OpenELIS Web Portal User Guide

IOWA | State Hygienic Laboratory

Table of Contents

The OpenELIS Web Portal has been redesigned to be more responsive; it can now be used easier on tablets, laptops, and cell phones.

General Features

The general features of the OpenELIS Web Portal are described in this section.
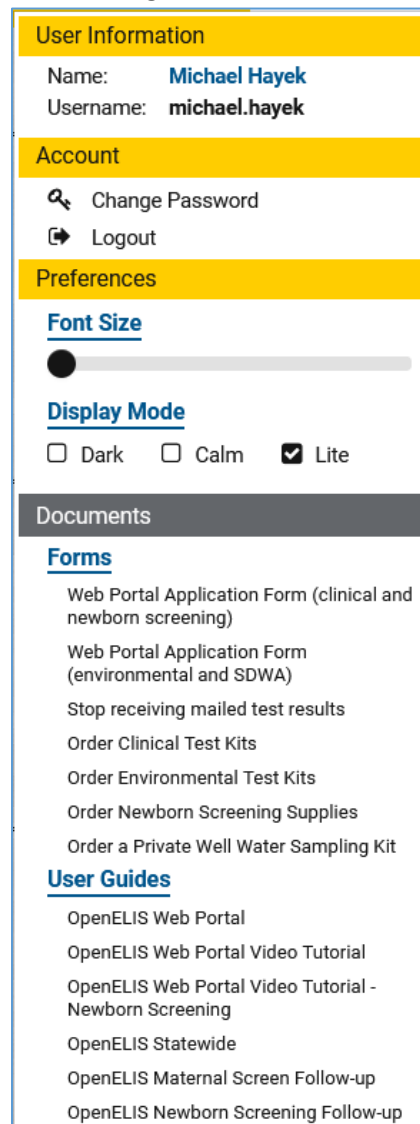
Logging in

- 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 using a shared computer, please click **Logout** on the **Account** menu and then close the browser after completing the session.
- Supported desktop web browsers are recent versions of: Firefox, Chrome, Opera, Safari, and Microsoft Edge (version 15 and above). Mobile browser compatibility includes Apple iPhone and iPad and Android devices.

Account Menu

- The **Account** menu in the top right corner of the **Home** page displays the name and username of the user.
- There are links to logout of the web portal and to change the user's password.
- The user can adjust the font size of the screen text and change the Display Mode (Dark, Calm, Lite).
- There are also links to related forms and user guides.

User Information

Name:	Michael Hayek
Username:	michael.hayek

Account

🔑 Change Password
➡ Logout

Preferences

Font Size

Display Mode
☐ Dark ☐ Calm ☑ Lite

Documents

Forms
Web Portal Application Form (clinical and newborn screening)
Web Portal Application Form (environmental and SDWA)
Stop receiving mailed test results
Order Clinical Test Kits
Order Environmental Test Kits
Order Newborn Screening Supplies
Order a Private Well Water Sampling Kit

User Guides
OpenELIS Web Portal
OpenELIS Web Portal Video Tutorial
OpenELIS Web Portal Video Tutorial - Newborn Screening
OpenELIS Statewide
OpenELIS Maternal Screen Follow-up
OpenELIS Newborn Screening Follow-up

Figure 1 Account Menu

Module Buttons and Menus

- The **Home** page of the OpenELIS Web Portal contains a button for each module for which permissions have been assigned. The menus at the top also lists these modules. Open a module by clicking on its button or selecting it from the menu.
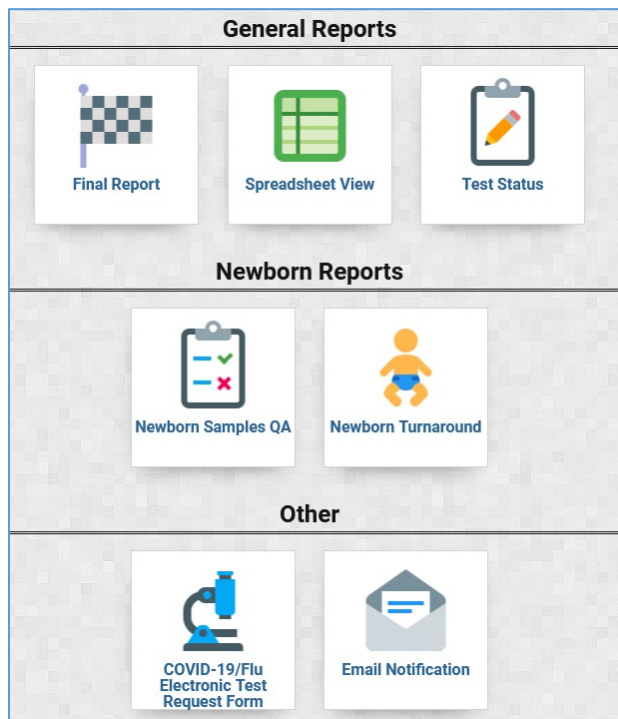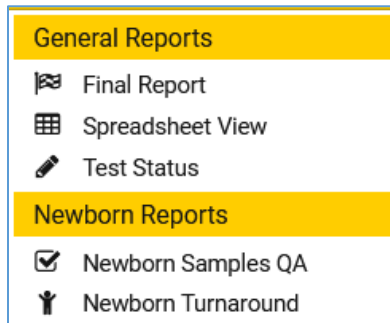

Figure 2 Module Buttons

Figure 3 Menu

Alerts

- A red circle above the bell icon denotes that there are one or more active alerts pertaining to the laboratory and the web portal. Click on this icon to display the alerts. Active alerts will also display at each login.

