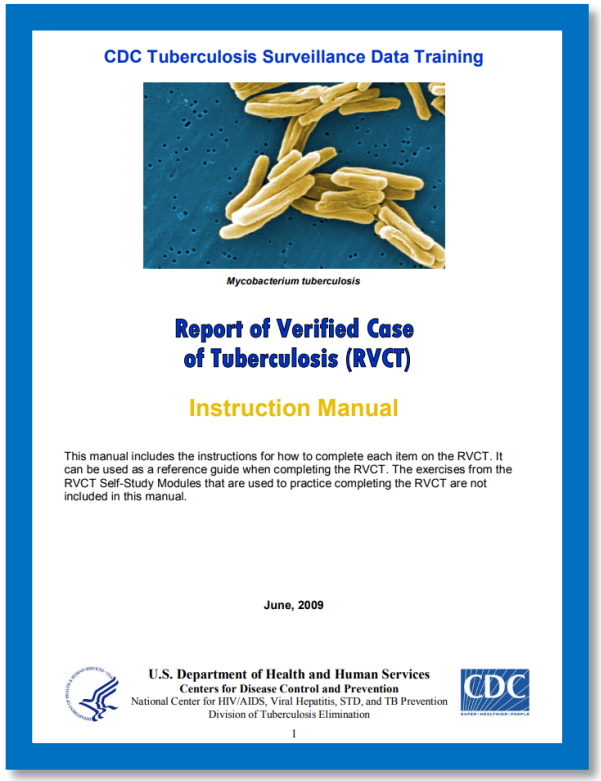
Report of Verified Case of Tuberculosis (RVCT) Data Entry Guide for use with the Virginia Electronic Disease Surveillance System (VEDSS)

- Please contact Laura Young, TB Epi with VDH, with any questions.
  - 804-864-7922
  - laura.r.young@vdh.virginia.gov
- For additional details about RVCT definitions, you may also refer to the RVCT manual
  - The RVCT manual is a 2009 publication and there have been a few changes made to the data we are allowed to capture. Please contact Laura regarding questions about discrepancies.
- For additional information about case definitions, please refer to Appendix A and B of CDC's annual TB report.



CDC Tuberculosis Surveillance Data Training

Mycobacterium tuberculosis

Report of Verified Case of Tuberculosis (RVCT)

Instruction Manual

This manual includes the instructions for how to complete each item on the RVCT. It can be used as a reference guide when completing the RVCT. The exercises from the RVCT Self-Study Modules that are used to practice completing the RVCT are not included in this manual.

June, 2009

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Division of Tuberculosis Elimination

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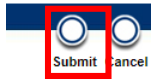
Updated 12/14/2018

General notes

- Initial RVCT data for a suspected or confirmed TB case should be entered into VEDSS within three days of the health district learning about the case.
- VEDSS does not currently accept 99 or 9999 as a valid entry for an unknown day, month or year.
  - If only year is known, use 07/15/XXXX.
- If an item was “not done” or “negative”, enter that information and do not leave the item blank.
- If an item is pending, do **not** select pending, leave the item blank until you have the information.
- For lab results:
  - Any positive results supersedes all other test results
- For reporting laboratory types:
  - Public Health Laboratory = any laboratory associated with a local or state health department (e.g. DCLS, Fairfax PHL)
  - Commercial laboratory = any laboratory that charges a fee for each specimen processed or test performed
  - Other = any other laboratory that is not considered a public health lab or a commercial lab (e.g. National Jewish, CDC, Hospital laboratories, Veterans Administration, Bureau of Prisons)
- To save information you have entered, click the “Submit” button at the top or bottom of the VEDSS page.



- To reopen a section for editing or to add new information, click the “Edit” button at the top or bottom of the VEDSS page.
- To print a PDF version of the RVCT at any time, click “Print CDC Form”.

- At this time, do not enter data on the Contact Tracing or Contact/Others tabs.

Patient Tab in VEDSS Tuberculosis Investigation

- Basic demographic information
- Contains RVCT items 4,8,9,10 and 11

Patient | Tuberculosis | Follow Up 1 | Follow Up 2 | Contact Tracing | Contacts/Others

Patient Information

Collapse Subsections

General Information

Information As of Date:

Comments:

Name Information

First Name:

Middle Name:

Last Name:

Suffix:

Other Personal Details

8. Date of Birth:

Reported Age:

9. Sex at Birth:

Current Sex:

Is the patient deceased?

