for the device you are using to report in the "Device_Identifier" field. Make sure the "Primary DI Number" is preserved correctly prior to saving the CSV file.
  - To check if the "Primary DI number" is saved correctly (*meaning, the "Primary DI Number" should not have trailing zeros or trailing zeros after the decimal*), open the file in "notepad" to see if the "Primary DI number" is preserved.
  - If you make any corrections to the file after that, you will have to repeat the process by making sure the "Primary DI Number" is preserved correctly prior to saving the file again.
  - NOTE: If the test you are performing is not listed, use the combination of Manufacturer and Model name of the device, as listed in the CDC LIVD Mapping Tool

Our facility cannot locate the value for a required field. How do we proceed?

Refer to the data dictionary for guidance. Only the format in the data dictionary is permitted.

I am a new staff member replacing the staff member responsible for reporting. The previous staff member is no longer responsible for reporting. What do I do?

Email your question to **COVID-19ELR@dshs.texas.gov** detailing your situation. Make sure to include your facility's CLIA number in the email. We can work to revise and/or correct our contact information for your facility.

Validation

Please refer to the data dictionary for guidance to correct all failed validations.

Can we schedule a call to review validation issues?
The preferred method of communication is through email since multiple individuals monitor the COVID-19 mailbox and we can provide timely, detailed responses to your questions. Please email the specific issues you are experiencing to **COVID-19ELR@dshs.texas.gov** .

Why are all the facility's date fields causing errors?
.csv files accept **ONLY** **MM/DD/YYYY** formatted fields and must not have timestamps. If dates are not reported in this format, they WILL fail validation. If the date field failed validation but it looks correct in Excel, check the underlying text of the file by reviewing the data in Notepad. If the date is not in **MM/DD/YYYY** format when reviewing the file in Notepad, then the data is not formatted properly.

The CSV looks correct in Excel with no data entry issues. Why is our facility's file submission still failing?
Open the CSV file in Notepad and check for any extra commas at the end of each line, as those represent extra columns. Remove the extra columns before resubmission.

How can our facility report missing date of birth (DOB)?
If a Date_of_Birth is not known, the field can be left blank. Filling this field with any other information like "Unknown" or "99" will cause file failure. Facilities may also leave the Patient_Age field blank if DOB is unknown. However, if you have the patients DOB and missing age or vice versa, the record will not pass validation.

Our facility changed device Id/instrument's; how do I report this?
Email the device ID, ordered test name, LOINC code, and LOINC text. Facilities may instead submit a test file with 2-3 results for review. Facilities will still need to use the correct naming convention used for test files if the facility decides to send a test file.

Helpful Websites

Centers for Disease Prevention and Control (CDC)

https://www.cdc.gov/coronavirus/2019-ncov/index.html

- Comprehensive COVID-19 information

Coronavirus Aid Relief Economic Security (CARES) Act

https://home.treasury.gov/policy-issues/cares

- Information on the CARES Act

Food and Drug Administration (FDA)

https://www.fda.gov/medical-devices/coronavirus-disease-2019-covid-19-emergency-use- authorizations-medical-devices/vitro-diagnostics-euas

- Lists all the FDA authorized tests for COVID-19

LOINC

https://www.cdc.gov/csels/dls/sars-cov-2-livd-codes.html https://loinc.org/sars-cov-2-and-covid-19/

- Help facilities determine the correct LOINC code to use based on the tests you are using

SNOMED (Systemic Nomenclature of MEDicine)

https://confluence.ihtsdotools.org/display/snomed/SNOMED%2BCT%2BCOVID- 19%2BRelated%2BContent