News

- A red circle above the newspaper icon denotes that there are one or more new news articles pertaining to the laboratory and the web portal that have been posted since the last time that the user logged in. Click on this icon to display the news articles.

Help Text

- A **Help** button ![? Help] located in the lower right corner of each screen will display helpful information regarding the use of that screen.

Changing Your Password

- Click **Change Password** on the Account menu and follow the designated steps.
- Keep your new password secure. If you must write it down, be sure to keep it in a safe place.
- Passwords must meet the following requirements:
  - Password is case sensitive.
  - Must be at least 15 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 Newborn Screening Follow-up Web Portal may be directed to shl-openelis-support@uiowa.edu or to 319/335-4451.

General Reports

Final Report Screen

The Final Report screen allows the user to search for and download the final reports for their organization's samples that have results available.

Click on the **Final Report** button (or select it from the General Reports menu).

Query Fields

Information only needs to be entered in one field to conduct a search for samples. Example fields include **Collected Date**, **Released Date**, **Accession Number**, **Client Reference**, **Collector**, or **Patient's Last Name**.

It is recommended to click in a date field and use the calendar when entering a date to eliminate any formatting errors. Clicking on the word "TODAY" at the bottom of the calendar will insert the current date (or date and time). Dates can also be typed, if preferred. All dates have the format of YYYY-MM-DD. **Released Date** also includes the time in the format of YYYY-MM-DD HH:MM.

Figure 4 Searching by a 1-month Collected Date Range

Final Report Search ✕

ANY SAMPLES

Collected Date:	Start	End
Released Date:	2024-07-25 08:00	2024-07-26 08:00

Figure 5 Searching by a 24-hour Released Date Range

A search can be narrowed by entering information in multiple fields. For example, to find all of the samples for patient Jane Doe who was born on March 11, 2024, enter DOE in the **Patient's Last Name** field, JANE in the **Patient's First Name** field, and 2024-03-11 in the **Patient's Date of Birth** Start field. To search by a range of dates enter a Start date and an End date.

PATIENT SAMPLES ONLY

Patient's Last Name:	DOE	
Patient's First Name:	JANE	
Patient's Date of Birth:	2024-10-22	End

Figure 6 Searching by a Patient's Last Name, First Name, and Date of Birth

To find all of the samples that were collected and sent to the laboratory in March of 2024 by a specific collector, enter the collector's name (as it appears on the collection form) in the **Collector** field and 2024-03-01 in the **Collected Date** Start field and 2024-03-31 in its End field.

Final Report Search ✕

ANY SAMPLES

Collected Date:	2024-03-01	2024-03-31
Released Date:	Start	End
Accession Number:	Start	End
Client Reference:		
Project:	▼	
Organization:	▼	
Lab Section:	▼	
Sample Domain:	▼	

ENVIRONMENTAL / SAFE DRINKING WATER SAMPLES ONLY

Collector:	*buck*

Figure 7 Searching by a Collected Date Range and a Partial Collector Name

A search may also be limited to one or more projects, reporting organizations, performing lab sections, or a sample domain. If these fields are left empty, all samples to which you are authorized will be displayed regardless of their reporting organization, performing lab section, sample domain, or whether they have an assigned project.

Figure 8 Searching by a Released Date Range and Sample Domain

The system supports wild card searches in the following fields: **Client Reference**, **Collector**, **Location**, **Patient's Last Name**, and **Patient's First 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 samples 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 samples 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 samples that were collected by a person with the 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.

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 the search criteria. The **Reset** button clears all of the search fields.

Viewing Final Reports

A list of samples that match the search criteria will be displayed on the next screen.

Final Report View

	Accession	Collected Date	Reference Information		Additional Information	Status	Project	Lab Section	Attachments
☑	235901	2017-01-03 09:35	[Patient] [DoB]	DOE, JANE 1995-06-30, Female	WELBY, MARCUS ANYTOWN HOSPITAL	✔		maternal_screen-ic	📎 ❶
☐	235905	2017-01-03 10:00	[Collector] [Location]	mouse mickey dining hall	1000 MEDICAL ST ANYTOWN	⏱	01wqfmm	asbestos-ic	📎 ❶
☑	235911	2017-01-03 08:30	[Patient] [DoB]	DOE, JANE 1995-06-30, Female	DOE, JOHN ANYTOWN HOSPITAL	✔		maternal_screen-ic	📎 ❸
☑	235912	2017-01-04 11:45	[Patient] [DoB]	DOE, JANE 1995-06-30, Female	WELBY, MARCUS ANYTOWN HOSPITAL	✔		maternal_screen-ic	📎 ❶
☑	235913	2017-01-04 09:45	[Patient] [DoB]	DOE, JANE 1995-06-30, Female	WELBY, MARCUS ANYTOWN HOSPITAL	✔		maternal_screen-ic	📎 ❶
☑	235935	2017-02-10 12:45	[Animal]	Skunk	DOE, JOHN ANYTOWN HOSPITAL	✔		rabies-ic	📎 ❶
☐	235940	2017-02-13 06:30	[Collector] [Location]	potter harry lower level men's bathroom tap	IA5225209-IOWA CITY LANDFILL & RECYCLING	✔		enviro_micro-ic	📎 ❷

7 samples have been found.

