



**Global Health Security  
and Diplomacy**  
U.S. DEPARTMENT *of* STATE



**PEPFAR**  
20 YEARS OF IMPACT

# Monitoring, Evaluation, and Reporting (MER) Guidance (v.2.7): TB/HIV

Meaghan Peterson

Rebeca Briceno-Robaugh

Stephanie O'Connor

ICPI Liaisons to the TB TWG

September 2023

# Training Outline

**Section 1:** Overview of the Technical Area

**Section 2:** Indicator Changes in MER 2.7

**Section 3:** Overview of Indicators

**Section 4:** Data Use

**Section 5:** Additional Resources and Acknowledgments



# Section 1: Overview of TB/HIV



**Global Health Security  
and Diplomacy**  
U.S. DEPARTMENT *of* STATE

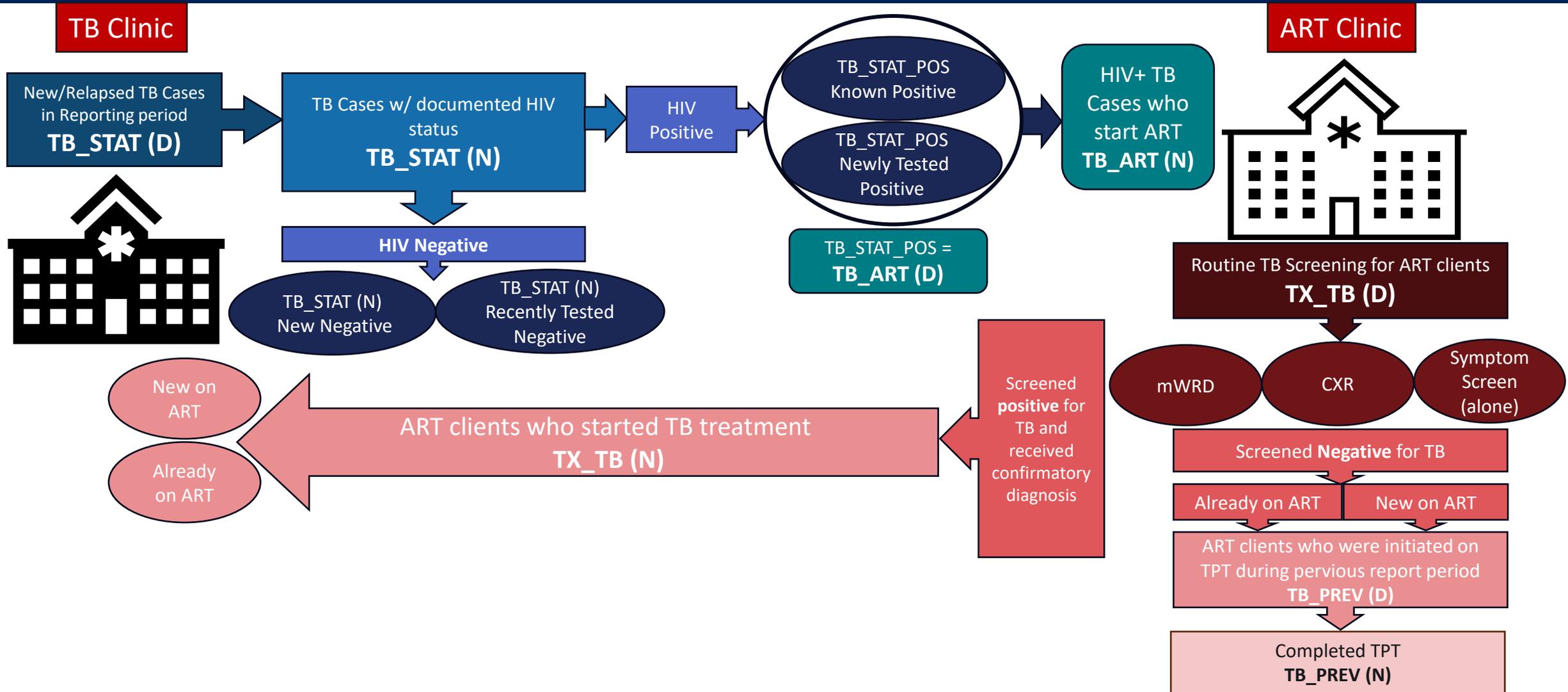


**PEPFAR**  
20 YEARS OF IMPACT

# Why is this topic important?



# TB/HIV Reporting Flow



# Section 2: Indicator Changes in MER 2.7



**Global Health Security  
and Diplomacy**  
U.S. DEPARTMENT *of* STATE



**PEPFAR**  
20 YEARS OF IMPACT

# Indicator Changes in MER 2.7

Change	Programmatic Rationale
TX_TB	<ul style="list-style-type: none"> <li>• New disaggregate for type of TB screening to record Symptom Screen (alone), CXR (chest x-ray) or mWRD (molecular WHO-recommended rapid diagnostic testing). This new disaggregate aligns with the WHO recommendation to use CXR or mWRD in combination with WHO four-symptom screen (W4SS) to optimize TB case detection among people living with HIV (PLHIV), including those who are asymptomatic.</li> <li>• Expanded age bands from coarse age bands to fine age bands</li> <li>• Clarified definitions of TB screen result by screening type</li> </ul>
TB_ART	None
TB_PREV	None
TB_STAT	New numerator disaggregate “Recently Tested Negatives” to better account for HIV testing coverage among various sub-groups among individuals with TB disease ”

