OpenELIS Web Portal User Guide

SHL's OpenELIS Web Portal has been designed to afford easier access to test results regardless of the type of sample (environmental, safe drinking water, private well, clinical, animal, maternal screen, or newborn screening.)

Logging in

- Go to the State Hygienic Laboratory at The University of Iowa's web site at www.shl.uiowa.edu .
- Click on the green **Test Results** button on the left-hand side.
- Click on the green **OpenELIS** button.
- Login using your username and password. (This is a secure site. Your username and password are encrypted as they are sent for authorization.)
- If you use a shared computer, please click the **Logout** button in the top right corner and then exit the browser after completing your session.
- Supported web browsers are recent versions of Firefox, Chrome, Safari, and Microsoft Edge.

Message of the Day

- The Message of the Day is displayed upon login. It contains important announcements regarding the OpenELIS Web Portal.
- You can click on the orange SHL logo anytime that you wish to return to this page.

Searching for Your Final Reports

- Click on the **Final Report** icon.
- You only need to enter information in one field to conduct a search for your results. Example fields include: **Collected Date**, **Accession Number**, **Collector** or **Patient's Last Name**. (See Figures 1 and 2.)
- It is recommended that you use the calendar to the right of each date field when entering a date to eliminate any formatting errors. You must click out of the calendar to enter the selected date. All dates have the format of YYYY-MM-DD. **Released Date** also includes the time in the format of YYYY-MM-DD HH:MM.
- You may also narrow your search by entering information in multiple fields. For example, to find all of the samples that you collected and sent to the laboratory in June of 2014, enter your name (as it appeared on the collection form) in the **Collector** field and select (using the calendars provided) 2014-06-01 in the **Collected Date** field and 2014-06-30 in the **To** field.
- A search may also be limited to one or more projects or reporting organizations. If these fields are left empty, all samples to which you are authorized will be displayed regardless of their reporting organization or whether they have an assigned project.
- The system supports wild card searches in the following fields: **Client Reference**, **Collector**, **PWS ID**, **Patient's First Name** and **Patient's Last Name**. To use this search method add an * at the beginning and/or end of your search term. Below are three examples:
  - To see a list of reports for a patient whose last name starts with the letters schm, enter schm* in the **Patient's Last Name** field. Matches would include: schmidt, schmitt, schmitz, etc.
  - To see a list of reports for a patient whose first name ends with the letters jo, enter *jo in the **Patient's First Name** field. Matches would include: betty jo, bettyjo, jo, etc.

- To see a list of reports for samples with a collector name of buck, enter *buck* in the **Collector** field. Matches would include: joseph buck, joe buck, j buck, buck joseph, buck joe, buck j, etc.

- Enter the **Patient's Date of Birth** in this field to search by that information. You must enter an ending date in the **To** field to search for a range of birth dates.
- Click on the Tool Tip to the right of each field to view information about the use and format of that field.
- Click the **Find Samples** button to display a list of samples that match your search criteria. The **Reset** button clears all of the search fields.