Figure 9 Final Report View (Mix of Sample Domains)

Final Report View

	Accession	Collected Date	Reference Information		Additional Information	Status	Project	Lab Section	Attachments
☑	67655	2023-12-05 10:30	[Newborn] [DoB]	LAST627651414, FIRST627651414 2023-12-04, Male	WELBY, MARCUS ANYTOWN HOSPITAL	✔			📎 ❷
☑	67657	2023-12-05 08:17	[Newborn] [DoB]	LAST616577777, FIRST616577777 2023-12-04, Male	WELBY, MARCUS ANYTOWN HOSPITAL	✔			📎 ❷

2 samples have been found.

Figure 10 Final Report View (Newborn Screening Samples)

To view reports for all of the listed samples, click 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. Reports may be viewed, saved, or printed.

The following are descriptions of each column on this screen.

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

Collected Date: The date (and time if submitted) 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, date of birth (DoB), and gender are usually displayed for patient samples. The collector's name and the collection location are usually displayed for environmental and safe drinking water samples. The type of animal and the collection location are usually displayed for animal samples (e.g., rabies testing).

Additional Information: This information can also be useful in identifying a sample. The collection address and city (if submitted) are displayed for environmental samples. The 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 reporting organization are displayed for patient 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. Exception: Newborn screening test results will only be displayed through the Final Report and the Spreadsheet View modules after all of the tests on the sample have been completed.

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.

Lab Section: The name(s) of the laboratory section(s) that performed the test(s) on the sample.

Attachments: The number of documents attached to each sample (if any) are shown in this column in a red circle. First, click on the paper clip icon to display the list of attachments. Next, click on the name of the attachment to display it. Attachments may include the test request form (begins with the prefix "TRF"), original and subsequent versions of final reports (begin with the prefix "FinalReport"), copies of email correspondence, send-out lab reports, and laboratory instrument output.
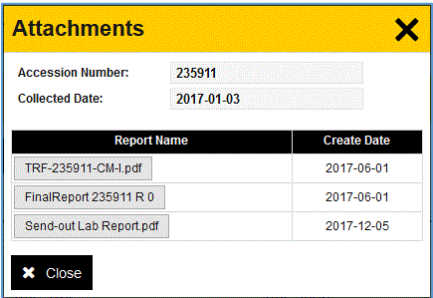
Attachments		✖
Accession Number:	235911	
Collected Date:	2017-01-03	

Report Name	Create Date
TRF-235911-CM-I.pdf	2017-06-01
FinalReport 235911 R 0	2017-06-01
Send-out Lab Report.pdf	2017-12-05

✖ Close

Figure 11 Sample Attachment List

Spreadsheet View Screen

The Spreadsheet View screen allows the user to search for and download data into a spreadsheet where it can be further sorted and filtered. It could be used to compare results from the same collection location or the same patient over time, to easily pick out abnormal results, or count the number of samples that were submitted or tests that were ordered over a given period of time.

Click on the **Spreadsheet View** button (or select it from the General Reports menu).

The first step is to search for the data to be displayed in the spreadsheet. The Spreadsheet View search screen works the same way as the Final Report search screen. See Query Fields in the **Final Report Screen** section for suggestions on how to conduct a search.

Use the **Open Query** button to navigate to a saved query (in XML format) to run, if desired. This feature is useful to generate a similar spreadsheet on a periodic basis without having to enter the search fields and select the data output fields.

After entering the search information, click the **Continue to Report Fields** button. The **Reset** button clears all of the search fields.

On the next screen select the fields to be displayed as columns on the spreadsheet. Individual fields can be selected or all of the fields in a group can be selected by clicking the **Select All** button.

Figure 12 Selecting Fields to Output to a Spreadsheet for Clinical Samples

Figure 13 Selecting Fields to Output to a Spreadsheet for Safe Drinking Water Samples

Figure 14 Selecting Fields to Output to a Spreadsheet for Newborn Screening Samples

This screen also shows all of the test analytes and auxiliary data that match the search criteria. Select at least one **Test Analyte** or **Auxiliary Data** field to run the report. Use the **Select All** button at the bottom to output all of the available information in a group.

The **Show analytes in single row per analysis?** option allows all of the test analyte values and auxiliary data for an analysis to be displayed as a single row on the spreadsheet.

Click the **Run Report** button to generate the spreadsheet containing the data that was selected. Spreadsheets can be viewed, saved, or printed.

Exception: Newborn screening test results will only be displayed through the Final Report and the Spreadsheet View modules after all of the tests on the sample have been completed.

Use the **Save Query** button to save a query (in XML format) to run again in the future. This feature is useful to generate a similar spreadsheet on a periodic basis without having to enter the search fields and select the data output fields.

