

# Washington Disease Reporting System

# Washington Disease Reporting System Lab Results Instruction Manual

Washington State Department of Health





This guide is non-exhaustive and only includes fields that need additional explanation. Please direct questions on topics not covered in this guide to your disease-specific point of contact.

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Contact the Washington State Department of Health

Office of Communicable Disease Epidemiology Email: <u>CommDisEpi@doh.wa.gov</u> | Phone: (206) 418-5500

Hepatitis Program General Hepatitis C Email: <u>hepatitis@doh.wa.gov</u> General Hepatitis B/D Email: <u>CommDisEpi@doh.wa.gov</u>

Blood Lead Program Email: <u>lead@doh.wa.gov</u> | Phone: 360-236-4280

Tuberculosis Program Email: tbservices@doh.wa.gov| Phone: 360-236-3443

Disclaimer: The examples used in this reference guide are fictitious. Any resemblance between any person or case illustrated in this reference guide and an actual person or case is purely coincidental.

# Lab Results in WDRS

Lab reports often need to be entered into WDRS and users may upload the lab report itself to the system. The process varies by each program area in WDRS. Refer to the table below, and if you are unsure how to input a lab result, please contact the applicable program area.

Program Area	Lab Results Tab	Uploading Lab Report	Question Package
Hepatitis	Required entry	<b>Optional</b> : Upload the lab report to the lab result itself (as shown below)	Lab information entered in the Lab Results tab auto-populates into the Laboratory Diagnostics question package
General Communicable Diseases (GCD)	Required entry	Upload the lab report to the lab result itself (as shown below)	Lab information entered in the Lab Results tab auto-populates into the case classification question package for auto- classified conditions
Tuberculosis	User choice	Attach the lab report to the Event Summary screen using the Attachment link (as shown below)	Required Entry into the Diagnostics and Evaluation question package
Blood Lead	User choice	Attach the lab report to the Event Summary screen using the Attachment link (as shown below)	

#### Entering lab data into WDRS:

#### Program area contact information:

Program Area	Phone	Email
General Communicable Diseases	206-418-5500	CommDisEpi@doh.wa.gov
Honotitic	B/D 206-418-5500	B/D <u>CommDisEpi@doh.wa.gov</u>
Перация	C 360-236-3390	C <u>Hepatitis@doh.wa.gov</u>
Lead	360-236-4280	Lead@doh.wa.gov
Tuberculosis	360-236-3443	Tbservices@doh.wa.gov

#### Uploading lab reports:

Upload the lab repo	rt to the lab result	Attach the lab report to the event		
Test performed and resultWDRS test performedTest performed-Other, specifyWDRS test result, codedWDRS test result, comparatorWDRS result, numeric onlyWDRS units of measureTest methodWDRS interpretation codeInterpretation code-Other, specifyTest result-Other, specifyWDRS result summary		Event Summary Basic Information Event ID: Disease: Person: Dates: Type: Investigation Status: Linked Events/Contacts: Linked Exposure Sites: Attachments: Notices:	100000010 Brucellosis Bruce Wayne Birth Date: 01/01/195 (68 yo Male) Create Date: 05/15/2018 Interactive Open (Change to Closed) 0 linked event(s)/contact(s) (View) 0 linked event(s)/contact(s) (View) 0 attachment(s) (Add) Workflow Status (1) Event is in workflows [View List]	
Test result status Result date Add	MM/DD/YYYY	Edit Event Properties	General Notifications (1) Vital Status: Alive Copy Event	

## Lab Results Tab

To view or enter results for an event, select the Lab Results Tab.

Event Data Lab Rest	ults Concerns	Persons	Tasks	Surveys	Calendar	Event Properties	Event Histo	ory
Labs								
Labs         Specimen collection           >1         04/18/2018	a date WDRS speci	men type	WDRS test p IgM by Bruce microagglut	erformed ella	WDRS test result Brucella spp.	WDRS test result (	(additional) V	VDRS result summary
Add Lab Result Update	Add Lab Result Update Lab Result Delete Lab Result							
Last Undate:	05/15/2018	LAB_DE_I	EMPLATE_C	JCD				
Updated By:	Jennifer Hubber [J	Hubber]						
Lab report information Lab report reviewed - LHJ:	ort information							
Specimen								
Specimen collection date:	04/18/2018							
Test performed and result								
WDRS test performed:	IgM by Brucella mi	croagglutin	ation test (BN	1AT)				
WDRS test result, coded:	Brucella spp.							