- Discusses SNOMED-related content specific to COVID-19

Texas DSHS Lab Submitters Resource Page

https://dshs.texas.gov/coronavirus/lab-reporting.aspx

- Resource link for facilities submitting lab report data to DSHS

U.S. National Library of Medicine

https://accessgudid.nlm.nih.gov/

- Help facilities determine the Device ID of the test

Acronym Glossary

- AOE: Ask on Order Entry
- CARES: Coronavirus Aid, Relief, and Economic Security
- CDC: Centers for Disease Control and Prevention
- CLIA: Clinical Laboratory Improvement Amendments
- CMS: Centers for Medicare & Medicaid Services
- CSV: Comma Separated Value
- DOB: Date of Birth
- DSHS: Texas Department of State Health Services
- ELR: Electronic Lab Report
- EMR: Electronic Medical Record
- EHR: Electronic Health Record
- FDA: Food and Drug Administration
- HL7: Health Level Seven (7) International standard
- ICU: Intensive Care Unit
- IP: Internet Protocol
- LIMS: Laboratory Information Management Systems
- LIVD: LOINC In Vitro Diagnostic
- LOINC: Logical Observation Identifiers Names and Codes
- NEDSS: National Electronic Disease Surveillance System
- NHSN: National Healthcare Safety Network
- NPI: National Provider Identifier
- PCR: Polymerase Chain Reaction
- PHI: Patient Health Information
- PHIDEG/PHID: Public Health Informatics & Data Exchange Group
- PII: Patient Identifying Information
- POC: Point of Care Test
- SARS CoV-2: Severe Acute Respiratory Syndrome Coronavirus 2
- sFTP: Secure file transfer protocol
- SNOMED: Systematized Nomenclature of Medicine

Data Dictionary

Data Dictionary for COVID-19 Laboratory Data 56-Column AOE Submission Template						
IMPORTANT NOTE: DO NOT INCLUDE COMMAS IN ANY FIELDS AS THIS WILL CAUSE ERRORS IN VALIDATION. All ELR files must be saved and submitted as CSV (MS-DOS) file format type. Files should be submitted using the following naming convention- LegalFacilityName_CLIA_YYYYMMDD(DateofSubmission).CSV. Test files must include the word TEST and should be named like TEST_LegalFacilityName_CLIA_YYYYMMDD(DateFiletobeAccepted).CSV.						
Column	**Required Field (Y/N)**	**Variable Name**	**Description**	**Permitted Response Options**	**Response Descriptions**	**Notes**
A	Y	Reporting_Facility_ Name	Name of reporting facility			Enter the legal name of the facility reporting results to DSHS. Do **not** include any commas.
B	Y	CLIA_Number	CLIA number of the reporting or sending facility. CLIA = Clinical Laboratory Improvement Amendments number		Valid 10-digit ID required.	Format of CLIA number is ##D####### Example: 12D3456789 **https://www.cdc.gov/clia/LabS earch.html** **https://qcor.cms.gov/index_ne w.jsp** **https://www.cms.gov/regulatio ns-and-guidance/legislation/clia/downl oads/howobtaincliacertificate.p df**
C	Y	Performing_ Organization_ Name	Name of performing laboratory organization			Enter the name of the performing lab facility actually performing the tests. Do **not** include any commas.
D	Y	Performing_ Organization_ Address	Address of performing lab			Do **not** include any commas in any field, including address fields.
E	Y	Performing_ Organization_City	City of performing lab			
F	Y	Performing_ Organization_Zip	Zip code of performing lab		ZIP or ZIP+4 (5 or 9 digit) Example: 78756, 787561234, or 78756-1234	Can be 5 or 9 digits Example: 78756, 787561234, or 78756-1234 If performing org zip is outside of the United States, enter 99999.
G	Y	Performing_ Organization_State	State or territory of performing lab		Two- character abbreviation (e.g., TN)	Only the two-letter abbreviations are permitted. Must be uppercase. If performing org state is outside of the United States, enter UN.

Data Dictionary for COVID-19 Laboratory Data 56-Column AOE Submission Template						
Column	**Required Field (Y/N)**	**Variable Name**	**Description**	**Permitted Response Options**	**Response Descriptions**	**Notes**
H	Y	Device_Identifier	Device Identifier (DI)		-	Use the primary DI number listed in the Access GUDID website. If the device you are using is not listed in the website, please use the combination of manufacturer and model name, as listed in the CDC LIVD Mapping tool (do not include commas in the values). **Unknown is not permissible in this field.** https://accessgudid.nlm.nih.gov/ https://www.cdc.gov/csels/dls/sars-cov-2-livd-codes.html
I	Y	Ordered_Test_Name	Name of the ordered test		-	Enter the name of the test ordered by the provider. Ordered test name must be descriptive enough to easily identify the test performed. (Do not enter LOINC code in this field.) Example: COVID 19 Rapid Antigen test Do **not** include any commas
J	Y	LOINC_Code	Standard clinical order code (LOINC = Logical Observation Identifier Names and Codes)	Visit https://loinc.org/sars-cov-2- and-covid-19/ for an up-to- date list of valid codes. The only codes we accept are the ones under "SARS CoV 2 lab tests".	The format of COVID LOINC codes is #####-#.	Instructions for selecting correct LOINC code: **1)** Visit https://www.cdc.gov/csels/dls/sars-cov-2-livd-codes.html and click the download link next to Mapping tool: LIVD SARS-CoV-2 Test Codes.xlsx. **2)** Once downloaded, open the document and click on the LOINC Mapping tab. **3)** Search for the manufacturer and model of the instrument/test kit you are using. You can do this by clicking "Find and Select" or using CTRL+F command. **4)** Scroll to the column LOINC Code and use the code for the test you are performing. **5)** See the CSV guide for more detailed instructions. **https://www.cdc.gov/csels/dls/sars-cov-2-livd-codes.html** **https://loinc.org/sars-cov-2- and-covid-19/**