Figure 15 Spreadsheet View of Clinical Samples

	A	B	C	D	E	F	G	H	I	J	K
1	Accession #	Collected Date	Received Date	Test	Method	Analysis Released Date	Analyte	Value	Uncertainty	Quant Limit	MCL
2	378947	2018-01-22 09:00	2018-01-22 12:10	Gross Alpha (excluding Uranium)	EPA 900.0/200.8	2018-01-24 15:47	Gross Alpha excluding Uranium	1.9	1.7	1.2	15
3	378947	2018-01-22 09:00	2018-01-22 12:10	Uranium	EPA 200.8	2018-01-24 15:40	Uranium	31		1.0	30
4	378947	2018-01-22 09:00	2018-01-22 12:10	Gross Alpha (including Uranium)	EPA 900.0	2018-01-24 15:41	Gross Alpha including Uranium	22.7	1.7	1.2	
5	378949	2018-01-22 08:30	2018-01-22 13:15	Total Coliform and E.coli Bacteria	9223B-18PA	2018-01-25 15:06	E.coli	Absent			
6	378949	2018-01-22 08:30	2018-01-22 13:15	Total Coliform and E.coli Bacteria	9223B-18PA	2018-01-25 15:06	Total Coliform Bacteria	Absent, Bacterially Safe			
7	378983	2019-01-15 14:30	2019-01-16 10:35	Haloacetic Acids (HAAs)	EPA 552.2	2019-01-23 14:18	Bromoacetic acid	<0.001		0.001	0.060
8	378983	2019-01-15 14:30	2019-01-16 10:35	Haloacetic Acids (HAAs)	EPA 552.2	2019-01-23 14:18	Chloroacetic acid	<0.002		0.002	0.060
9	378983	2019-01-15 14:30	2019-01-16 10:35	Haloacetic Acids (HAAs)	EPA 552.2	2019-01-23 14:18	Dibromoacetic acid	<0.001		0.001	0.060
10	378983	2019-01-15 14:30	2019-01-16 10:35	Haloacetic Acids (HAAs)	EPA 552.2	2019-01-23 14:18	Dichloroacetic acid	0.009		0.001	0.060
11	378983	2019-01-15 14:30	2019-01-16 10:35	Haloacetic Acids (HAAs)	EPA 552.2	2019-01-23 14:18	Total Haloacetic Acids (HAA5)	0.015		0.006	0.060
12	378983	2019-01-15 14:30	2019-01-16 10:35	Haloacetic Acids (HAAs)	EPA 552.2	2019-01-23 14:18	Trichloroacetic acid	0.005		0.001	0.060