The organization of the screen for the **Lab Results Tab** is the same for all program areas. Below the Event Summary section displayed at the top of the screen there are two sections: **Labs** (grid) and **Details**.

#### Labs

The Labs grid shows all individual laboratory result reports that have been received or entered for the event. Each specimen (not test result) is numbered consecutively. The grid displays the following information for each test:

- Lab number: internal numbering for specimen (1, 2, 3, ... )
- Specimen collection date
- WDRS specimen type
- WDRS test performed
- WDRS test result
- WDRS test result (additional)
- WDRS result summary

If the field begins with 'WDRS' it indicates that the field is standardized and can be used for reports entered manually or received through electronic laboratory reporting (ELR).

One specimen can have more than one test performed, each with a separate result. In addition, one specimen may be tested at more than one laboratory. In the example below, the first lab number was a stool specimen that had PCR performed identifying *Salmonella*. The same laboratory then did a bacterial culture identifying non-typhoidal *Salmonella*. The first and second test results share the same internal Lab number. The third lab result report was the first specimen (note the same collection date) forwarded to a reference laboratory for bacterial serotyping, which gave it a different internal Lab number. Finally, the follow-up stool sample taken on a later date is still positive for *Salmonella* by PCR.

Even	t Data	Lab Results	Co	oncerns	Persons	Tasks	Surveys	Calendar	Event Properties	Ev
Labs			_							
Lab No.	Specin	nen collection da	ate	WDRS s	specimen type WDRS test performed		ed	WDRS test result		
1	03/08/2	2018		Stool		PCR/N	lucleic Acid T	est (NAT,	Salmonella spp. dete	cted
1	03/08/2	/08/2018 Stoo		Stool		Bacter	ial culture (is	olation)	Salmonella non typhi	
2	03/08/2	2018		Isolate	Isolate		Bacterial serotyping		Enteritidis	
>3	03/19/2	2018		Stool		PCR/N	lucleic Acid T	est (NAT,	Salmonella spp. detected	
	1									

#### Details

When the user highlights a result line on the Labs grid, as for the second result above, the **Details** section displays all data for that Lab number.

Labs				
Lab No.	Specimen co	llection date	WDRS specimen type	
1	03/08/2018		Stool	
>1	03/08/2018		Stool	
2	03/08/2018		Isolate	
3	03/19/2018		Stool	
Add Lab Resu	ult Update	e Lab Result Delete	Lab Result	
Details				
Template:		WDRS_MANUAL_LAB_DE_TEMPLATE_GCD		
Last Update:		03/30/2018		
Updated By:		Marcia Goldoft [mgoldoft]		
Specimen				
Specimen co	llection date:	03/08/2018		
WDRS speci	men type:	Stool		
Test performed	and result			
WDRS test p	erformed:	PCR/Nucleic Acid Test (NAT, NAAT, DNA)		
WDRS test re	esult, coded:	Salmonella spp. detected		
WDRS result	summary:	Positive		
Test performed	and result			
WDRS test p	erformed:	Bacterial culture (isolation)		
WDRS test re	esult, coded:	Salmonella non typhi		
WDRS result	summary:	Positive		

# **Electronic Lab Reporting (ELR)**

Electronic lab reporting (ELR) will be fully incorporated into WDRS at a later date. Until that time, DOH will perform a daily import of General Communicable Diseases and Hepatitis labs from PHRED into WDRS. This daily import will involve some standardization of lab data including test type (WDRS test performed) and result (WDRS result coded and WDRS result summary), as well as assigning the accountable county. Additionally, Hepatitis labs received in PHRED from 5/9/18 to 6/25/18 will be imported into WDRS by DOH.

