# **Case Verification Criteria ("Vercrit") Calculation**

### Overview

The calculation of case verification is hierarchical. A record that satisfies the criteria for more than one Case Verification value will be assigned the value that appears first in the hierarchy. For example, a record that meets the criteria for both *Positive Culture* and *Clinical Case Definition* will be assigned a value of *Positive Culture*.

**Not a Verified Case** appears twice in the hierarchy because there are two sets of criteria that will result in a Case Verification value of **Not a Verified Case.** They are:

- 1. Reason Therapy Stopped or Never Started is Not TB
- 2. Suspect Case is changed by the user to Not a Verified Case

**Suspect Case** is the default Case Verification value assigned to all records created in the Surveillance module.

### 0 - Not a Verified Case

The record is assigned a **0-Not a Verified Case** case verification value if **Reason** Therapy Stopped or Never Started is Not TB.

### 1 - Positive Culture

The record is assigned a **1-Positive Culture** case verification value if either **Sputum Culture** or **Culture** of **Tissue** and **Other Body Fluids** is <u>Positive</u>.

### 1A - Positive NAA

The record is assigned a **1A-Positive NAA** case verification value if **Nucleic Acid Amplification Test Result** is <u>Positive.</u>

### 2 - Positive Smear/Tissue

The record is assigned a **2-Positive Smear/Tissue** case verification value if:

- Sputum Smear or Smear/Pathology/Cytology of Tissue and Other Body Fluids is Positive
  - -AND-
- Sputum Culture and Culture of Tissue and Other Body Fluids are both either Not <u>Done</u> or <u>Unknown</u>
   -AND-
- Nucleic Acid Amplification Test Result is either Not Done, Unknown or Indeterminate

### 3 - Clinical Case Definition

The record is assigned a **3-Clinical Case Definition** case verification value if all the following are true:

Site of TB Disease is not Missing or is not <u>Site Not Stated</u>.

- Sputum Culture and Culture of Tissue and Other Body Fluids are either Negative, Not Done, or Unknown
- Nucleic Acid Amplification Test Result is either <u>Negative</u>, <u>Not Done</u>, <u>Unknown</u>, or <u>Indeterminate</u>
- When Site of TB Disease is either <u>Pulmonary</u>, <u>Pleural</u>, or <u>Lymphatic</u>: <u>Intrathoracic</u> then either <u>Initial Chest Radiograph</u> or <u>Initial Chest CT Scan or Other Chest Imaging Study</u> is Abnormal,
- Tuberculin (Mantoux) Skin Test at Diagnosis or Interferon Gamma Release Assay for *Mycobacterium tuberculosis* at Diagnosis is Positive
- Initial Drug Regimen has at least two drugs marked Yes

If criteria to satisfy any of the previous case verifications are not met, the user has the option to overwrite the assigned case verification default value **5-Suspect**, by selecting either **4-Verified by Provider Diagnosis** or **0-Not a Verified Case**.

# 5 - Suspect

All new records are considered **5-Suspect** until they meet the criteria for another Case Verification value or are overwritten by the user as either **4-Verified by Provider Diagnosis** or **0-Not a Verified Case**.

4 - Verified by Provider Diagnosis (Overwrites Suspect)

The user elects to overwrite case verification default value **5-Suspect** with **4-Verified by Provider Diagnosis**.

0 - Not a Verified Case (Overwrites Suspect)

The user elects to overwrite the **5-Suspect** case verification default with **0-Not a Verified Case**.

### **Technical Specification**

If **TB154** (Case Verification) calculates to '5 – **Suspect**' and the user changes the value to '0 - **Not a Verified Case**' or '4 - **Verified by Provider**', then '5 – **Suspect**' will not be included in the rule calculation and the user entered value should be maintained for **TB154** (Case Verification).

### 0 - Not a Verified Case

```
IF
        [ TB177 (44. Reason Therapy Stopped or Never Started) = 'Not TB' ]
        THEN
        TB154 (Case Verification) = '0 - Not a Verified Case'

1 - Positive Culture
IF
```

[ **TB109** (18. Sputum Culture:) = 'Positive'

OR

TB113 (20. Culture of Tissue and Other Body Fluids) = 'Positive' ]

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```
THEN
      TB154 (Case Verification) = '1 - Positive Culture'
1A - Positive NAA
TB255 (21. Nucleic Acid Amplification Test Result) = 'Positive'
THEN
TB154 (Case Verification) = '1A - Positive NAA'
2 - Positive Smear/Tissue
IF
      [ TB108 (17. Sputum Smear) = 'Positive'
       OR
TB110 (19. Smear/Pathology/Cytology of Tissue and Other Body Fluids) = 'Positive'
AND
      [ TB109 (18. Sputum Culture) = 'Not Done' or 'Unknown' ]
      AND
TB113 (20. Culture of Tissue and Other Body Fluids) = 'Not Done' or 'Unknown'
AND
[ TB255 (21. Nucleic Acid Amplification Test Result) = 'Not Done', 'Unknown', or
'Indeterminate' ]
       THEN
TB154 (Case Verification) = '2 - Positive Smear/Tissue'
```

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## 3 - Clinical Case Definition

```
IF
[ TB205 (16. Site of TB Disease) DOES NOT = 'Site Not Stated' or BLANK ]
AND
TB109 (18. Sputum Culture) = 'Negative', 'Not Done', or 'Unknown'
AND
[ TB113 (20. Culture of Tissue and Other Body Fluids) = 'Negative', 'Not Done', or
'Unknown ']
AND
TB255 (21. Nucleic Acid Amplification Test Result) = 'Negative', 'Not Done',
'Unknown', or 'Indeterminate'
AND
[ IF TB205 (16. Site of TB Disease) = 'Pulmonary', 'Pleural', or 'Lymphatic:
Intrathoracic"
AND
[ TB116 (22A. Initial Chest Radiograph) = 'Abnormal'
OR
TB245 (Initial Chest CT Scan or Other Chest Imaging Study) = 'Abnormal' | 1
AND
[TB119 (23. Tuberculin (Mantoux) Skin Test at Diagnosis) = 'Positive'
OR
TB250 (24. Interferon Gamma Release Assay for Mycobacterium tuberculosis at
Diagnosis = 'Positive']
AND
[TB132 - TB146, TB260-TB262, TB264 (37. Initial Drug Regimen) = At Least Two
Drugs = 'Yes']
       THEN
       TB154 (Case Verification) = '3 – Clinical Case Definition'
```

### 5- Suspect

### **ELSE**

TB154 (Case Verification) = '5 - Suspect'

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