Web-Based Laboratory Reporting (WLR)

Wisconsin State Laboratory of Hygiene (WSLH) Contacts:
Mary Wedig – 608-224-4274, mary.wedig@slh.wisc.edu
Barb Rosenthal – 608-224-4231, barb.rosenthal@slh.wisc.edu

Definitions:

- **WLR (Web-based Laboratory Reporting):** A means to enter laboratory results for diseases/conditions required by Wisconsin statutes into a secure portal, where they are reviewed and transmitted to the local public health department with jurisdiction.

- **ELR (Electronic Laboratory Reporting):** A means to automatically (or electronically) and rapidly report laboratory results for diseases/conditions required by Wisconsin statutes to WEDSS (HHLPLLSS or ABLES for lead), where they are reviewed and transmitted to the local public health department with jurisdiction.

- **WEDSS (Wisconsin Electronic Disease Surveillance System):** A system for disease reporting, outbreak management, and investigation and management of individual cases by local and state public health agencies.

The following definitions are only included for clarification of terms used in this document. Reporting laboratories are not required or expected to use them. The WSLH will assign codes, etc. to data.

- **HL7 (Health Level Seven (HL7)):** The preferred standard to electronically transfer results from different reporting systems to the appropriate healthcare network.

- **LOINC (Logical Observation Identifiers Names and Codes”):** A standardized system of medical terminology to assist in the electronic exchange of laboratory tests, clinical observations, outcomes management, etc..

- **SNOMED: (Systematized Nomenclature of Medicine -- Clinical Terms).** is a systematic collection of medical terminology that is standardized so terms can be processed by computers. It allows a consistent way to index, store, retrieve, and aggregate clinical data (including diseases, findings, procedures, microorganisms, pharmaceuticals etc.).
• **PHINMS** (Public Health Information Network Messaging System): A system developed by CDC to rapidly and securely transmit sensitive health information over the Internet.

**Process:**
WLR and ELR are formatted into HL7 messages, assigned LOINC and SNOMED codes and sent to WEDSS or WLP through a secure message system (PHINMS). When the message gets to WEDSS, a disease is assigned, based on the LOINC and SNOMED codes, and a health department of jurisdiction is assigned, based on the patient address (street, city, state and zip).

**Access to WLR through WSLH Web site:**
WLR can be accessed from the Laboratory-Based Surveillance web page on the WSLH website at [http://www.slh.wisc.edu/labupdates/reports/index.dot](http://www.slh.wisc.edu/labupdates/reports/index.dot)

Or [https://www.slh.wisc.edu/apps/ELRManualLabEntry/labentry.htm](https://www.slh.wisc.edu/apps/ELRManualLabEntry/labentry.htm)
This will take you to the WLR login page.

**Wisconsin Web-based Laboratory Reporting (WLR): Login Page**

![Login page screenshot](image)

**User ID and Password:** Enter your pre-assigned User ID and password, then click on “**Log In**”.

**Reset:** Click here only if you want to clear all of the information you had entered and re-enter your User ID and Password.
After your login and password are accepted, you will be taken to the main menu page:

### Wisconsin Web-based Laboratory Reporting (WLR): Main Menu

**Entering Test Results for:** The name of the laboratory for which you are reporting will be visible on the page in the “Entering Test Results for:” line, unless you report for more than one laboratory. If you report for multiple laboratories, there will be a drop down box with a list from which to select the laboratory for which you will be entering or viewing results.

**Enter Test Results:** Click on this to enter laboratory test results.

**View Previous Entries:** Click on this to see previous test result entries for your laboratory.

After you click **Enter Test Results**, you will be taken to the Data Entry Screen:
The laboratory for which you are entering test results will appear at the top of the form; in the example above: “Entering Test Results for: Wisconsin State Laboratory of Hygiene”.

**General Instructions:**

- All information is required even though only a few fields have the red * that will not let the information be submitted without this information as timely reporting is important if you are missing one or two pieces of information.

- To move between fields, press “TAB” or click your computer mouse. “ENTER” or a mouse-click can be used to exit a “warning” comment.

- Please check information carefully before submitting, as the information is transmitted directly to WEDSS or WLP and cannot be edited after it is submitted.