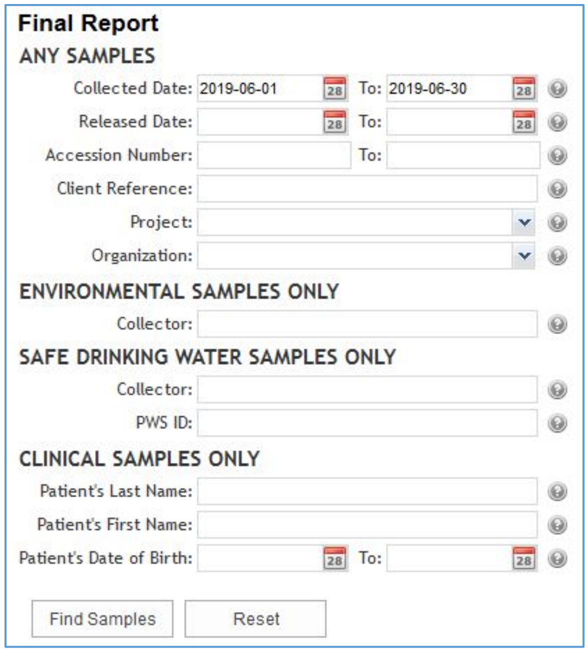


Figure 1 Searching by a Collected Date Range

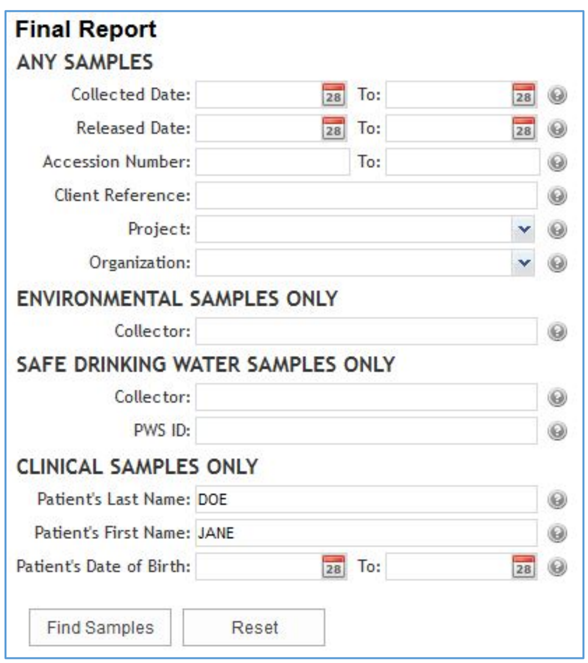


Figure 2 Searching by a Patient's Last and First Name

Viewing Your Final Reports

- A list of final reports that match your search criteria will be displayed on the next screen. (See Figure 3.)
- To view all reports of the listed samples, click on the **Select All** button, and then the **Run Report** button.
- To view specific reports, check the boxes in front of their **Accession Numbers**, and then click the **Run Report** button.
- The PDF reports of the selected samples will pop up. You may view, save, or print your PDF reports.
- The following are descriptions of each column on this screen.

Accession Number: The lab number assigned to the sample by the laboratory.

Collected Date: The date and time that the sample was collected. All dates and times have the format of YYYY-MM-DD HH:MM.

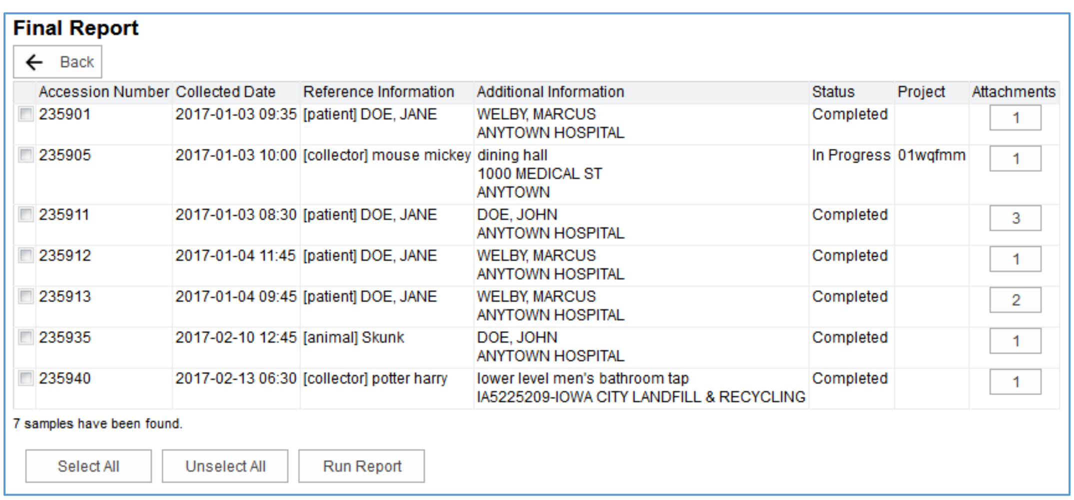
Reference Information: This information can be helpful in identifying a sample. The patient's name is usually displayed for clinical samples. The collector's name is usually displayed for environmental, safe drinking water, and private well samples. The type of animal is displayed for animal samples (e.g., rabies testing).

Additional Information: This information can also be useful in identifying a sample. The collection location, address, and city (if submitted) are displayed for environmental and private well samples. The collection location (if submitted) and PWS ID-PWS Name are displayed for safe drinking water samples. The health care provider's/veterinarian’s/public health professional’s name (if submitted) and the submitting organization are displayed for clinical and animal samples.