Data Dictionary for COVID-19 Laboratory Data 56-Column AOE Submission Template						
Column	**Required Field (Y/N)**	**Variable Name**	**Description**	**Permitted Response Options**	**Response Descriptions**	**Notes**
K	Y	LOINC_Text	Standard clinical order text description	We only accept the "long common name", "short name", or "display name" corresponding to the LOINC code.		Instructions for finding LOINC text: **1)** After the correct LOINC code has been identified, you can visit https://loinc.org/sars-cov-2-and-covid-19/ and click on the code you selected in the previous field. **2)** On the popup, you will see the "long common name" at the top. You can also scroll down to "Additional names" and use the "Short" or "Display" name for the LOINC Text. Do **not** include any commas. https://loinc.org/sars-cov-2-and-covid-19/
L	Y	Result	Either qualitative (results come back as a word like "positive", "negative", etc.) or quantitative (results come back as a number like 0.05) result	Detected Not Detected Positive Negative Indeterminate Invalid	Qualitative tests: Detected, Not Detected, Positive, Negative, Indeterminate, Invalid. Quantitative tests: numerical results like 0.05, etc.	Please use proper spelling and format for qualitative results: +First letter should be uppercase +No abbreviations +Use proper spelling and punctuations
M	Y if Result is Quantitative	Result_Units	Result unit (only if result is quantitative or titer)		You can refer to the package insert or analyzer instructions for more information.	Leave blank **IF** results are qualitative. Do not enter "N/A", "U", or "Unknown".
N	Y if Result is Quantitative or titer	Reference_Range	Only if result is quantitative or titer		You can refer to the package insert or analyzer instructions for more information.	Leave blank **IF** results are qualitative. Do not enter "N/A", "U", or "Unknown".
O	Y	Date_Test_Performed	Date test was performed	MM/DD/YYY	Enter date test was performed in the format MM/DD/YYYY	month/day/year Example: 10/10/2020, 05/6/2020 Do not enter a timestamp. Leading zeroes are not necessary.
P	Y	Test_Result_Date	Date test was resulted	MM/DD/YYYY	Enter date test was resulted in the format MM/DD/YYYY	month/day/year Example: 10/10/2020, 05/6/2020 Do not enter a timestamp. Leading zeroes are not necessary.
Q	Y	Pt_Fname	Patient first name			Do **not** include any commas.

Data Dictionary for COVID-19 Laboratory Data 56-Column AOE Submission Template						
Column	**Required Field (Y/N)**	**Variable Name**	**Description**	**Permitted Response Options**	**Response Descriptions**	**Notes**
R	N	Pt_Middle_Initial	Patient middle initial		**ONLY** first initial of middle name is permitted. Do **NOT** use punctuations or provide the complete middle name. If unknown, leave blank instead of "U" or "Unknown".	Acceptable: A Not acceptable: A. Not acceptable: Jr
S	Y	Pt_Lname	Patient last name		_	Do **not** include any commas.
T	Y	Date_of_Birth	Patient date of birth	MM/DD/YYYY	Enter patient's date of birth in the format MM/DD/YYYY	month/day/year Example: 10/10/2020, 05/6/2020 Do not enter a timestamp. Leading zeroes are not necessary.
U	Y	Patient_Age	Age of patient	Age in Years (Whole digit- No months, decimals, etc.)	Integer	Value in years, use 0 if age is less than 1 year. Acceptable: 3 Not acceptable: 16 months Not acceptable: 1.5
V	Y	Sex	Patient sex	M F O U A	Male Female Other Unknown Ambiguous	Only the abbreviated values on the left are permitted.
W	Y	Pt_Race	Patient race	AI A B PI W O U	American Indian or Alaska Native Asian Black or African American Native Hawaiian or Other Pacific Islander White Other Unknown	Only the abbreviated values on the left are permitted.
X	Y	Pt_Ethnicity	Patient ethnicity	H NH U	Hispanic Non-Hispanic Unknown	This is a description of a patient's background - whether they are Hispanic or non-Hispanic. Only the abbreviated values on the left are permitted.
Y	Y	Pt_Phone	Patient phone number		###-###- #### 10 digits only. No country codes or extensions.	Do **NOT** provide extensions or descriptions such as Cell, HOME, WORK, etc. Do not include country codes like +1 or +44. Example: 512-123-4567 or 5121234567, or (512) 123-4567