These daily-imported labs will create open cases in WDRS that can be found and reviewed through various workflows. PHRED will remain operational, but labs do not need to be printed from PHRED and manually entered into WDRS. The daily import of PHRED labs will continue until the launch of the DRIVE system (Disease Reporting Interoperability and Verification Engine), anticipated in December 2018. DRIVE will transforms lab data to make it align with WDRS. This transformation makes high-level decisions such as which product code it belongs to and general standardized lab results. DRIVE will create a new lab result populating available fields. Fields starting with WDRS will be populated by DRIVE. A lab result created will display more fields than manually entered results.

# Manually Entered Lab Results

Local health jurisdictions may receive a laboratory report directly through fax, mail or telephone. Each program area in WDRS has a customized lab template for manually entering lab results.

For a new result entry, select the Lab Results Tab. Click on 'Add Lab Result'.

	Event Dat	a Lab Results	Concerns	Persons	Tasks	s Surveys	Calenda	r Event Properti	es Event History		
Labs		cimen collection da	te WDRS	specimen fvr	e V	WDRS test perfo	ormed	WDRS test result	WDRS test result (ac	(difional)	WDRS interpretation code
	10. Opt			opeoninen ()						antonary	
Add	Lab Resi	III Update Lab	Result								

When the template opens, the Lab number is assigned automatically. The Lab number can repeat if more than one result is reported for a specimen.

General Lab Notes:

- Refer to the General Manual terminology for fields with a search icon (magnifying glass).
- Some drop-down lists in the template are the same for all conditions in a particular program area (e.g., WDRS specimen type, WDRS specimen source site, WDRS units of measure, WDRS interpretation code, WDRS result summary, Test result status). Other drop-down lists are condition-specific (e.g., WDRS test performed, WDRS test resultcoded).
- Fields marked with an \* are of high importance along with the required fields of each program area.

The following text (Sections 1-5) describes each section of the manual lab template and fields commonly found in them. Templates vary by each program area's model. Please refer to program area's model manual for required fields.

## Section 1: Lab report information

Lab report information	
Lab report reviewed - DOH	$\checkmark$
Lab report reviewed - LHJ	
WDRS user-entered lab report note	
Submitter	n 🛧
Submitter	
If submitter is not on the pick list, please select "Laboratory not listed" and enter information below:	
Lab not listed-specify	
Performing lab for entire report	R 🗊
If performing lab is not on the pick list, please select "Laboratory not listed" and enter information below:	·,
Lab not listed-specify	
Referring lab	
If referring lab is not on the pick list, please select "Laboratory not listed" and enter information below:	
Lab not listed-specify	

This section is completed once for the entire lab report. Fields included and field order vary by program area.

#### WDRS user-entered lab report note

This field is an optional open text note for the user.

#### WDRS report date

This field indicates the date the event is entered in to WDRS. If it is not populated and the date is unknown, populate it with the Specimen collection date

#### Lab report reviewed - DOH

This drop down indicates if the lab has been reviewed by DOH.

#### Lab report reviewed - LHJ

This drop down indicates if the lab has been reviewed by the LHJ. Some program areas may require this field to be completed and have workflows that trigger off of it. Check with the individual models for guidance.

#### Submitter

The submitter is the entity that submitted the lab report. This may or may not be the laboratory that performed the test. Select the search icon and use the wildcard function with the first few letters of the lab name followed by an asterisk(\*). Click on the correct laboratory and hit Select. If the performing laboratory is not on the pick list, select 'Laboratory not listed' (lab\*) and specify the laboratory in the field 'Lab not listed-specify'

#### Performing lab for entire report

Input the laboratory that performed the test. Select the search icon and use the wildcard function with the first few letters of the lab name followed by an asterisk(\*). Click on the correct laboratory and hit Select. If the performing laboratory is not on the pick list, select 'Laboratory not listed' (laboratory\*) and specify the laboratory in the field 'Lab not listed-specify'.

The Performing laboratory is needed if a result needs to be tracked or confirmed.

#### **Referring lab**

The referring laboratory is the laboratory that forwards a specimen to another laboratory for testing. If applicable, input the laboratory using the search icon and wildcard function with the first few letters of the lab name followed by an asterisk(\*). Click on the correct laboratory and hit Select. If the referring laboratory is not on the pick list, select 'Laboratory not listed' (laboratory\*) and specify the laboratory in the field 'Lab not listed-specify'.