Figure 16 Spreadsheet View of Safe Drinking Water Samples

	A	B	C	D	E	F	G	H
1	Accession #	Collected Date	Client Reference	Test	Patient Last Name	Patient First Name	Analyte	Value
2	67747	2023-05-17 10:30	567788222	Congenital Adrenal Hyperplasia	LAST567788222	FIRST567788222	Congenital adrenal hyperplasia interpretation	Poor Quality - Resubmit newborn screen sample
3	67747	2023-05-17 10:30	567788222	Congenital Hypothyroidism	LAST567788222	FIRST567788222	Congenital hypothyroidism interpretation	Poor Quality - Resubmit newborn screen sample
4	67747	2023-05-17 10:30	567788222	Biotinidase Deficiency	LAST567788222	FIRST567788222	Biotinidase deficiency interpretation	Poor Quality - Resubmit newborn screen sample
5	67747	2023-05-17 10:30	567788222	Galactosemia	LAST567788222	FIRST567788222	Galactosemia interpretation	Poor Quality - Resubmit newborn screen sample
6	67747	2023-05-17 10:30	567788222	Hemoglobinopathies	LAST567788222	FIRST567788222	Hemoglobin disorders interpretation	Within Normal Limits
7	67747	2023-05-17 10:30	567788222	Cystic Fibrosis	LAST567788222	FIRST567788222	Cystic fibrosis interpretation	Poor Quality - Resubmit newborn screen sample
8	67747	2023-05-17 10:30	567788222	Expanded Screening Disorders	LAST567788222	FIRST567788222	Amino acidemias interpretation	Poor Quality - Resubmit newborn screen sample
9	67747	2023-05-17 10:30	567788222	Expanded Screening Disorders	LAST567788222	FIRST567788222	Fatty acid oxidation defects interpretation	Poor Quality - Resubmit newborn screen sample
10	67747	2023-05-17 10:30	567788222	Expanded Screening Disorders	LAST567788222	FIRST567788222	Organic acidemias interpretation	Poor Quality - Resubmit newborn screen sample
11	67747	2023-05-17 10:30	567788222	Severe Combined Immunodeficienc	LAST567788222	FIRST567788222	SCID interpretation	Poor Quality - Resubmit newborn screen sample
12	67747	2023-05-17 10:30	567788222	Spinal Muscular Atrophy	LAST567788222	FIRST567788222	SMA interpretation	Poor Quality - Resubmit newborn screen sample
13	67747	2023-05-17 10:30	567788222	Lysosomal Storage Disorders	LAST567788222	FIRST567788222	MPS1 disease interpretation	Poor Quality - Resubmit newborn screen sample
14	67747	2023-05-17 10:30	567788222	Lysosomal Storage Disorders	LAST567788222	FIRST567788222	Pompe disease interpretation	Poor Quality - Resubmit newborn screen sample
15	67748	2023-05-18 11:47	567788222	Biotinidase Deficiency	LAST567788222	FIRST567788222	Biotinidase deficiency interpretation	Within Normal Limits
16	67748	2023-05-18 11:47	567788222	Congenital Adrenal Hyperplasia	LAST567788222	FIRST567788222	Congenital adrenal hyperplasia interpretation	Within Normal Limits
17	67748	2023-05-18 11:47	567788222	Galactosemia	LAST567788222	FIRST567788222	Galactosemia interpretation	Within Normal Limits
18	67748	2023-05-18 11:47	567788222	Hemoglobinopathies	LAST567788222	FIRST567788222	Hemoglobin disorders interpretation	Within Normal Limits
19	67748	2023-05-18 11:47	567788222	Cystic Fibrosis	LAST567788222	FIRST567788222	Cystic fibrosis interpretation	Within Normal Limits
20	67748	2023-05-18 11:47	567788222	Lysosomal Storage Disorders	LAST567788222	FIRST567788222	MPS1 disease interpretation	Within Normal Limits
21	67748	2023-05-18 11:47	567788222	Lysosomal Storage Disorders	LAST567788222	FIRST567788222	Pompe disease interpretation	Within Normal Limits
22	67748	2023-05-18 11:47	567788222	Spinal Muscular Atrophy	LAST567788222	FIRST567788222	SMA interpretation	Within Normal Limits
23	67748	2023-05-18 11:47	567788222	Expanded Screening Disorders	LAST567788222	FIRST567788222	Amino acidemias interpretation	Within Normal Limits
24	67748	2023-05-18 11:47	567788222	Expanded Screening Disorders	LAST567788222	FIRST567788222	Fatty acid oxidation defects interpretation	Within Normal Limits
25	67748	2023-05-18 11:47	567788222	Expanded Screening Disorders	LAST567788222	FIRST567788222	Organic acidemias interpretation	Within Normal Limits
26	67748	2023-05-18 11:47	567788222	Severe Combined Immunodeficienc	LAST567788222	FIRST567788222	SCID interpretation	Within Normal Limits
27	67748	2023-05-18 11:47	567788222	Congenital Hypothyroidism	LAST567788222	FIRST567788222	Congenital hypothyroidism interpretation	Within Normal Limits

Figure 17 Spreadsheet View of Newborn Screening Samples

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 Screen

The Test Status screen will display the status of each test that is being performed on the queried samples. The Lab Section, Collected Date, Received Date, Client Reference, and any QA Events will also be shown.

Click on the **Test Status** button (or select it from the General Reports menu).

The first step is to search for the desired samples. The Test Status search screen works the same way as the Final Report search screen. See Query Fields in the **Final Report Screen** section for suggestions on how to conduct a search.

After entering the search information, click the **Find Samples** button. The **Reset** button clears all of the search fields.

A list of samples matching the search criteria will be displayed. The real-time status of each test that is being performed is shown. Samples will not be displayed until they have been entered into and verified through the laboratory's information system.

Test Status View

? Help

Accession	Sample/Test Description	Lab Section	Status	Collected Date	Received Date	Client Reference	QA Event
37565	MOUSE, GREENY[1]			2020-02-01 10:10	2020-02-03 11:23	728927672	1. There was an error in sample collection date/time (e.g. missing, mismatched, postdated or incorrect). 2. Previous test result was incorrect. The corrected result is included on this report.
	E.coli O157 & Other STEC, Bacterial Culture for Exclusion [2]		✓				
	Enteric Pathogen Identification/Serotyping, Agglutination	bacteriology-ic	🕐				
	Enteric Pathogen Identification/Serotyping, Next Generation Sequencing	bacteriology-ic	🕐				
37566	hayek mike[1]			2020-02-13 09:45	2020-02-13 11:40	62181991	1. Sample was leaking upon receipt. Integrity of sample is questionable.
	Metals, EPA 200.8	metals-ank	🕐				

2 samples have been found.

? Help

Figure 18 Test Status View (Mix of Sample Domains)