Status: The sample's status is shown here. "In Progress" samples have one or more tests that are not yet complete and at least one test that is finished. The finished test’s results are currently available on the Final Report. "Completed" samples have finished testing and all of their results are available on the Final Report.

Project: The name of the project that has been assigned to the sample. A project can be used to group samples with a similar purpose.

Attachments: The number of documents attached to each sample (if any) are shown in this column. First, click on the number to display the list of attachments. (See Figure 4.) Next, click on the attachment that you want to display. Attachments may include the test request form (begins with the prefix "TRF"), previous revisions of final reports (begin with the prefix "FinalReport"), copies of email correspondence, send-out lab reports, and laboratory instrument output.



Final Report

Back

Accession Number	Collected Date	Reference Information	Additional Information	Status	Project	Attachments
235901	2017-01-03 09:35	[patient] DOE, JANE	WELBY, MARCUS ANYTOWN HOSPITAL	Completed		1
235905	2017-01-03 10:00	[collector] mouse mickey	dining hall 1000 MEDICAL ST ANYTOWN	In Progress	01wqfmm	1
235911	2017-01-03 08:30	[patient] DOE, JANE	DOE, JOHN ANYTOWN HOSPITAL	Completed		3
235912	2017-01-04 11:45	[patient] DOE, JANE	WELBY, MARCUS ANYTOWN HOSPITAL	Completed		1
235913	2017-01-04 09:45	[patient] DOE, JANE	WELBY, MARCUS ANYTOWN HOSPITAL	Completed		2
235935	2017-02-10 12:45	[animal] Skunk	DOE, JOHN ANYTOWN HOSPITAL	Completed		1
235940	2017-02-13 06:30	[collector] potter harry	lower level men's bathroom tap IA5225209-IOWA CITY LANDFILL & RECYCLING	Completed		1

7 samples have been found.

Select All Unselect All Run Report

Figure 3 Final Report Listing

Figure 4 Sample Attachment List

Spreadsheet View

- The Spreadsheet View option will display your results in a spreadsheet that you can sort and filter. It can be used to compare results from the same sampling location or the same patient over time, among other things. Click on the **Spreadsheet View** icon.
- The first step is to search for the results that you would like to be displayed in the spreadsheet. The Spreadsheet View search screen works the same way as the one for final reports. See **Searching for Your Final Reports** for suggestions on how to conduct a search.
- After entering your search information, click the **Continue to Report Fields** button. The **Reset** button clears all of the search fields.
- The next page will display groups of fields containing sample, organization, analysis, patient, and other information which you can select to be displayed as columns in your spreadsheet. (See Figure 5.) This screen also shows all of the test analytes and auxiliary data that matches your search criteria. You need to select at least one **Test Analyte** or **Auxiliary Data** field to run the report. You can use the **Select All** buttons if you want to view all of the available information in a group.
- The **Show single row per test** option allows all of the analyte values and auxiliary data for a test to be displayed as a single row on the spreadsheet.
- Click the **Run Report** button to pop up the spreadsheet containing all of the data that you selected. You may view, save, or print your spreadsheet reports. (See Figure 6.)

