Agenda: The Evolution of WDRS

1. Past
   - Change requests since go-live
     - TB Contact module

2. Present
   - Electronic lab reports feed into WDRS

3. Future
   - RVCT 2020

March 2013: WDRS go-live
August 2019: TB Contact Module updates
September 2019: Electronic lab reports
2020/2021: RVCT update to version 3
WDRS Evolves from Change Requests

WDRS is your system and it’s still evolving. If there are changes you would like to see, then we want to hear it! We will accommodate change requests (CR) as we’re able to.

How to request changes to WDRS
1. Submit a CR directly through the form available on the DOH website
2. Participate in the WDRS User Group (WUG)
3. Participate in a topic-specific work group

WDRS Change Requests - Form

Submit a change request (CR) directly through the form available on DOH.WA.GOV/WDRS

The form will collect your contact information for follow-up questions, the disease area it pertains to, and a summary of your requested change. All other fields are optional.
WDRS Change Requests - **WUG**

Participate in the WDRS User Group (WUG) via GoToWebinar on the 2nd and 4th Wednesdays of each month.
Register here: [https://register.gotowebinar.com/register/4663650438489405451](https://register.gotowebinar.com/register/4663650438489405451)

Changes that have originated from the WUG include:
- Removing the read-only expression on ‘Follow-up testing due on or after’ instead defaulting the field to 8 weeks from the date of last exposure with ability to override the value.
- Consolidating TB LHJ roles in WDRS. Previously there was both a TB LHJ Supervisor and TB LHJ Investigator role. Permissions were combined into the TB LHJ Investigator role for ease of assigning WDRS security to new LHJ staff.
- Editing the workflow ‘TB Events with Investigator of current user’ to include an exit criteria (not done yet, in the pipeline).

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WDRS Change Requests – **Work Group**

Work groups are topic-specific and will be initiated as needed.
Original work group was the TB WUG in 2018, an opportunity to share feedback and suggest improvements. Has since morphed into a call with all disease areas.
Most recently, the TB Contact and LTBI Work Group met bi-weekly from March 2019 – September 2019
  - Representatives from 8 LHJs and DOH
  - Goal of improving the WDRS TB contact and infection modules by identifying and creating:
    - Revisions to existing questions and/or answer choices
    - Additional questions needed
    - Wizards, rosters, reports, print templates, etc.
Development and testing took place in the WDRS Training environment which is a great LHJ resource. Let us know if you would like access through Test SAW.
Timeline of WDRS Changes - Past

March 2017: WDRS go-live

August 2019: TB Contact Module updates

September 2019: Electronic lab reports

2020/2021: RVCT update to version 3

TB Contact and LTBI Work Group changes are now live in WDRS. Let’s take a look at what the group came up with.
TB Contact Event Updates
Demographics Question Package

Previous and follow-up TST and IGRA questions are replaced with a single ‘Screening status’ parent question with repeatable child questions.

Diagnostics and Evaluation Question Package

Repeatability:
The round can be indicated for TST, IGRA, and Symptom check.
Label change from 'Evaluation' TB Contact Event Updates

Diagnostics and Evaluation Question Package

New answer choices

Risk Question Package

Change label from 'Risk factors for transmission'

Revised answer options
Previous ‘treatment regimen’ question is replaced with a ‘treatment offered’ parent question

Before

After

Added a TB contact wizard for ease of data entry. All questions can be input on a single screen.
TB Contact Event Updates

Additional

Removed required on
• Date LHJ notified DOH
• Date contact interviewed
• Index smear result
• Index chest radiograph
• Index drug resistance
• Index TB site
• Reason therapy stopped or never started
  • If treatment was started, please fill this out, as it’s reported to CDC.

TB Contact Work Group

Contact data can be roster imported into WDRS using a CSV upload. If you would like to explore this option, reach out to our team for more information. Thank you to our work group members. This meeting format is available for other TB needs or WDRS trainings.
Timeline of WDRS Changes - Present

- March 2017: WDRS go-live
- August 2019: TB Contact Module updates
- September 2019: Electronic lab reports
- 2020/2021: BVCT update to version 3

Electronic Lab Reports in WDRS

A recent, big shift in WDRS was the automated and real-time entry of labs into the system on September 27, 2019 (less than two weeks ago!)