Test Status View

? Help

Accession	Sample/Test Description	Lab Section	Status	Collected Date	Received Date	Client Reference	QA Event
69246	LAST5682901, FIRST5682901[1]			2024-07-11 05:55	2024-07-12 02:30	5682901	1. The red blood cells and serum appear separated on the filter paper, which might impact the Newborn Screening results interpretation. Resubmit newborn screening sample.
	Congenital Adrenal Hyperplasia, Immunoassay	newborn_screen-ank	✓				
	Congenital Hypothyroidism, Immunoassay	newborn_screen-ank	✓				
	Biotinidase Deficiency, Immunoassay	newborn_screen-ank	✓				
	Galactosemia, Enzymatic Assay	newborn_screen-ank	✓				
	Hemoglobinopathies, Various Methods	newborn_screen-ank	✓				
	Cystic Fibrosis, Various Methods	newborn_screen-ank	✓				
	Expanded Screening Disorders, Tandem Mass Spectrometry	newborn_screen-ank	✓				
	Lysosomal Storage Disorders, Tandem Mass Spectrometry	newborn_screen-ank	✓				
	X-linked Adrenoleukodystrophy, Tandem Mass Spectrometry	newborn_screen-ank	✓				
	Severe Combined Immunodeficiency, Real-Time PCR	newborn_screen-ank	✓				
	Spinal Muscular Atrophy, Real-Time PCR[1]	newborn_screen-ank	✓				
69247	LAST145768981, FIRST145768981			2024-07-11 05:55	2024-07-12 02:30	145768981	
	Congenital Adrenal Hyperplasia, Immunoassay	newborn_screen-ank	✓				
	Congenital Hypothyroidism, Immunoassay	newborn_screen-ank	🕐				
	Biotinidase Deficiency, Immunoassay	newborn_screen-ank	✓				
	Galactosemia, Enzymatic Assay	newborn_screen-ank	✓				
	Hemoglobinopathies, Various Methods	newborn_screen-ank	🕐				
	Cystic Fibrosis, Various Methods	newborn_screen-ank	✓				
	Expanded Screening Disorders, Tandem Mass Spectrometry	newborn_screen-ank	🕐				
	Lysosomal Storage Disorders, Tandem Mass Spectrometry	newborn_screen-ank	🕐				
	X-linked Adrenoleukodystrophy, Tandem Mass Spectrometry	newborn_screen-ank	🕐				
	Severe Combined Immunodeficiency, Real-Time PCR	newborn_screen-ank	🕐				
	Spinal Muscular Atrophy, Real-Time PCR	newborn_screen-ank	🕐				

2 samples have been found.

? Help

Figure 19 Test Status View (Newborn Screening Samples)

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 number. The patient's name (in uppercase letters) is usually displayed for patient samples. The collector's name (in lowercase letters) is usually displayed for environmental and safe drinking water 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 number. They consist of the "test name, method name". 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 only applies to that test.

Lab Section: The name of the laboratory section that performed each test on the sample.

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 through the Final Report and the Spreadsheet View modules. Exception: Newborn screening test results will only be displayed through the Final Report and the Spreadsheet View modules after all of the tests on the sample have been completed.

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

Received Date: 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: An item of information that helps to identify a sample. It could be the organization's lab number, a patient ID/Chart ID/Medical Record Number, or another identifier for a sample.

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

Newborn Reports

Newborn Samples QA Report

The Newborn Samples QA Report displays the patients having quality assurance (QA) issues with their newborn screening samples. The samples must be in released status to be displayed in the report. The totals of each category of QA issues and the combined total are displayed for each "Report To" organization.

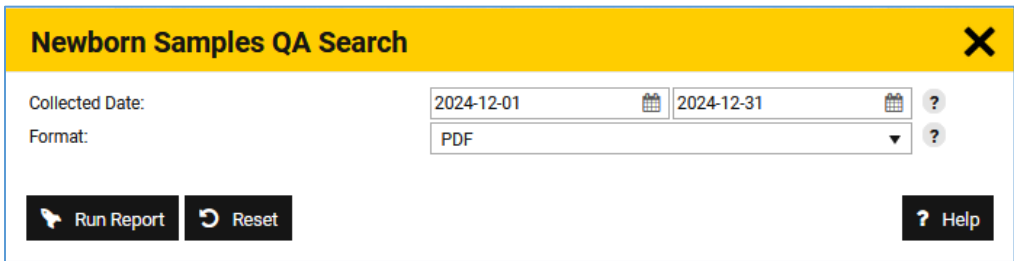Click on the **Newborn Samples QA** button (or select it from the Newborn Reports menu).

Figure 20 Newborn Samples QA Report Search Screen

The following are descriptions of each field on this screen.

Collected Date: The date that the sample was collected is used for the timeframe of the report. It is recommended to click in a date field and use the calendar when entering a date to eliminate any formatting errors. Clicking on the word

"TODAY" at the bottom of the calendar will insert the current date. Dates can also be typed, if preferred. All dates have the format of YYYY-MM-DD.

Format: It is required to select the format of the report: PDF or CSV. CSV files will normally open in Excel by default.

Click on the Tool Tip ? to the right of each field to view information about the use and format of that field.

Click the **Run Report** button to generate the report. The **Reset** button clears all of the search fields.

Figure 21 Newborn Samples Quality Assurance Report (PDF version)

Figure 22 Newborn Samples Quality Assurance Report (CSV version)

The following are descriptions of each section/column on this report.

Report Header

The date and time that the report was generated is displayed in the upper left corner. The name of the report and the date range is displayed in the top middle section. The page number and username of the person who generated the report is displayed in the upper right corner.

Organization Id-Organization Name, City, State

The OpenELIS id, name, city, and state of the "Report To" organization for the newborn screening samples with QA issues is displayed at the top of the section. Each organization's data is displayed in a separate section of the report.

Patient Name

The last name, first name of the newborn is displayed in this column.