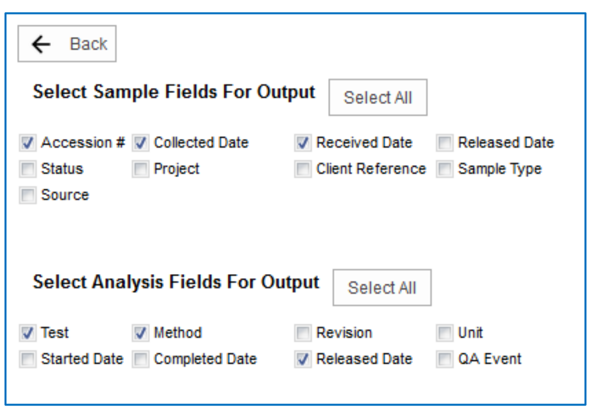


Figure 5 Selecting Fields to Output to Your Spreadsheet

	A	B	C	D	E	F	G	H
1	Accession #	Collected Date	Received Date	Test	Method	Analysis Released Date	Analyte	Value
2	81109	2015-01-31 00:00	2015-02-02 14:54	Speciated Non-Methane Organics	EPA TO-12	2015-02-05 15:21	1,2,3-Trimethylbenzene	0.32
3	81109	2015-01-31 00:00	2015-02-02 14:54	Speciated Non-Methane Organics	EPA TO-12	2015-02-05 15:21	1,2,4-Trimethylbenzene	0.33
4	81109	2015-01-31 00:00	2015-02-02 14:54	Speciated Non-Methane Organics	EPA TO-12	2015-02-05 15:21	1,3,5-Trimethylbenzene	0.14
5	81109	2015-01-31 00:00	2015-02-02 14:54	Speciated Non-Methane Organics	EPA TO-12	2015-02-05 15:21	1,3-Butadiene	0.16
6	81109	2015-01-31 00:00	2015-02-02 14:54	Speciated Non-Methane Organics	EPA TO-12	2015-02-05 15:21	1-Decene	0.26
7	81109	2015-01-31 00:00	2015-02-02 14:54	Speciated Non-Methane Organics	EPA TO-12	2015-02-05 15:21	1-Dodecene	0.27
8	81109	2015-01-31 00:00	2015-02-02 14:54	Speciated Non-Methane Organics	EPA TO-12	2015-02-05 15:21	1-Heptene	0.09
9	81109	2015-01-31 00:00	2015-02-02 14:54	Speciated Non-Methane Organics	EPA TO-12	2015-02-05 15:21	1-Hexene	<0.05
10	81109	2015-01-31 00:00	2015-02-02 14:54	Speciated Non-Methane Organics	EPA TO-12	2015-02-05 15:21	1-Nonene	<0.04
11	81109	2015-01-31 00:00	2015-02-02 14:54	Speciated Non-Methane Organics	EPA TO-12	2015-02-05 15:21	1-Octene	0.28

Figure 6 Spreadsheet View

Disclaimer

Results from the **Spreadsheet View** represent analytical values as of the date they are generated. Future revisions may affect these results and official final results should be reviewed from the **Final Report** option to assure their accuracy.

Test Status

- The Test Status option will display the status of each test that is being performed on your samples. The Collected Date, Received Date, Client Reference, and any QA Events will also be shown. Click on the **Test Status** icon.
- The first step is to search for your desired samples. The Test Status search screen works the same way as the one for final reports. See **Searching for Your Final Reports** for suggestions on how to conduct a search.
- After entering your search information, click the **Find Samples** button. The **Reset** button clears all of the search fields.
- A list of samples matching your search criteria will be displayed. (See Figure 7.)
- The following are descriptions of each column on this screen.

  Accession #: The lab number assigned to the sample by the laboratory.

  Sample/Test Description: The Sample Description is displayed in the first row for each Accession #. The patient's name is usually displayed for clinical samples. The collector's name is usually displayed for environmental, safe drinking water, and private well samples. The type of animal is displayed for animal samples (e.g., rabies testing). The Test Descriptions are displayed in the remaining rows for each Accession #. There may be a footnote at the end of a Sample or Test Description which is explained in the QA Event column. If a footnote is after the Sample Description, it applies to the entire sample. If a footnote is after a Test Description, it applies to only that test.

  Test Status: The test's status is shown here. "In Progress" tests have not been finished. "Completed" tests have finished testing and their results are available on the Final Report or through the Spreadsheet View.

  Collected Date: The date and time that the sample was collected. All dates and times have the format of YYYY-MM-DD HH:MM.

  Date Received: The date and time that the sample was received at the laboratory. All dates and times have the format of YYYY-MM-DD HH:MM.

  Client Reference: This value is a piece of information that your organization provided on the sample paperwork. It could be your organization's lab number, a patient ID/Chart ID/Medical Record Number or another unique identifier for a sample.

  QA Event: Any quality assurance issue that applies to your entire sample or an individual test is displayed in this column.