Data Dictionary for COVID-19 Laboratory Data 56-Column AOE Submission Template						
Column	**Required Field (Y/N)**	**Variable Name**	**Description**	**Permitted Response Options**	**Response Descriptions**	**Notes**
Z	Y	Pt_Str	Patient street address			Do **not** include any commas. If the patient lives outside of the United States, enter the Country after address. Example: 123 Green St. - Canada
AA	Y	Pt_City	Patient city			If patient lives outside of the United States, enter city name as usual.
AB	Y	Pt_ST	Patient state		Two-character abbreviation (e.g., TN)	Only the two-letter abbreviations are permitted. Must be uppercase. If patient lives outside of the United States, enter UN or 99.
AC	Y	Pt_Zip	Patient ZIP		ZIP or ZIP+4 (5 or 9 digit)	Can be 5 or 9 digits. Example: 78756, 787561234, or 78756-1234 If patient lives outside of the United States, enter 99999. ZIP Code™ Lookup | USPS
AD	Y	Pt_County	Patient County			If unknown or if patient lives outside of the United States, use Unknown. Only provide the county name: Travis instead of Travis County
AE	Y	Accession_Number	Unique filler order number			Must be unique number and should not be shared. The assigned accession number should be managed and maintained by your facility since we will reference the accession number when we have questions about a result. If your facility does not use accession numbers, see the CSV guide for instructions on generating your own. Accession number must be unique for each test result, for each patient, on any given day.
AF	Y	Ordering_Facility	Ordering facility/client name			Do **not** include any commas.
AG	Y	Ordering_Facility_Address	Ordering facility/client Address			Street address of ordering facility. Do **not** include any commas.
AH	Y	Ordering_Facility_City	Ordering facility/client City			
AI	Y	Ordering_Facility_State	Ordering facility/client State		Two-character abbreviation (e.g., TN)	Only the two-letter abbreviations are permitted. Must be uppercase.

Data Dictionary for COVID-19 Laboratory Data 56-Column AOE Submission Template						
Column	**Required Field (Y/N)**	**Variable Name**	**Description**	**Permitted Response Options**	**Response Descriptions**	**Notes**
AJ	Y	Ordering_Facility_ Zip	Ordering facility/client ZIP code		ZIP or ZIP+4 (5 or 9 digit)	Can be 5 or 9 digits Example: 78756, 787561234, or 78756-1234 If patient lives outside of the United States, enter 99999.
AK	Y	Ordering_Provider_ Last_Name	Ordering Provider's last name			Do **not** include any commas. Acceptable: Smith M.D. Not acceptable: Smith, M.D.
AL	Y	Ordering_Provider_ First_Name	Ordering provider's first name			Do **not** include any commas. Acceptable: John Not acceptable: John, Jr.
AM	N	Ordering_Provider_NPI	Ordering provider NPI number		NPI = National Provider Identifier. A 10-digit numerical value.	If unknown, leave blank instead of "Unknown" or "N/A" or 9999999999.
AN	Y	Ordering_Provider_ Street_Address	Ordering provider street address			Do **not** include any commas.
AO	Y	Ordering_Provider_City	Ordering provider city			
AP	Y	Ordering_Provider_State	Ordering provider state		Two-character abbreviation (e.g., TN)	Only the two-letter abbreviations are permitted. Must be uppercase.
AQ	Y	Ordering_Provider_Zip	Ordering provider ZIP		ZIP or ZIP+4 (5 or 9 digit)	Can be 5 or 9 digits Example: 78756, 787561234, or 78756-1234 If ordering provider is outside of the United States, enter 99999.
AR	Y	Ordering_Provider_Phone	Ordering provider phone number		###-###- #### 10 digits only. No country codes or extensions.	Do **NOT** provide extensions or descriptions such as Cell, HOME, WORK, etc. Example: 512-123-4567 or 5121234567, or (512) 123-4567 Not acceptable: 512-123-4567 ext. 13
AS	Y	Specimen_ID	Unique Id for the specimen		A unique ID given to every specimen taken from a patient or individual.	Must be unique and can't be duplicated for any other result in the file. You are allowed to utilize the same value for accession and specimen ID.