Deceased Date:

Marital Status:

SSN:

4. Reporting Address for Case Counting

Street Address 1:

Street Address 2:

City:

State:

Zip:

County:

Country:

Within City Limits:

Telephone Information

Home Phone:

Ext.:

Work Phone:

Ext.:

Ethnicity & Race Information

10. Ethnicity:

11. Race:
- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- Unknown

Previous Next

Patient | Tuberculosis | Follow Up 1 | Follow Up 2 | Contact Tracing | Contacts/Others

Verify spelling of patient's name.

RVCT item 8 – Enter patient's DOB.

RVCT item 9 – Only current sex will auto-populate from demographics, so you will need to complete this item.

Please indicate if the patient is deceased and if so, the date of death.

RVCT item 4 – Use patient's address at time of diagnosis. Contact VDH regarding out-of-area residents diagnosed in your jurisdiction. Always include county.

Use Melissa Data or USPS to determine if the address is within city limits (i.e. when city and county are both listed as Fairfax City).

RVCT item 10 – Response should be based on patient's self-identity or self-report.

RVCT item 11 – Response should be based on patient's self-identify or self-report. Select all that apply.
*If Asian or Native Hawaiian/Other Pacific Islander is selected, select the appropriate race category from the additional options.
**Filipino is listed under Asian, not Hawaiian/Other Pacific Islander.

Tuberculosis Tab in VEDSS Tuberculosis Investigation

- Contains RVCT items 1, 2, 3, 7 and 12-37

Patient | Tuberculosis | Follow Up 1 | Follow Up 2 | Contact Tracing | Contacts/Others

Go to: Investigation Information | Reporting Information | Patient History | Clinical Information | Laboratory Information | Risk Factors | Treatment | Investigation Comments | Custom Fields

Collapse Sections

Investigation Information

Collapse Subsections

Investigation Details

* Jurisdiction:

Program Area: Tuberculosis

Shared Indicator:

* Investigation Status: Open

Investigation Start Date:

Investigator

Investigator: Search - OR - Quick Code Lookup

Investigator Selected:

Date Assigned to Investigation:

Reporting Information

Collapse Subsections

Key Report Dates

* 1. Date Reported:

2. Date Submitted:

3. Case Numbers

State Case Number: (example : 2008-OK-ABCD56789)

City/County Case Number: (example : 2008-OK-ABCD56789)

Linking State Case Number 1: (example: 2008-OK-ABCD56789)

Link Reason 1:

Linking State Case Number 2: (example : 2008-OK-ABCD56789)

Link Reason 2:

Patient History

Collapse Subsections

Previous Diagnosis

7. Previous Diagnosis of TB Disease:

Year of Previous Diagnosis:

Origin

12. "U.S.-born" (or born abroad to a parent who was a U.S. citizen):

Country of Birth:

13. Date Arrived in U.S.:

14. Pediatric TB Patients (<15 years old)

Primary Guardian 1 Birth Country:

Primary Guardian 2 Birth Country:

Patient lived outside of US for more than 2 months:

(Use Ctrl to select more than one)

Countries: AFGHANISTAN, ALAND ISLANDS, ALBANIA, ALGERIA, AMERICAN SAMOA

Selected Values:

Select your Health District; if you select another Health District you will not be able to see the investigation after you save the investigation.

Change to "Closed" when treatment and contact investigation completed (if indicated).

The date the local health department assigned the case for follow-up.

Search for or enter the quick code for the TB Case Manager – update this if the TB Case Manager changes.

RVCT item 1 – The date the local health department was first notified that a person may have TB.

RVCT item 2 – the date initial RVCT data was submitted to VDH (by entering data in VEDSS).

RVCT item 3 - Leave blank. This section will be completed by VDH

RVCT item 7 - If the answer is YES, include the year of previous diagnosis.

RVCT item 12 - Indicate if patient meets U.S.-born* definition and select Country of Birth for all patients whether "U.S.-born" or not.

RVCT item 13 - If born outside of the US, indicate month/year of arrival. If only year is known, use 07/01/XXXX.

RVCT item 14; only complete this section for pediatric TB patients (<15 years old).