## **Section 2: Specimen**

Specimen	
Specimen identifier/accession number	
Specimen collection date*	MM/DD/YYYY
Specimen received date	MM/DD/YYYY
WDRS specimen reject reason	<b>T</b>
WDRS specimen reject reason-Other, specify	

Each specimen and performing laboratory combination is entered as a separate lab result. The user can enter one or more results for each specimen and laboratory. For example, a bacterial culture done on a stool specimen could have results for one or more organisms (and results can be positive or negative results).

#### Specimen identifier/accession number

The specimen identifier or accession number is the laboratory's unique identifier for the specimen, not for the result. The Specimen identifier and the Performing laboratory are needed to track a result. These are a required field for all program areas.

#### Specimen collection date

Enter this field for every result when available. Otherwise enter the Received date or Date/time of analysis in their respective fields. If onset date is missing, specimen collection date may be the only date available for an event. This is a required field for all program areas.

#### Specimen received date

Enter the date the performing laboratory marked the specimen as received. This date is optional if the collection date is entered.

#### WDRS specimen type

The WDRS specimen type field has model-specific drop-down lists for all conditions (e.g. any GCD event will provide the same GCD list of specimen types while any Lead event will provide another list of specimen types). Not all choices in the list may be applicable for a given condition.

For GCDs, the most commonly used specimen types are: blood, CSF, isolate, nasopharyngeal swab, serum, sputum, stool, swab, and urine. The type of specimen may be important for a case definition (e.g., isolate must be for a specimen type from a normally sterile site such as CSF). For fluid, swab, or tissue, also provide a WDRS specimen source site.

#### WDRS specimen source site

The WDRS specimen source site is the body location site where the specimen was taken such as an abscess or organ. The specimen source field has model-specific drop-down list for all conditions. Not all choices in the list will be applicable for a given condition. The specimen source field may not be pertinent for all conditions. An entry is not necessary if the WDRS specimen type indicates the source (e.g., blood, CSF, NP swab, pleural fluid, sputum, stool or urine).

Specimen source should be given if the specimen type is fluid, swab, or tissue. If the WDRS specimen type includes '(specify source)' or is an isolate, a specimen source should be entered to indicate the part of the body that was tested (e.g., indicate if the source is a normally sterile site).

#### WDRS specimen reject reason

This is an optional field if the LHJ wants to document the reason a specimen was not tested, such as broken container or missing patient identifiers. If 'Other' is selected for WDRS specimen rejection reason, specify it in the text box.

### Section 3: Test performed and result

This section is repeatable for all tests done on the same specimen.

Test performed and result		
WDRS test performed*	▼	
Test performed-Other, specify		
WDRS test result, coded		Y
WDRS test result, comparator	▼	
WDRS result, numeric only		
WDRS units of measure	<b>T</b>	
Reference range		
WDRS interpretation code		•
Interpretation code-Other, specify		
Test result-Other, specify		
WDRS result summary*	<b>T</b>	
Test result status		¥
Result date	MM/DD/YYYY	
WDRS performing organization		🥸 🛍
If performing organization is not on the pick list, please enter information below:*		
Performing organization name		
Add		

#### WDRS test performed

The WDRS test performed is a drop-down list with condition-specific choices. If the test performed is not listed, select 'Other' and specify the test in the field 'Test performed – Other, specify'.

#### WDRS test result, coded

The WDRS test result, coded, is a drop-down list with test-specific and condition-specific choices. Examples:

- Selecting WDRS test result, coded, for **Hepatitis B core antigen IgM (anti-HBc IgM)** gives the result choices of: Negative, Negative/Nonreactive, No result, Not reportable, Positive, Positive/Reactive.
- Selecting WDRS test result, coded, for **Hepatitis C genotype** gives the result choices of: Negative, Not Reportable, Positive, and a list of HCV genotypes (1 and 1a through 6 and 6c).
- Selecting WDRS test result, coded, for **Salmonella** provides an extensive drop-down list of serotypes (e.g., Typhimurium, Enteritidis, Newport)
- Selecting WDRS test result, coded, for **child Lead report** gives the result choices of: Test result less than 5 ug/dL or Test result greater than or equal to 5 ug/dL.