- If you would like a **printed copy** of the entry, press the print icon on your web browser or File and print from the tool bar.

- After all of the information is complete, press “Submit Lab Entry” to save the data and exit to the main menu page.

- Dates and telephone numbers must follow a specific format to be accepted; the required format is visible in the field before your cursor moves into that field.
- Dates are formatted as “mm-dd-yyyy”, but can be entered as “1/5/2009” or “1-5-2009” or “01052009”.
- Telephone numbers are formatted as “nnn-nnn-nnnn”, but can also be entered as “nnnnnnnnnn”, e.g., “608-555-1234” or “6085551234”

**Patient Information:**

**Patient’s name (last and first) and patient’s city are required fields.** Please complete as much of the information as possible, as the patient address is necessary for WEDSS or WLP to assign the correct Local Health Department jurisdiction.

- **Patient address:** Complete physical address.
- **City:** Type in the patient city. As you type, city names will appear that match what you have typed. If the city name(s) that appear are not correct, continue to type the correct name. All of Wisconsin’s cities are available in the cities list.
  - Examples:
    - If you type “M” in the city field, “Mackeys Landing” will auto-fill in the field.
    - If you type “Madi” in the city field, “Madison” will auto-fill in the field.
- **Patient ID:** Patient MRN or identifier assigned by your facility.
- **Patient phone number:** Enter as “6081231234” or “608-123-1234”. An error message will display if it is entered in any other format.
- **Patient date of birth:** Enter the date as 1/5/2009, 1-5-2009 or 01052009. An error message will display if it is entered in any other format.
- **Sex, Ethnicity and Race:** Each of these is a “drop-down” box. Enter the appropriate response by clicking on the arrow at the left of the box, then select the appropriate response by clicking on it or by typing the first letter of the word into the box.
Ordering Facility Information: Provide information regarding where the patient was seen and by whom.

- **Provider:** The physician or clinician who saw the patient (ordered the test)
- **Ordering facility:** The facility where the patient was seen.
- **Address:** The address of the facility where the patient was seen (ordering facility)
- **Telephone:** The telephone number which the local health department should call with questions; this could be the ordering facility’s or provider’s telephone number, as most appropriate.

Specimen Information: Provide information related to the specimen that was collected and tested, and provided the reportable result.

- **Specimen Number:** The specimen or accession number assigned to the specimen.
  
  This can be any number but must be unique to each specimen. If this is not normally assigned, can use date collected with an incremented number. Format YYYYMMDD-nnn where YYYYMMDD is the date of collection and nnn is an incremented number; 20200915-001

- **Date collected:** The date the specimen was collected
• **Date received:** The date that the specimen was received in your laboratory

• **Specimen source/type:** The source of the specimen taken (e.g. throat, stool, blood, lung, etc.). The field will auto-fill as you type, but you can also type over the information that was auto-filled.

• **Specimen source/type Notes:** Enter any additional information regarding the specimen (e.g. swab, aspirate, stored at room temperature, right upper lobe, autopsy specimen, etc.)

**Test/Result Information:**
All of the laboratory tests that may produce a reportable result can be pre-populated in the drop down box labeled “Test Performed”.

If a test, organism, etc., is not available in a drop-down box, you may need to create a new test/organism/etc., using the instructions included in those sections or call Mary W 608-890-0353 or Bill Kurth 608-265-3290.

• **Test Performed:** Choose the test that was performed from the drop down box

  After you choose the test that was performed, additional fields will appear, based on the test that was selected. The fields and the information in the fields will depend on the type of test you have performed.

  If you are entering multiple tests from the same patient and the same specimen, click on “Add Additional Test” to add the 2nd, 3rd, etc. tests and results.

• **Result:** Enter the result of the test.
  
  o If this test produces an organism (rather than positive, reactive, numeric value, etc.), there will be a drop down box to choose the organism.
  
  o If the test is a value, positive, reactive, etc., type the result into the field.

• **Units:** Enter units if applicable; this is primarily used for numeric results.

• **Normal Range:** Enter the normal or reference range for the test, if applicable; this is also primarily used for numeric results.