*U.S.-born relates to census data and applies to someone born in 1 of the 50 states or D.C or someone born abroad to a parent who was a U.S. citizen.

Patient | Tuberculosis | Follow Up 1 | Follow Up 2 | Contact Tracing | Contacts/Others

Go to: Investigation Information | Reporting Information | Patient History | Clinical Information | Laboratory Information | Risk Factors | Treatment | Investigation Comments | Custom Fields

Reminder: if a type of lab test was not done, indicate "not done" as the result. If a result is pending, leave blank until results are known. A positive smear and a positive culture may be from different specimen collection dates.

Clinical Information

Collapse Subsections

15. Status at TB Diagnosis

Patient Status at Diagnosis:
Date of Death:
Was TB a cause of death:

RVCT item 15 – If patient deceased at time of diagnosis, indicate date of death and if TB was the cause of death.

16. Site of TB Disease

Site(s) of Disease: (Use Ctrl to select more than one)
Accessory sinus
Adrenal gland
Anus
Appendix
Selected Values:

RVCT item 16 – Select single or multiple sites of TB disease as appropriate

Laboratory Information

Collapse Subsections

17. Sputum Smear

Result:
Date Collected:

RVCT item 17 – Indicate date of collection for **first positive sputum smear**; if all smears were negative, indicate the collection date of the first negative sputum; do **NOT** record results obtained after patient has received treatment for more than 2 weeks. See page 57 of RVCT manual.

18. Sputum Culture

Result:
Date Collected:
Date Result Reported:
Reporting Laboratory Type:

RVCT item 18 – Indicate date of collection for **first positive sputum culture**; if all cultures were negative, indicate the collection date of the first culture negative sputum; do **NOT** record results obtained after patient has received treatment for more than 2 weeks. Include date result reported and the reporting lab type. See page 59 of RVCT manual.

19. Smear/Pathology/Cytology of Tissue and Other Bodily Fluids

Result:
Date Collected:
Anatomic Site:
Type of Exam: (Use Ctrl to select more than one)
Pathology/Cytology
Smear
Selected Values:

RVCT item 19 – Indicate date of collection for **first positive smear of any tissue or body fluid other than sputum** (e.g. bronchial washing, lymph node, tracheal aspirate, urine); if all smears were negative, indicate the collection date of the first negative smear; do NOT record results obtained after patient has received treatment for more than 2 weeks; pathology/cytology results may also be entered here. Indicate anatomic site and if this result is from pathology/cytology or a smear. See page 61 of RVCT manual.

20. Culture of Tissue and Other Body Fluids

Result:
Date Collected:
Anatomic Site:
Date Result Reported:
Reporting Laboratory Type:

RVCT item 20 – Indicate date of collection for **first positive culture of any tissue or body fluid other than sputum**; if all cultures were negative, indicate the collection date of the first negative culture; do NOT record results obtained after patient has received treatment for more than 2 weeks. Include anatomic site, date result reported and the reporting lab type. See page 64 of RVCT manual.

21. Nucleic Acid Amplification Test Result

Result:
Date Collected:
Specimen Type is Sputum:
Non-Sputum Anatomic Site:
Date Result Reported:
Reporting Laboratory Type:

RVCT item 21 – Indicate date of specimen collection for **first positive NAA for *M. tuberculosis* complex.** If all NAAs were negative, indicate the collection date of the first negative NAA; Include anatomic site, date result reported and the reporting lab type. See page 67 of RVCT manual.

Patient | Tuberculosis | Follow Up 1 | Follow Up 2 | Contact Tracing | Contacts/Others

Go to: Investigation Information | Reporting Information | Patient History | Clinical Information | Laboratory Information | Risk Factors | Treatment | Investigation C

Reminder: if a type of lab test was not done, indicate "not done" as the result. If a result is pending, leave blank until results are known.

22. Initial Chest Radiograph and Other Chest Imaging Study

22A. Initial Chest Radiograph:
Evidence of a cavity:
Evidence of miliary TB:
22B. Initial Chest CT Scan or Other Chest Imaging Study:
Evidence of a cavity:
Evidence of miliary TB:

RVCT item 22A – Select result of initial chest x-ray if done and indicate if any initial x-ray showed evidence of cavity or miliary TB.