#### WDRS test result, comparator

These fields both display a list of comparators for entering numeric results. The comparator gives the mathematical symbol for the test result: less than, less than or equal, equal, greater than or equal, greater than and 1:# (dilution) such as 1:256.

#### WDRS test result, numeric only

The numeric field is the value of the result, which should only include numeric values (i.e. integer or decimal).

#### WDRS units of measure

Indicate the units of measure for all numeric results.

#### **Reference range**

If appropriate, record the reference range of the test performed, which may be qualitative (e.g., "undetected") or quantitative (e.g., "0.0-0.9", "<15", or "<3.3").

#### Test method

The test method is an optional text field for more information about the type of test done.

#### WDRS interpretation code

The WDRS interpretation code is a drop-down list that can be used for optional interpretation of a WDRS result summary.

For GCDs this field is most commonly a complete blood count or an antibiotic resistance report. This field is not used for auto-classification. Commonly used codes will be Abnormal (applies to non-numerical results), Abnormal result, Normal (applies to non-numeric results), Normal (applies to non-numeric results), Normal result, Resistant, and Sensitive.

If 'Other' is selected, specify it in the 'Interpretation code-Other,' specify text box.

#### Test result -Other, specify

This optional text box is available for any result that cannot be reported through the fields in the Test performed and result section.

#### WDRS result summary

Enter a WDRS results summary for every report.

For GCDs this field is used with auto-classification. The result summary field has the same dropdown list for all GCD conditions. The options are: Equivocal, Indeterminate, Negative, Test not performed, and Positive.

For Hepatitis, this field is used for auto-classification. The dropdown options are the same for all test types: Positive, Negative, Indeterminate, Test not performed, Pending, Not reportable, and No result.

#### Test result status

The test result status field can be used to indicate if the result is final, preliminary, a correction, cannot be obtained, or pending.

#### **Result date**

Enter the date the performing laboratory marked the result as completed.

#### WDRS performing organization

Select the search icon and use the wildcard function with the first few letters of the performing organization name followed by an asterisk(\*). Click on the correct laboratory and hit Select. If the performing organization is not on the pick list, select 'Laboratory not listed' (lab\*) and specify the laboratory in the field 'Lab not listed-specify'. If the performing organization is not on the pick list, specify the 'Performing organization name'.

The Lead lab template will also collect the address, phone number, and identifier of the performing organization.

#### **Upload document**

Performing organization phone number	
Performing organization identifier	
	Upload Document
Add	

Click 'Upload Document' to attach the laboratory report to the investigation (lab report) if required. Click Browse, navigate to the correct computer drive and select the file, enter a name for the file, and click Save. (Note: this will exit you from the lab report.) Only one document can be attached to a result. If the Upload Document option is not present, save the lab result and the option should appear upon reentry.

#### Add additional result

The 'Add' button allows entry of another result for the same specimen and the same performing laboratory. Otherwise, click Save and generate a new report for the specimen and another laboratory or for a different specimen.

**Note**: this is the end of the TB lab template.

# **Section 4: Ordering provider**

Ordering provider	
WDRS ordering provider	🍳 🛍
If ordering provider is not on the pick list, please select "Provider not listed" and enter information below:	
Provider not listed-specify	

#### WDRS ordering provider

The WDRS ordering provider is the heath care provider that ordered the laboratory test. Select the search icon and use the wildcard function with the first few letters of the ordering provider name followed by an asterisk(\*). Click on the correct provider and hit Select. If the ordering provider is not listed, select 'Provider not listed' and specify the provider in the field 'Provider not listed- specify'.

## Section 5: Ordering facility



#### WDRS ordering facility

The WDRS ordering facility is the health care facility from which the laboratory test order originated. Select the search icon and use the wildcard function with the first few letters of the ordering facility name followed by an asterisk(\*). Click on the correct facility and hit Select. If the ordering facility is not listed, select 'Facility not listed' (\*facil\*) and specify the facility in the field 'Facility not listed- specify'.



Select the 'Save' button and you will be brought back to Lab Results Tab.