• **Abnormal Flag:** Select the abnormal value from the drop down box. Most will be “Abnormal” or “Normal”.
- **Result Status**: Select the correct term to indicate whether this is a preliminary, final or corrected result.

- **Date Resulted**: Enter the date that the result report was released.

- **Result Notes**: Enter any additional information regarding the result such as HHS questions and answers.

*Please check information carefully before submitting* as the information is transmitted directly to WEDSS and cannot be edited. If a result must be changed, enter all information again as a “corrected report” and resubmit it.

**To print a copy of the report**: Click on “print” in your browser menu bar at the top of the page **BEFORE** you click on “Submit Lab Entry”. The report cannot be printed after you click on “Submit Lab Entry”.

**Press “Submit Lab Entry”** to submit the data and return to the main menu page.

If any “Required Fields” were not completed properly, you will not be allowed to leave the data entry screen. “Please correct below errors identified in red” will appear near the top of the screen and “Required entry” will appear in red text below each required field that was not properly completed.

**Reset**: Clicking this button will clear all of the data entered on the data entry page without submitting it and without moving to another screen.

**Main Menu**: Clicking this button will move you to the main menu screen without saving any of the data you have entered (unless you have clicked on “Submit Lab Entry”)

**Warnings**: You will receive a warning comment for the following circumstances:

- Entering an incorrect format for telephone numbers or dates
- Entering future dates
- Your session is about to time out
- Required information is missing
**View Previous Entries:**

To view laboratory results that were entered previously from your institution, click on “View Previous Entries” at the main menu screen.

- To view previously entered *laboratory results*, click on “Lab Entries”;
- To view previously entered *tests*, click on “Test Catalog”;
- To view previously entered *organism* or *pre-populated results*, click on “Organism Catalog”. See below for additional details about each option:

**Lab Entries:**

This screen displays the results that have been entered by an authorized staff member from your facility. Results are displayed in reverse entry order, with the most current at the top of the list. The list can be sorted or re-ordered by clicking on any of the column headers.

- Date Entered
- Specimen Number
- Test Performed
- Result
- Sensitivity

**Press “Return”** to go back to the main menu.

**Test Entries or “Test Catalog”:**

This screen displays all of the tests that you can select. You can sort by any of the fields by clicking on one of the column headers. This table is created when anyone from your institution creates a new test or antimicrobial agent. WSLH will work with your laboratory to create a list of tests that may produce a reportable result to pre-populate your “Test Catalog”.

- **Test Name**: This is your test code.
- **Description**: This is your test name.
- **Method**: This is the test method used to produce the result
- **Specimen type**: This is the source of the specimen or sample that can be used in the test
- **Scale**: This is the scale of measurement of the test result, as described previously.
- **LOINC Code**: *WSLH ENTERS THIS INFORMATION.*
• **LOINC Description:**  *WSLH ENTERS THIS INFORMATION.*
• **OBX type:**  *WSLH ENTERS THIS INFORMATION.*
• **Is Antibiotic?**  *WSLH ENTERS THIS INFORMATION.*
• **Is Approved?**  *WSLH will change this to “Y” after assigning LOINC codes.*
• **Is Active?**  WSLH can inactivate the test code so it will not display in the drop down box for the test on the entry screen if the test is no longer performed.

**Press “Return” to go back to the main menu.**

**Organism Catalog:**
- This table displays all of the available results/organisms choices for your institution. You can sort by any field by clicking on one of the column headers. Entries to this table are created whenever new results/organisms are entered and can be created and pre-populated so there would be little “create new” activity required.
- **Code:** This is your organism or result code
- **Name:** This is your organism or result name
- **SNOMED ID:**  *WSLH ENTERS THIS INFORMATION.*
- **SNOMED Code:**  *WSLH ENTERS THIS INFORMATION.*
- **SNOMED Description:**  *WSLH ENTERS THIS INFORMATION.*
- **Is Approved?**  *WSLH will change this to “Y” after assigning LOINC codes.*
- **Is Active?**  WSLH can inactivate the organism code so it will not display in the drop down box for the test on the entry screen if the code is no longer used.

**Press “Return” to go back to the main menu.**