RVCT item 22B – Select result of initial chest CT scan or other imaging study if done and indicate if any initial CT scan or other imaging study showed evidence of cavity or miliary TB.

23. Tuberculin (Mantoux) Skin Test Diagnosis

Result:
Date Tuberculin Skin Test (TST) Placed:
Millimeters of Induration:

RVCT item 23 – Indicate if a TST was performed. If you have documented results from a prior TST in the medical record (not just self-report) this may be entered if a TST is not performed during the current diagnostic evaluation. If performed, indicated date placed and induration.

24. Interferon Gamma Release Assay for Mycobacterium tuberculosis at Diagnosis

Result:
Date Collected:
Test Type:

RVCT item 24 – Indicate if an IGRA was performed during the diagnostic evaluation. If performed, include date collected and test type (T-Spot, Quantiferon Gold).

Risk Factors

Collapse Subsections

25. Primary Reason Evaluated

Primary Reason Evaluated:

RVCT item 25 – Select the single or initial reason the patient was evaluated for TB disease (the situation or reason that led to the initial suspicion that the patient might have TB disease).

26. HIV Status at Time of Diagnosis

HIV Status at Time of Diagnosis:
State HIV/AIDS Patient Number:
City/County HIV/AIDS Patient Number:

RVCT item 26 – Select the appropriate response. If a patient has a documented negative HIV test from less than 1 year prior to the TB diagnostic evaluation and reports no risk factors, this result may be used. VDH will enter the State HIV/AIDS Patient Number. Leave City/County HIV/AIDS Patient number blank.

Residence

27. Homeless Within Past Year:

RVCT item 27 – Mark yes if patient was experiencing homelessness at **any time** during the 12 months prior to TB diagnosis.

28. Resident of Correctional Facility at Time of Diagnosis:
Type of Correctional Facility:
Under custody of Immigration and Customs Enforcement:

RVCT item 28– Mark yes if patient was an inmate when the TB diagnostic evaluation was performed/initiated. If yes, select a facility type.

29. Resident of Long Term Care Facility at Time of Diagnosis:
Type of Long Term Care Facility:

RVCT item 29– Mark yes if patient was a resident of a LTCF when the TB diagnostic evaluation was performed/initiated (e.g. nursing home, assisted living, mental health facility, alcohol or drug treatment facility). If yes, select a facility type.

Occupation

30. Primary Occupation Within Past Year:

RVCT item 30– Select most appropriate primary occupation choice. Add details in comments section. Health care worker supersedes other options (e.g. if the patient is a health care worker in a correctional facility, select health care worker).

Patient | Tuberculosis | Follow Up 1 | Follow Up 2 | Contact Tracing | Contacts/Others

Drug and Alcohol Use

31. Injecting Drug Use Within Past Year:
32. Non-Injecting Drug Use Within Past Year:
33. Excess Alcohol Use Within Past Year:

Additional Risk Factors

34. Additional TB Risk Factors: (Use Ctrl to select more than one) Contact of Infectious TB Patient; Contact of MDR-TB Patient; Diabetes Mellitus; End-Stage Renal Disease; Selected Values:

Other Risk Factor(s):

35. Immigration Status at First Entry to the U.S.:

A1C Performed

A1C Numeric Result

Weight at Diagnosis (in kilograms)

Treatment

Collapse Subsections

37. Initial Drug Regimen

36. Date Therapy Started:

Standard Regimen (4)

Mark Rest 'No'

Isoniazid:
Rifampin:
Pyrazinamide:
Ethambutol:
Streptomycin:
Rifabutin:
Rifapentine:
Ethionamide:
Amikacin:
Kanamycin:
Capreomycin:
Ciprofloxacin:
Levofloxacin:
Ofloxacin:
Moxifloxacin:
Cycloserine:
Para-Amino Salicylic Acid:
Other Drug:
Specify Other Drug:
Other Drug 2:
Specify Other Drug 2:

Clear

Investigation Comments

RVCT item 31 – Injection drug use w/in the past year
RVCT item 32 – Non-injection drug use w/in the past year; this does not include alcohol or nicotine, does include marijuana, steroids, opiate pills, etc.
RVCT item 33 – Excess alcohol use in past year– (5+ drinks for 5+ days in 30 days)

RVCT item 34 – Select all additional TB risk factors that apply; for Contact of Infectious TB Patient, Contact of MDR TB patient, or Missed contact, these should be selected if the exposure was within two years. Select OTHER to record information about risk factors such as smoking, Crohn's disease, or contact to a TB patient more than two years ago. Record these in the Other Risk Factors box.