# Section 3: Overview of Indicators



**Global Health Security  
and Diplomacy**  
U.S. DEPARTMENT *of* STATE



**PEPFAR**  
20 YEARS OF IMPACT



# Summary of Indicators

Program Area Group	Indicator	Indicator Description	Reporting Frequency	Reporting Level
TB/HIV	TX_TB	Proportion of ART patients screened for TB in the semiannual reporting period who start TB treatment.	Semi-Annually	Facility
TB/HIV	TB_ART	Proportion of HIV-positive new and relapsed TB cases on ART during TB treatment	Annual	Facility
TB/HIV	TB_PREV	Proportion of ART patients who started on a standard course of TB Preventive Treatment (TPT) in the <b>previous</b> reporting period who completed therapy	Semi-annually	Facility
TB/HIV	TB_STAT	Percentage of new and relapsed TB cases with documented HIV status	Quarterly	Facility

# TX\_TB



**Global Health Security  
and Diplomacy**  
U.S. DEPARTMENT *of* STATE



**PEPFAR**  
20 YEARS OF IMPACT

# Indicator Definition: TX\_TB

**Indicator Definition:** Proportion of ART patients screened for TB in the semiannual reporting period who start TB treatment.

**Numerator:** Number of ART patients who were started on TB treatment during the semiannual reporting period.

---

**Denominator:** Number of ART patients who were screened for TB at least once during the semiannual reporting period.

## **Numerator Description:**

The numerator can be generated by counting the number of screened ART patients who were diagnosed with TB and started on anti-TB therapy during the reporting period.

## **Denominator Description:**

The denominator can be generated by counting the number of ART patients who were screened for TB at least once during the reporting period.

# Numerator Disaggregates: TX\_TB

Disaggregate Groups	Disaggregates
<p><b>ART Status (Already/New on ART) by Age/Sex: [Required]</b></p>	<ul style="list-style-type: none"><li>• Number of patients starting TB treatment who <b>newly started</b> ART during the reporting period:<ul style="list-style-type: none"><li>• &lt;1 F/M, 1-4 F/M, 5-9 F/M, 10-14 F/M, 15-19 F/M, 20-24 F/M, 25-29 F/M, 30-34 F/M, 35-39 F/M, 40-44 F/M, 45-49 F/M, 50-54 F/M, 55-59 F/M, 60-64 F/M, 65+ F/M, Unknown Age F/M</li></ul></li><li>• Number of patients starting TB treatment who <b>were already on</b> ART prior to the start of the reporting period:<ul style="list-style-type: none"><li>• &lt;1 F/M, 1-4 F/M, 5-9 F/M, 10-14 F/M, 15-19 F/M, 20-24 F/M, 25-29 F/M, 30-34 F/M, 35-39 F/M, 40-44 F/M, 45-49 F/M, 50-54 F/M, 55-59 F/M, 60-64 F/M, 65+ F/M, Unknown Age F/M</li></ul></li></ul>

# Denominator Disaggregates: TX\_TB

Disaggregate Groups	Disaggregates
Type of Screening	Number of patients that were screened for TB at least once during the reporting period with these types of screening: <ul style="list-style-type: none"> <li>• Symptom Screen (alone),</li> <li>• CXR</li> <li>• mWRD.</li> </ul>
Start of ART by Screen Result and by Age/Sex [Required]	<ul style="list-style-type: none"> <li>• <b>New on ART/Screen Positive:</b> <ul style="list-style-type: none"> <li>• &lt;1 F/M, 1-4 F/M, 5-9 F/M, 10-14 F/M, 15-19 F/M, 20-24 F/M, 25-29 F/M, 30-34 F/M, 35-39 F/M, 40-44 F/M, 45-49 F/M, 50-54 F/M, 55-59 F/M, 60-64 F/M, 65+ F/M, Unknown Age F/M</li> </ul> </li> <li>• <b>New on ART/Screen Negative:</b> <ul style="list-style-type: none"> <li>• &lt;1 F/M, 1-4 F/M, 5-9 F/M, 10-14 F/M, 15-19 F/M, 20-24 F/M, 25-29 F/M, 30-34 F/M, 35-39 F/M, 40-44 F/M, 45-49 F/M, 50-54 F/M, 55-59 F/M, 60-64 F/M, 65+ F/M, Unknown Age F/M</li> </ul> </li> <li>• <b>Already on ART/Screen Positive:</b> <ul style="list-style-type: none"> <li>• &lt;1 F/M, 1-4 F/M, 5-9 F/M, 10-14 F/M, 15-19 F/M, 20-24 F/M, 25-29 F/M, 30-34 F/M, 35-39 F/M, 40-44 F/M, 45-49 F/M, 50-54 F/M, 55-59 F/M, 60-64 F/M, 65+ F/M, Unknown Age F/M</li> </ul> </li> <li>• <b>Already on ART/Screen Negative:</b> <ul style="list-style-type: none"> <li>• &lt;1 F/M, 1-4 F/M, 5-9 F/M, 10-14 F/M, 15-19 F/M, 20-24 F/M, 25-29 F/M, 30-34 F/M, 35-39 F/M, 40-44 F/M, 45-49 F/M, 50-54 F/M, 55-59 F/M, 60-64 F/M, 65+ F/M, Unknown Age F/M</li> </ul> </li> </ul>
Specimen Sent [Required]	Number of ART patients who had a specimen sent for bacteriologic diagnosis of active TB disease.
Diagnostic Test (Disaggregation of Specimen Sent) [Required]	<ul style="list-style-type: none"> <li>• mWRD: Molecular WHO-Recommended Diagnostic PCR (with or without other testing)</li> <li>• Smear microscopy only</li> <li>• Additional test other than mWRD</li> </ul>
Positive Result Returned [Required]	Number of ART patients who had a positive result returned for bacteriologic diagnosis of active TB disease.