**Terminology**

"ELRs are processed through WELRS and DRIVE before entering WDRS"

- **ELR**: Electronic Laboratory Reports (labs that currently come through PHRED)
- **WELRS**: Washington Electronic Lab Reporting System
- **DRIVE**: Disease Reporting Interoperability and Verification Engine
- **RAINIER suite**: Reporting Array for Incident Non-Infectious & Infectious Events Response
- Encompasses flow of WELRS ➔ DRIVE ➔ WDRS
Important Dates

- **9/30/2019** - All notifiable TB lab results are processed by WEIRS and DRIVE, and made accessible to ELR data users in WDRS.
- **11/15/2019** - Last day the PHRED application will be available for retrieving historical data (including both search and pick-up).

DRIVE Processing

**Person-matching/deduplication**
- DRIVE looks for a person match in WDRS using the exact first name, last name and either exact DOB or SSN on the incoming lab
  - If there is a single person in WDRS who is a match, the lab will automatically attach to the existing event with the same disease/product code
  - If more than one matching person exists in WDRS, or the existing person is dead, DRIVE creates a new person

**Accountable County assignment**
- If the lab contains a valid patient address in Washington, the event is assigned to the appropriate LHJ.
- If the lab does not contain a valid patient address in Washington, the event is assigned to DOH.
4 TB Conditions in WDRS

1. TB Disease
2. TB Infection
3. TB Contact
4. TB Unspecified
   - Created only by ELR
   - Visible only to DOH
   - Closed in WDRS if not "relevant"

When TB Unspecified events are created in WDRS:
- Events with "Relevant" labs will be made visible to LHJs and include:
  - Culture identification = MTB complex
  - Molecular Identification = MTB detected
  - NAAT = MTB detected
- Events with "Not relevant" labs will be closed and include:
  - All IGRAs
  - Negatives

TB ELR Flow in WDRS

Lab enters WDRS

If there is an existing person with a TB event, the lab will attach to that event*

LHJ is notified of the new lab through the workflow

If there is not an existing person with an event in WDRS, a 'TB Unspecified' event will be created

DOH reviews TB Unspecified events

*Only IGRAs will append to contact and infection events

DOH closes the event (will auto re-open if another lab comes in)
**TB ELR Flow in WDRS**

- **Lab enters WDRS**
  - If there is an existing person with a TB event, the lab will attach to that event
  - If there is not an existing person with an event in WDRS, a 'TB Unspecified' event will be created
  - LHJ is notified of the new lab through the workflow

- **DOH reviews TB Unspecified events**
  - Relevant
  - Not relevant
  - DOH makes it visible to the LHJ (new event or move lab to existing event)
  - DOH closes the event (will auto-re-open if another lab comes in)

**TB Unspecified Event Workload**

If you would like to see TB Unspecified events created within your jurisdiction, DOH can share a report of your LHJ’s TB Unspecified events upon request.

Alternatively, DOH could release TB Unspecified events to you if you would like to take on the burden of handling these events. It cannot be done on an LHJ-by-LHJ basis. It would be statewide.

The workload entails review of each lab and taking the appropriate actions:
- If the lab should be on an event with another TB condition (disease, infection, or contact), that event must be created and lab copied over.
- If the lab belongs to an existing event but didn’t automatically append to it, the lab will have to be copied to that existing event.
- If the lab is not relevant, the event can be closed.

We can revisit TB Unspecified events in the coming months on the WUG.
ELRs are Populated on the Lab Results Tab

ELRs populate the ELR template

WDRS ELR template 20190911

Sections:
1. Lab report information
2. Patient name
3. Patient address
4. Patient phone
5. Patient identifier (e.g. Medical record number)
6. Patient information (DOB, sex)
7. Patient-centric observation(s)
8. Next of kin
9. Test request identifier(s)
10. Specimen
11. Test requested
12. Test performed and result
13. Ordering provider
14. Ordering facility
15. Patient visit

The fields that will require your review

This information is transferred to the person party

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Reference Codes Values Used by DRIVE

- **ELR data not standardized**
  - DRIVE has not attempted to choose a standardized value for this data element
  - Also used when the standardized value should be blank, but WDRS cannot accept blank values from DRIVE for coded fields
  - WDRS users can, but should not need to, update these fields
- **Automated process-unresolved**
  - DRIVE was unable to find a standardized value for this data element
  - LHJ WDRS users are expected to update these fields as applicable

ELR Workflows

With great ELR power comes great responsibility. New LHJ workflows include:

1. TB Events with ELR fields to resolve [LHJ]
2. TB Events with lab reports for review [LHJ]
TB Events with ELR fields to resolve [LHJ]

Tuberculosis events where Automated process-unresolved is in a standardized ELR field of importance.