RVCT item 35 – Mark **UNKNOWN or N/A** (US-born); Virginia does not collect this information.

Indicate if an A1C was performed, the results, and the patient's weight at dx in kg.

RVCT item 36 – Record the first date that the patient ingested any TB medication.

Click the "Standard Regimen (4)" button to select RIPE
Click the "Mark Rest 'No'" button to mark all blank drugs 'No'.

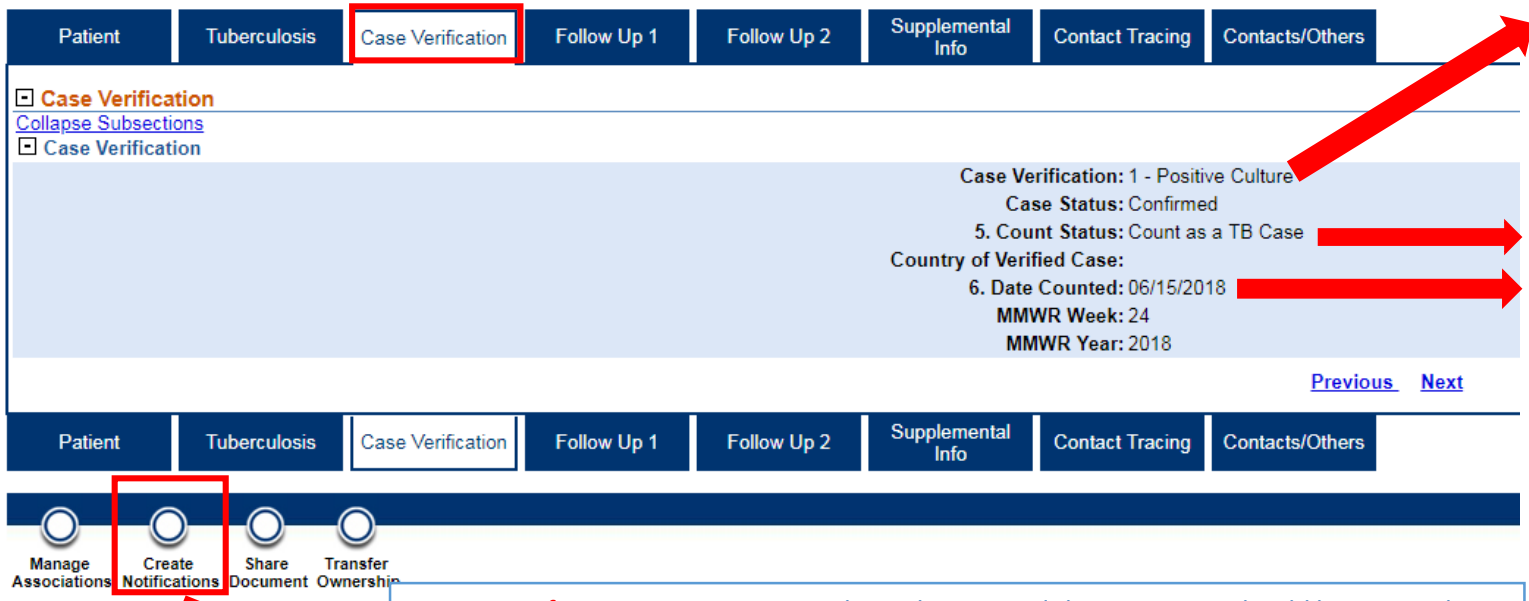
RVCT item 37 – Select **any and all drugs started within the initial 2-week period of treatment**. Even if a drug was discontinued, if it was started during this time it should be recorded here. If a drug was NOT part of the initial regimen, it must be marked No.