Accession #	Sample/Test Description	Test Status	Collected Date	Date Received	Client Reference	QA Event
25763	doe john		2015-02-03 06:45	2015-02-04 15:02		
	Prep for Acid Herbicides, SOP UHL-H-025 LC/MS/MS	Completed				
	Acid Herbicides, SOP UHL-H-025 LC/MS/MS	In Progress				
154980	POTTER, HARRY[1]		2015-02-03 15:05	2015-02-04 11:30		1. Sample was leaking upon receipt. Integrity of sample is questionable.
	Culture for Acid Fast Bacillus, Bacterial Culture[2]	Completed				2. There will be no charge for this testing.
	Fluorescent Stain for AFB, Fluorochrome (Auramine-Rhodamine Stain)	Completed				
	Blood Lead Screening, Graphite Furnace AA	In Progress				
	Culture for Acid Fast Bacillus, Bacterial Culture	In Progress				

Figure 7 Test Status Listing

Email Notification

- The laboratory can send an email to specified email addresses whenever a new sample is received or when a result is available. You can choose whether the notification emails are sent for either or both types of events. Click on the **Email Notification** icon.
- You can also add a filter so that you will only receive email notifications from the laboratory that match that filter. This allows the user to only receive email notifications for samples that she collects, where she is the provider, or that have a specific Client Reference.

To Add Your Email Address (See Figure 8.)

- Click on the **Add** button to enter a new email address.
- Select your organization from the dropdown list in the **Organization** field.
- Enter your email address in the **Email** field.
- Check **Received** or **Released** or both to receive notifications for each type of event.
- Click the **Save Changes** button to complete the process.

To Add an Email Notification Filter (Optional) (See Figure 8.)

- If you wish to add an email notification filter, select the **Filter By** field (Client Reference, Collector, or Provider) by which you want to filter your email notifications.
- Enter the text that you want to match your filter in the **Filter Match** field. Examples include the last name of the collector or provider or a common word or number that is used in the Client Reference field of your samples.
- Click the **Save Changes** button to complete the process.

To Edit an Existing Email Address or Filter

- Click on any cell in the entry that you want to edit.
- Type in the new email address or filter information.
- Click the **Save Changes** button to complete the process.

To Remove an Email Notification

- Select the entry that you want to remove. Click the **Remove** button.

Organization	Email	Filter By	Filter Match	Received	Released
SHL ANKENY	michael-hayek@uiowa.edu	Collector	hayek	☑	☑

Figure 8 Signing Up for Email Notification

COVID-19 Electronic Test Request Form

- Organizations can now order Coronavirus (COVID-19) tests electronically through the COVID-19 Electronic Test Request Form. This form increases SHL's capability to deliver COVID test results faster to our clients since we do not have to enter this information manually into our information system. It also prevents transcription errors that can occur through manual data entry by our staff. Click on the **COVID-19 Test Request** icon.
- Fields marked with an * are required. You cannot submit the form without an entry in these fields.
- You can use the Tab key to move through the fields.
- You can enter one or two letters in the fields with dropdown lists and then press the Tab key to select the item or you can choose it immediately from the list.
- Select the organization that you want to receive the results in the **Reporting Organization Information** section. (See Figure 9.) Only one organization can receive the test results through the OpenELIS Web Portal.


COVID-19 Electronic Test Request Form
(* means required field)
REPORTING ORGANIZATION INFORMATION:
Organization to receive the results*: 9055 - ANYTOWN HOSPITAL

Figure 9 Reporting Organization Information

- If you would like to enter a Patient ID, MRN (Medical Record Number), Chart Number, or Account Number for the patient, enter it in the Client Reference field in the **Patient Information** section. (See Figure 10.) Those organizations that are testing multiple facilities (such as county health departments) could also use this field to identify the facility that is being tested (i.e., Oak Tree Care).
- The last name, first name, date of birth, and complete address of the patient must be entered. All dates have a format of YYYY-MM-DD. If you use the calendar to the right of a date field, the date will be formatted automatically for you. You must click out of the calendar for the date to be entered into the field. The patient's phone number, gender, race, and ethnicity are useful to IDPH epidemiologists. All phone numbers have a format of 111/111-1111.