Client Reference

An item of information that helps to identify a sample. It could be the organization's lab number, a patient ID/Chart ID/Medical Record Number, or another identifier for a sample.

Poor Quality

A poor quality issue with the sample is displayed here. These include Apply both sides, Clotted, Did not saturate, Expired Device, FP contaminated, FP damaged, Layered, No blood applied, Quant not suffic, Sample age, Serum separation.

Early Collection

If the newborn screening sample was an "Early Collection" (the sample was collected prior to 24 hours after the newborn's birth), an "X" will be displayed in this column.

Note: Early collection may be appropriate in some instances such as if infant will be transferred or discharged prior to 24 hours. Also, if an infant will receive a transfusion before the infant is 24 hours old then an early collection prior to transfusion is appropriate and recommended.

Early Collection Unknown

If the newborn screening sample was an "Early Collection Unknown" (it cannot be determined if the sample was collected early), an "X" will be displayed in this column.

Unknown Transfusion

If the newborn screening sample was an "Unknown Transfusion" (it cannot be determined if the newborn was transfused with any blood products before the sample was collected), an "X" will be displayed in this column.

Total Samples

The total number of samples with QA issues for the organization is displayed in the bottom row of the organization's section. The total number of samples for each category of QA issues is also displayed in this row.

Newborn Turnaround Report

The Newborn Turnaround Report displays the turnaround times for individual newborn screening samples and the average turnaround times for a "Report To" organization over a selected time period. The samples must be in released status to be displayed in the report.

Click on the **Newborn Turnaround** button (or select it from the Newborn Reports menu).

Figure 23 Newborn Turnaround Report Search Screen

The following are descriptions of each field on this screen.

Collected Date: The date that the sample was collected is used for the timeframe of the report. It is recommended to click in a date field and use the calendar when entering a date to eliminate any formatting errors. Clicking on the word "TODAY" at the bottom of the calendar will insert the current date. Dates can also be typed, if preferred. All dates have the format of YYYY-MM-DD.

Sort Order: A sort order must be selected for the report. Samples within a "Report To" organization can be sorted in ascending order by Date Received, Birth to Collection, Collection to Received, Received to Released, Birth to Received, or Birth to Released turnaround times.

Format: It is required to select the format of the report: PDF or CSV. CSV files will normally open in Excel by default.

Click on the Tool Tip ? to the right of each field to view information about the use and format of that field.

Click the **Run Report** button to generate the report. The **Reset** button clears all of the search fields.

Figure 24 Newborn Turnaround Report (PDF version)

	A	B	C	D	E	F	G	H	I
1	1329 - ANYTOWN HOSPITAL, ANYTOWN,								
2	Patient Name		Client Reference	Repeat	Birth to Collection	Collection to Receive	Birth to Receive	Receive to Release	Birth to Release
3	LAST38190001, FIRST38190001		38190001		1 d 0.4 h	0 d 16.0 h	1 d 16.4 h	127 d 13.0 h	129 d 5.4 h
4	LAST61555111, FIRST61555111		61555111		1 d 0.9 h	0 d 16.0 h	1 d 16.8 h	127 d 14.3 h	129 d 7.0 h
5	LAST7287554443, FIRST7287554443		7287554443		1 d 0.4 h	0 d 15.5 h	1 d 15.9 h	20 d 8.6 h	22 d 0.5 h
6	Total Samples 3	Average Turnaround Time (# of samples for averages)			1 d 0.6 h (3)	0 d 15.9 h (3)	1 d 16.4 h (3)	91 d 20.0 h (3)	93 d 12.3 h (3)
7	1338 - ANYTOWN MEDICAL CLINIC,								
8	Patient Name		Client Reference	Repeat	Birth to Collection	Collection to Receive	Birth to Receive	Receive to Release	Birth to Release
9	LAST616577777, FIRST616577777		616577777		1 d 1.9 h	0 d 17.8 h	1 d 19.7 h	233 d 12.9 h	235 d 8.5 h
10	Total Samples 1	Average Turnaround Time (# of samples for averages)			1 d 1.9 h (1)	0 d 17.8 h (1)	1 d 19.7 h (1)	233 d 12.9 h (1)	235 d 8.5 h (1)

Figure 25 Newborn Turnaround Report (CSV version)

The following are descriptions of each section/column on this report.

Report Header

The date and time that the report was generated is displayed in the upper left corner. The name of the report and the date range is displayed in the top middle section. The page number and username of the person who generated the report is displayed in the upper right corner.

Organization Id-Organization Name, City, State

The OpenELIS id, name, city, and state of the "Report To" organization for the newborn screening samples is displayed at the top of the section. Each organization's data is displayed in a separate section of the report.

Patient Name

The last name, first name of the newborn is displayed in this column.

Client Reference

An item of information that helps to identify a sample. It could be the organization's lab number, a patient ID/Chart ID/Medical Record Number, or another identifier for a sample.

Repeat

A repeat sample for the patient will have an "X" displayed in this column.

Birth to Collection

The turnaround time from the birth of the newborn to the collection of their newborn screening sample is displayed in this column in days, hours, and tenths of an hour.

Collection to Receive

The turnaround time from the collection of the newborn screening sample to its receipt in the laboratory is displayed in this column in days, hours, and tenths of an hour.