Other drugs that were part of the initial regimen should be listed here

Use the comments box to record any pertinent information related to this section

Case Verification Tab in VEDSS Tuberculosis Investigation

- Contains RVCT items 5 and 6.
- This tab will appear once you have saved initial information on the Tuberculosis tab of the investigation.
- An algorithm will determine your Case Verification and Case Status based on the lab and clinical information entered. These will update if you add additional information (i.e. positive culture) that change the case verification and status. You must save the investigation with the new information for these items to update.
- A notification should be submitted as soon as you have confirmed that a case should be counted. A case should NOT be counted if TB medication began outside of the United States, if a patient left the country prior to completing 90 days of TB medication, if this is recurrent TB within 12 months, or if the case has already been counted by another state. Contact TB Control with any questions about counting cases.

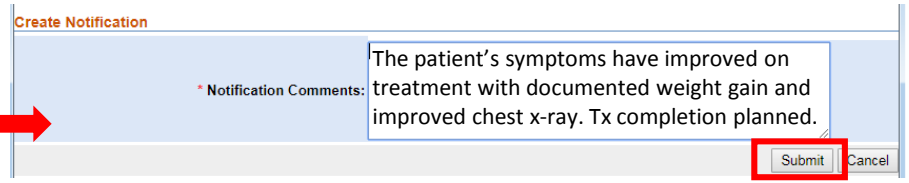


Case Verification – This will auto-populate based on clinical and lab info already entered on the TB tab. If the case does not meet a specific case definition, it will indicate 5-Suspect. If a provider is diagnosing TB in a patient and improvement on treatment is documented, you can update this to 4-Verified by Provider Diagnosis. If a case is ruled-out, you may select 0 – Not a Verified case.

RVCT item 5 – Update this item to "Count as a TB Case" if the case can be counted by Virginia. If the case cannot be counted, select the appropriate choice from the drop down list (Counted by another US area, Recurrent TB within 12 months of completion of therapy, TB treatment initiated in another country).

RVCT item 6 – Indicate the date that you determined the case could be counted (i.e. the date you received a positive culture result, a positive NAA result, determined this to meet the clinical case definition, or determined that this should be counted as a provider diagnosed case. MMWR Week and Year will populate automatically based on the date you enter. You can also reference a list of MMWR lists here.

Create Notification – As soon as you have determined that your case should be counted, create and submit a notification. In some districts this task may be performed by a nurse supervisor or nurse manager. If you are submitting a notification for a Provider Diagnosed case, please indicate details in the Notification Comments box such as the patient's symptoms have improved on treatment, the chest x-ray has improved on treatment, the patient is scheduled to complete treatment, etc.



Patient | Tuberculosis | Follow Up 1 | Follow Up 2 | Contact Tracing | Contacts/Others

Initial Drug Susceptibility Report

Collapse Subsections

38.Genotyping Accession Number

Isolate submitted for genotyping:

Genotyping Accession Number for Episode:

39. Initial Drug Susceptibility Testing

Was drug susceptibility testing done:

Date First Isolate Collected:

Specimen Type is Sputum:

Non-Sputum Anatomic Site:

40. Initial Drug Susceptibility Results

Standard Susceptiblities (4)

Mark Rest 'Not Done'

Isoniazid:

Rifampin:

Pyrazinamide:

Ethambutol:

Streptomycin:

Rifabutin:

Rifapentine:

Ethionamide:

Amikacin:

Kanamycin:

Capreomycin:

Ciprofloxacin:

Levofloxacin:

Ofloxacin:

Moxifloxacin:

Other Quinolones:

Cycloserine:

Para-Amino Salicylic Acid:

Other Drug:

Specifiy Other Drug:

Other Drug 2:

Specifiy Other Drug 2:

Clear

Follow Up 1 Comments

Comments:

Follow-Up 1 Tab in VEDSS Tuberculosis Investigation

- Contains RVCT items 38-40

RVCT item 38 – Leave blank; VDH will complete this item

RVCT item 39 – Complete this if a positive culture was obtained from sputum or another site. Indicate if testing was done and if so the date of collection for the first specimen for which DST was done; indicate if sputum or another site. This section is **ONLY** for conventional DST results. Do **NOT** enter molecular results here.

RVCT item 40 – Record the results of initial DST on the first specimen on which DST was performed. If DST was not performed for certain drugs, mark "Not Done" instead of leaving blank. This section is **ONLY** for conventional DST results. Do **NOT** enter molecular results here.

Any degree of resistance, even at a low concentration of the drug, should be listed as resistant.