Data Dictionary for COVID-19 Laboratory Data 56-Column AOE Submission Template						
Column	**Required Field (Y/N)**	**Variable Name**	**Description**	**Permitted Response Options**	**Response Descriptions**	**Notes**
AT	Y	Specimen_Type	Specimen type (e.g., blood/serum, nasopharyngeal, oropharyngeal, sputum, etc.)		Text description of where the specimen originated from the patient. Use the examples on the left for guidance or refer to the package insert of your test kit or device.	Do **NOT** use numerical SNOMED-CT (Systemic Nomenclature of MEDicine-Clinical Terms) values. You may not use Unknown in this field.
AU	Y	Date_Test_Ordered	Date test was ordered	MM/DD/YYYY	Enter date test was ordered in the format MM/DD/YYYY	month/day/year Example: 10/10/2020, 05/6/2020. Do not enter a timestamp. Leading zeroes are not necessary.
AV	Y	Date_Specimen_ Collected	The date the specimen was collected	MM/DD/YYYY	Enter date specimen was collected in the format MM/DD/YYYY	month/day/year Example: 10/10/2020, 05/6/2020. Do not enter a timestamp. Leading zeroes are not necessary.
AW	N	Medical_Record_ Number	Medical Record Number (MRN)		If the person being tested is not a patient, leave this field blank.	The medical record number is organization specific. The number is used by the hospital as a systematic documentation of a patient´s medical history and care during each hospital stay. If unknown or not collected, leave blank.
AX	Y	Employed_in_healthcare	Ask on Order Entry (AOE): Employed in healthcare	Y N U	Yes No Unknown	Is the patient employed in healthcare **with direct patient contact**? Use only the abbreviated values on the left
AY	Y	Symptomatic_per_CDC	AOE: Symptomatic per CDC?	Y N U	Yes No Unknown	Was the patient symptomatic per CDC? Official list of COVID-19 symptoms from CDC Use only the abbreviated values on the left
AZ	conditional	Date_of_Symptom_ Onset	AOE: Date of symptom onset	MM/DD/YYYY	The date that the patient started experiencing symptoms of COVID-19. MM/DD/YYYY	If patient does not have symptoms, then leave this field blank. Example: 10/10/2020, 05/6/2020 Do not enter a timestamp. Leading zeroes are not necessary.
BA	Y	Hospitalized	AOE: Hospitalized (at time of testing, for COVID)?	Y N U	Yes No Unknown	Is the patient being tested currently hospitalized? To determine if the individual is hospitalized for any reason at time of testing. Use only the abbreviated values on the left. When ordered during ER duration, the answer would be N.

Data Dictionary for COVID-19 Laboratory Data 56-Column AOE Submission Template						
Column	**Required Field (Y/N)**	**Variable Name**	**Description**	**Permitted Response Options**	**Response Descriptions**	**Notes**
BB	Y	ICU	AOE: ICU (at time of testing, for COVID)?	Y N U	Yes No Unknown	To determine if the individual is in the ICU for any reason at time of testing. Use only the abbreviated values on the left.
BC	Y	Resident_in_Congregate_Care	AOE: Resident in a congregate care setting	Y N U	Yes No Unknown	Does patient reside in a congregate setting (including nursing homes, residential care for people with intellectual and developmental disabilities, psychiatric treatment. facilities, group homes, board and care homes, homeless shelter, foster care or other setting)? This is at time of exposure where they normally live. Use only the abbreviated values on the left.
BD	Y	Pregnant	AOE: Pregnant?	Y N U	Yes No Unknown	Is the patient pregnant? Current pregnancy status of the patient. Use only the abbreviated values on the left.
Note: Please refer to the full version of the dictionary for more information.						

TEXAS
Health and Human Services

Texas Department of State
Health Services

Texas Department of State Health Services
Laboratory and Infectious Disease Services

Division Public Health Informatics and Data Exchange Group
1100 West 49th Street
Austin, Texas 78756
COVID-19ELR@dshs.texas.gov