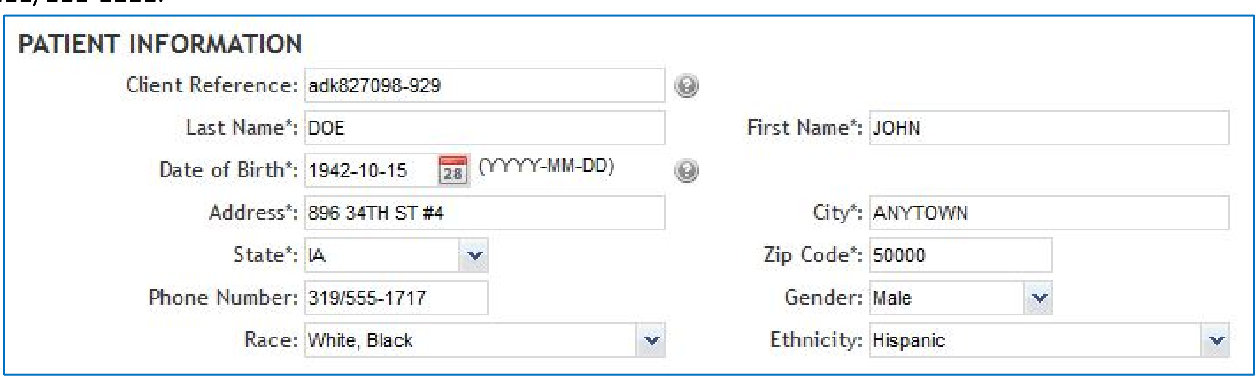

PATIENT INFORMATION
Client Reference: adk827098-929
Last Name*: DOE   First Name*: JOHN
Date of Birth*: 1942-10-15 (YYYY-MM-DD)
Address*: 896 34TH ST #4   City*: ANYTOWN
State*: IA   Zip Code*: 50000
Phone Number: 319/555-1717   Gender: Male
Race: White, Black   Ethnicity: Hispanic

Figure 10 Patient Information

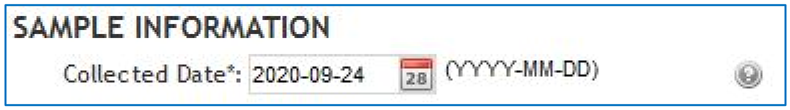
- The last and first name of the ordering health care provider must be entered in the **Ordering Health Care Provider Information** section. (See Figure 11.) The provider's National Provider Identifier (NPI) and phone number are also useful to SHL staff and IDPH epidemiologists.

ORDERING HEALTH CARE PROVIDER INFORMATION

Last Name*: DOE
First Name*: JANE
NPI: 0123456789
Phone Number: 319/555-1818

Figure 11 Ordering Health Care Provider Information

- The date that the sample was (or will be) collected must be entered in the **Sample Information** section. (See Figure 12.) It has a format of YYYY-MM-DD. If you use the calendar to the right of a date field, it will be formatted automatically for you. You must click out of the calendar for the date to be entered into the field.

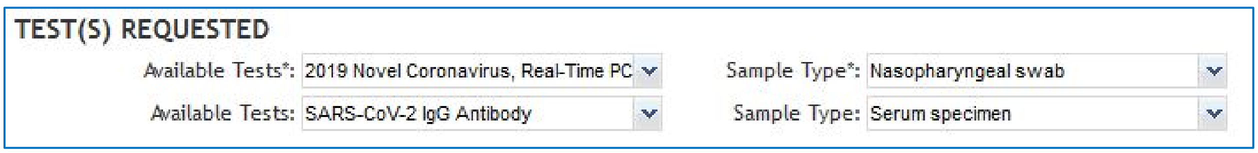


SAMPLE INFORMATION

Collected Date*: 2020-09-24 (YYYY-MM-DD)

Figure 12 Sample Information

- At least one test must be selected along with its corresponding sample type in the **Test(s) Requested** section. (See Figure 13.) If you want to order a second type of COVID test on the patient, select the test and its corresponding sample type in the second row.