If DRIVE is not able to assign a value for WDRS specimen type, WDRS test performed, or WDRS test result, the event will enter this workflow for you to assign the appropriate outputs.

- TB Events open in my LHJ
- TB Events with ELR fields to resolve [LHJ]
- TB Events with Investigator of current user unresolved

Exit criteria: when Automated process-unresolved.

TB Events with lab reports for review [LHJ]

All new ELRs in WDRS require LHJ review.

Events enter this workflow if they have a lab with 'Lab report reviewed - LHJ' is not equal to YES

Exit criteria: ‘Lab report reviewed - LHJ’ = Yes
RVCT and Labs

All labs required for RVCT reporting* must still be entered into the Diagnostics and Evaluation question package

Lab Results tab
• ELRs will land in lab template and may need to be copied over to the question package
• Manual entry here is optional for labs received at your LHJ

*Refer to the CDC RVCT Participant Manual
Feedback Wanted!

- Everything we’re doing now is dynamic, now and for the next few years. Our goal is to become more transparent in our data.
- We want to hear from you if something is not working. ELR is a new process for all of us and we’re still ironing out the kinks
- For questions or feedback, please email tbservices@doh.wa.gov or assign a task in WDRS using the task function. Assign tasks to the group TB Statewide edit (task training coming later this year on the WUG).

Timeline of WDRS Changes - **Future**

- March 2017: WDRS go-live
- August 2019: TB Contact Module updates
- September 2019: Electronic lab reports
- 2020/2021: RVCT update to version 3
2020 RVCT

Why?
The RVCT was last updated in 2009. Since then, QA issues have been identified, there are new anti-TB drugs available, new testing methods.

When?
The final 2020 RVCT was released in August, 2019. Still to come are instruction manuals and training resources.
DOH hopes to implement these updates in WDRS by fall 2020.
All 2020 RVCT data elements are expected to be sent to CDC for cases counted January 2021 and later.

RVCT 2020 New Questions

- Pregnancy Status
- Patient's Country of Usual Residence
- If not U.S. Reporting Area, did patient remain in U.S. for >=90 days after Report Date?
- Current Occupation
- What is the Patient’s Current Smoking Status?
- Risk factors: homeless ever, resident of correctional facility ever, viral hepatitis
- Has the patient lived (or traveled) in countries with a high incidence of TB for > 60 consecutive days since first arrival in the United States, or since birth, if the patient
- Completed Treatment for Previous Diagnosis
- Case Meets Binational Reporting Criteria
- Case Identified During Contact Investigation
- Evaluated for TB During Contact Investigation
- Was a Contact Investigation Conducted Around This Case?
- Reason Not Treated with RIPE
- MDR supplemental questions
- was born in the United States?
<table>
<thead>
<tr>
<th>RVCT 2020 Removed Questions</th>
<th>WDR Change Requests</th>
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<tbody>
<tr>
<td>• Pediatric Patient lived outside US &gt; 2 months</td>
<td>• In state Move City</td>
</tr>
<tr>
<td>• Under custody of Immigration and Customs Enforcement</td>
<td>• In State move County</td>
</tr>
<tr>
<td>• Immigration Status at First Entry in the US (removed from WDRS May 2019)</td>
<td>• Cause of Death, related to Treatment</td>
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<tr>
<td>• Sputum Culture Reporting Laboratory Type</td>
<td>• Type of Outpatient Health Care Provider</td>
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<td>• Culture of Tissue and Other Body Fluids, Reporting Laboratory Type</td>
<td>• DOT</td>
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<tr>
<td>• NAA Reporting Laboratory Type</td>
<td>• DOT Weeks</td>
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<tr>
<td>• State HIV AIDS Number</td>
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<tr>
<td>• City/County HIV AIDS Number</td>
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The RVCT 2020 change period is a good time to ask for other updates you would like to see in the system.
Cobalt 1.8 Changes Late 2019

In addition to RVCT changes, we have some changes slated for this fall, including:
- TB Infection report
- LTBI wizard for data entry
- MDR supplemental questions
- Report updates
- Workflow updates
- Question label changes

Communicating Changes

How would you like WDRS changes to be communicated to you?
- Webinar
- PDF
- Training
- Email
Washington State Department of Health is committed to providing customers with forms and publications in appropriate alternate formats. Requests can be made by calling 800-525-0127 or by email at civil.rights@doh.wa.gov. TTY users call 711.