Birth To Receive

The turnaround time from the birth of the newborn to the receipt of their newborn screening sample in the laboratory is displayed in this column in days, hours, and tenths of an hour.

Receive to Release

The turnaround time from the receipt in the laboratory of the newborn screening sample to the release of its results is displayed in this column in days, hours, and tenths of an hour.

Birth to Release

The average turnaround time from the birth of a newborn to the release of their newborn screening results is displayed in this column in days, hours, and tenths of an hour.

Total Samples

The total number of samples for the organization is displayed in the bottom row of the organization's section.

Average Turnaround Time (# of samples for averages)

The averages of each turnaround time are displayed here along with the number of samples that were used to calculate the averages.

Note: Repeat samples, samples with dates missing, and samples collected greater than 5 days after birth are not used for determining averages.

Other Reports

COVID-19/Flu Electronic Test Request Form

Organizations can order Coronavirus (COVID-19) tests and the Influenza SARS-CoV-2 (Flu SC2) Multiplex test electronically through the COVID-19/Flu Electronic Test Request Form. This form creates an electronic test order which increases the laboratory's capability to deliver COVID and Influenza test results faster since this information does not need to be manually entered into our information system. It also prevents transcription errors that can occur through manual data entry by our staff.

Click on the **COVID-19/Flu Electronic Test Request Form** button (or select it from the Other menu).

Fields marked with an * are required. The form cannot be submitted without an entry in these fields.

The Tab key can be used to move through the fields. Use the mouse to select an answer from a dropdown list. Alternatively, enter the first letter of the selection (or arrow down to it) and then press the Enter key to select that item.

All dates have a format of YYYY-MM-DD. It is recommended to click in a date field and use the calendar when entering a date to eliminate any formatting errors. Clicking on the word "TODAY" at the bottom of the calendar will insert the current date. Dates can also be typed, if preferred. All phone numbers have a format of 111/111-1111.

Select the organization to receive the test results in the **Reporting Organization Information** section. Only one organization can receive the test results through the OpenELIS Web Portal.

Figure 26 Reporting Organization Information

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

Figure 27 Ordering Health Care Provider Information

The date that the sample was (or will be) collected must be entered in the **Sample Information** section.

Figure 28 Sample Information

At least one test must be selected along with its corresponding sample type in the **Test(s) Being Requested** section. If it is desired to order a second type of test on the patient, select the test and its corresponding sample type.

Figure 29 Test(s) Being Requested

If it is desired to associate a Patient ID, MRN (Medical Record Number), Chart Number, or Account Number with the patient, enter it in the Client Reference field in the **Patient Information** section.

The last name, legal first name, date of birth, and complete address of the patient must be entered. The patient's middle name, phone number, gender, race, and ethnicity are useful to public health epidemiologists.

Figure 30 Patient Information

The remainder of the questions are requested to be answered by the United States Department of Health and Human Services (HHS) and laboratory staff to assist with testing and epidemiological investigations. The majority of these questions can be answered with a Yes/No/Unknown answer or a date. "Date test ordered" is the date that this form is completed. The last two questions should be answered if the SARS-CoV-2 Next Generation Sequencing test is being ordered.

Noteworthy information is listed in the **Additional Information** section at the bottom of the screen.

After entering the information into the form, 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 the PDF does not pop-up, pop-ups may need to be allowed for the web browser. Call SHL Web Portal Support at 319/335-4358 or your IT staff for assistance, if needed. It may be necessary to re-enter the information after pop-ups are allowed in order to display the PDF version of the test request form.

Any of the information on the paper copy of the test request form can be corrected, if necessary. Strike through the incorrect information and hand write the correct information along with your initials and the current date. It is not necessary 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, as stated above.

Contact the State Hygienic Laboratory to cancel a test only if you have already shipped the sample. There is no need to contact the State Hygienic Laboratory to cancel an electronic 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** and **Requested 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.

Email Notification

The laboratory can send an email to specified email addresses whenever a new sample is received or when a result is available. The user can choose whether the notification emails are sent for either or both types of events.

Click on the **Email Notification** button (or select it from the Other menu).

A filter can be added so that only email notifications from the laboratory that match that filter will be received. This allows the user to only receive email notifications for samples that have a specific collector, provider, client reference, or assigned project.

Add an Email Notification Entry

Click on the **Add** button to enter a new email address.

Select the "Report To" organization of the samples from the dropdown list in the **Organization** field.

Enter the recipient's email address in the **Email** field.

To add an email notification filter, select the **Filter By** option (Client Reference, Collector, Provider, or Project) to filter the email notifications. Next, enter the text that must match for the filtering in the **Filter Match** field. Examples include the last name of the collector or provider, the name of the project, or a common word or number that is used in the Client Reference field of the samples.

Check **Received** or **Released** or both to receive notifications for each type of event.

Click the **OK** button and then the **Save Changes** button to complete the process.

Figure 32 Adding an Email Notification

Edit an Existing Email Notification Entry

Click on any cell in the entry that you want to edit.

Edit the information.

Click the **Save Changes** button to complete the process.

Figure 33 Editing an Email Notification

Remove an Existing Email Notification Entry

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