Use this comments section to note molecular results or other comments referring to this section.

Patient | Tuberculosis | Follow Up 1 | Follow Up 2 | Contact Tracing | Contacts/Others

Case Completion Report

Collapse Subsections

41. Sputum Culture Conversion Documented

Sputum Culture Conversion Documented:

Date of First Consistently Negative Culture:

Reason for not documenting sputum culture conversion:

Other reason for not documenting sputum culture conversion:

42. Moved

Did the patient move during TB therapy:

Moved to where: (Use Ctrl to select more than one)
In state, out-of-jurisdiction
Out of state
Out of the U.S.
Selected Values:

In-State Move - City:

In-State Move - City 2:

In-State Move - County: (Use Ctrl to select more than one)
Accomack County
Albemarle County
Alleghany County
Amelia County
Selected Values:

Out-of-State Move - State: (Use Ctrl to select more than one)
Alabama
Alaska
Arizona
Arkansas
Selected Values:

Out-of-Country Move - Country: (Use Ctrl to select more than one)
AFGHANISTAN
ALAND ISLANDS
ALBANIA
ALGERIA
Selected Values:

Transnational Referral:

Follow-Up 2 Tab in VEDSS Tuberculosis Investigation

- Contains RVCT items 41-49

RVCT item 41 – Complete for patients with a positive sputum culture in RVCT item 18. Indicate if conversion was documented and the date of collection for the first consistently negative culture. If conversion was not documented, indicate a reason why not.

RVCT item 42 – Indicate if the patient moved during TB therapy. If so, provide details as available about the move.

Patient | Tuberculosis | Follow Up 1 | Follow Up 2 | Contact Tracing | Contacts/Others

Follow-Up 2 Tab in VEDSS Tuberculosis Investigation - Contains RVCT items 41-49

Therapy

43. Date Therapy Stopped:

44. Reason Therapy Stopped or Never Started:

Indicate cause of death:

45. Reason Therapy Extended >12 months:
(Use Ctrl to select more than one)
Adverse Drug Reaction
Clinically Indicated - other reasons
Failure
Non-adherence
Selected Values:

Other Reason Therapy Extended:

46. Type of Outpatient Health Care Provider:
(Use Ctrl to select more than one)
Institutional/Correctional
Local/State Healt
Other
Private Outpatient
Unknown
Selected Values:

47. Directly Observed Therapy (DOT):

Number of weeks of directly observed therapy (DOT):

VET Used During Therapy

48. Final Drug Susceptibility Testing

Was follow-up drug susceptibility testing done:

Date final isolate collected:

Specimen Type is Sputum:

Non-Sputum Anatomic Site:

49. Final Drug Susceptibility Results

Standard Susceptiblities (4)

Mark Rest 'Not Done'

Isoniazid:
Rifampin:
Pyrazinamide:
Ethambutol:
Streptomycin:
Rifabutin:
Rifapentine:
Ethionamide:
Amikacin:
Kanamycin:
Capreomycin:
Ciprofloxacin:
Levofloxacin:
Ofloxacin:
Moxifloxacin:
Other Quinolones:
Cycloserine:
Para-Amino Salicylic Acid:
Other Drug:
Specifiy Other Drug:
Other Drug 2:
Specifiy Other Drug 2:

Clear

Follow Up 2 Comments

RVCT item 43 – Indicate the date the patient last ingested TB medication

RVCT item 44 – Indicate the primary reason the patient stopped therapy (completed, lost, uncooperative etc.). If the patient never started treatment, select this option.

RVCT item 45 – If therapy was longer than 12 months duration (RVCT item 43 minus RVCT item 36), indicate the reason(s) therapy was extended.

RVCT item 46 – Select all types of providers who cared for the patient

RVCT item 47 – Indicate if DOT was used during this patient's care and if so what type (totally DOT vs. some DOT and some self-administered, etc.) Also indicate the number of DOT weeks and if Video Enhanced Therapy was used.

RVCT item 48 – Indicate if DST testing was performed on a specimen collected 30 or more days after the specimen used for initial DST. Include specimen details if "Yes".

RVCT item 49 – Indicate results of final DST testing if performed. Leave blank if not performed (and indicate "No" in RVCT item 48).

Any degree of resistance, even at a low concentration of the drug, should be listed as resistant.