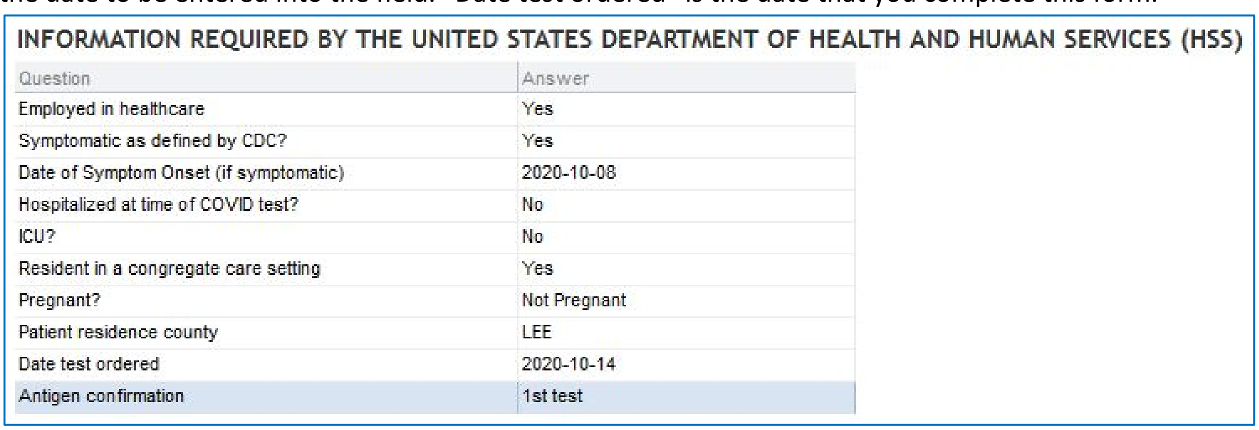


TEST(S) REQUESTED

Available Tests*: 2019 Novel Coronavirus, Real-Time PC
Sample Type*: Nasopharyngeal swab
Available Tests: SARS-CoV-2 IgG Antibody
Sample Type: Serum specimen

Figure 13 Test(s) Requested

- As part of the national response to COVID-19, there are 9 new questions that are required to be answered by the United States Department of Health and Human Services (HSS). (See Figure 14.) The majority of these questions can be answered with a Yes/No/Unknown answer or a date. You can enter either Y, N, or U for Yes, No, or Unknown and then tab to the next question. P, N, or U can be entered for Pregnant, Not Pregnant, or Unknown. 1 or 2 can be entered for 1st test or 2nd test. All dates have a format of YYYY-MM-DD. If you use the calendar to the right of a date field, it will be formatted automatically for you. You must click out of the calendar for the date to be entered into the field. "Date test ordered" is the date that you complete this form.



INFORMATION REQUIRED BY THE UNITED STATES DEPARTMENT OF HEALTH AND HUMAN SERVICES (HSS)

Question	Answer
Employed in healthcare	Yes
Symptomatic as defined by CDC?	Yes
Date of Symptom Onset (if symptomatic)	2020-10-08
Hospitalized at time of COVID test?	No
ICU?	No
Resident in a congregate care setting	Yes
Pregnant?	Not Pregnant
Patient residence county	LEE
Date test ordered	2020-10-14
Antigen confirmation	1st test

Figure 14 Information Required by the United States Department of Health and Human Services (HSS)

- Noteworthy information is listed in the **Additional Information** section at the bottom of the screen.
- When you have finished entering the information click the **Generate Form** button. **A PDF copy of the test request form should pop-up. Print it out and package it with the sample.** If it does not pop-up, you may have to allow pop-ups to be displayed for this web site. Call 319/335-4358 or your IT staff for assistance, if needed. You

may need to re-enter the information after pop-ups are allowed in order to display the PDF version of your test request form.

- You can correct any of the information on the paper copy of the test request form, if necessary. Strike through the incorrect information and hand write the correct information. You do not need to re-enter the information on this screen to correct one or two pieces of information.
- It is perfectly acceptable to enter the information into this form and print the PDF version of the test request form several days in advance of when the sample will be collected. If the Collected Date changes, correct it on the paper copy of the test request form.
- You only need to contact SHL to cancel a COVID test if you have already sent the sample. There is no need to contact SHL to cancel an electronic COVID test order if you do not ship the sample.
- After clicking the **Generate Form** button all of the information will remain in the fields except for the **Patient Information**. This allows the user to enter a batch of samples with the same reporting organization, provider, collection date, and test(s) requested and corresponding sample type(s) without having to re-enter this information for every patient. If you want to clear all of the fields on the form click the **Reset** button.

Changing Your Password

- You can click the **Change Password** button in the top right corner.
- Keep your new password secure. If you must write it down, be sure to keep it in a safe place.
- Your new password must meet the following requirements:
    - Password is case sensitive.
    - Must be at least 9 characters long.
    - Must be no more than 25 characters long.
    - Must not include any of the following values: test password
    - Must not include part of your name or username.
    - Must not include a common word or commonly used sequence of characters.
    - Must have at least three types of the following characters:

      Uppercase letter (A-Z) Number (0-9)

      Lowercase letter (a-z) Symbol (!, #, $, etc.)

Questions/Help

- Questions regarding the OpenELIS Web Portal may be directed to SHL-WebPortalSupport@uiowa.edu or to 319/335-4358.