# Definitions of Disaggregates: TX\_TB

## Age/Sex by ART Status:

- Number of patients starting TB treatment who newly started ART during the reporting period: These individuals initiated TB treatment within 6 months of being enrolled on ART.
- Number of patients starting TB treatment who were already on ART prior to the start of the reporting period: These individuals initiated TB treatment at least 6 months (or longer) after being enrolled on ART.

## Type of Screening:

- **Symptom Screen:** patients who received symptom screening alone (without CXR, or mWRD, or other methods). A screening is considered positive if a patient reports at least one or more W4SS symptom during the reporting period. Screening negative is the absence of any of the symptoms at all clinical encounters.
- **CXR:** patients who received a CXR for screening purposes, with or without symptom screening. A screening is considered positive if a CXR is suggestive of TB. All other results should be reported as a negative screening.
- **mWRD:** patients who received an mWRD for screening purposes, with or without symptom screening. A screening is considered positive if Mycobacterium Tuberculosis (MTB) is detected and negative if MTB is not detected. All other unsuccessful results (invalid, indeterminate RIF, error) should not be reported, but instead followed up with repeat sample collection and testing, and any successful repeat results reported as positive or negative. Patients with a positive mWRD result will not need further diagnostic tests and should start TB treatment.



# Definitions of Disaggregates: TX\_TB (cont.)

## Age/Sex/Start of ART and Screen Result by Fine Age/Sex disaggregates:

- **Age/Sex/New on ART/Screen Positive:** The number of patients who started ART in the reporting period and screened positive (according to the appropriate “Type of Screening” definition above) during the reporting period.
- **Age/Sex/New on ART/Screen Negative:** The number of patients who started ART in the reporting period and who did not screen positive for TB during the reporting period.
- **Age/Sex/Already on ART/Screen Positive:** The number of patients who were on ART prior to the reporting period and who screened positive (according to the appropriate “Type of Screening” definition above) during the reporting period.
- **Age/Sex/Already on ART/Screen Negative:** The number of patients who were on ART prior to the reporting period and who did not screen positive for TB during the reporting period.

# How to Use: TX\_TB

This indicator documents the TB screening of ART patients as well as the proportion who were diagnosed and started on TB therapy. The disaggregates demonstrate the cascade from screening to testing and can be used to identify gaps and challenges in TB diagnostic activities.

# How to Collect: TX\_TB

- The denominator can be generated by counting the number of ART patients who were screened for TB at least once during the reporting period. This includes newly enrolling ART patients as well as those already on ART.
- The numerator can be generated by counting the number of ART patients screened for TB who were diagnosed with TB and started on anti-TB therapy during the reporting period.
- These data should be captured in ART registers as well as additional data collection sources (e.g., facility-based TB screening and notification registers or forms, TB microscopy result registers, mWRD data collection systems) that may contain relevant information (e.g., TB screening results, TB specimen testing results). Programs should modify the register as needed to easily capture this information.
- Documentation of screening is generally collected in patient charts but may also be collected in another aggregate partner-generated data source.

# How to Collect: TX\_TB (cont.)

- Screening for TB and/or initiation of anti-TB therapy might not happen at the same time that ART is started. For PLHIV new to HIV care, those who are diagnosed with TB are usually started on anti-TB therapy before they initiate ART (e.g., 2-8 weeks as per current recommendations). Regardless of when they occur relative to ART initiation, TB screening and initiation of TB therapy should be included for all patients who were already on ART or who started ART at any time during the reporting period.
- For TB screening type, patients who receive CXR or mWRD for screening purposes (i.e. as an initial approach for identifying presumptive TB) should be reported under the corresponding disaggregates 'CXR' or 'mWRD', even if they were screened using algorithms that also include symptom screening. These “enhanced TB screening” approaches recommended by the WHO may use CXR or mWRD alone or in combination with WHO four-symptom screening (W4SS) to optimize TB case detection among people living with HIV (PLHIV), including those who are asymptomatic. Patients who are screened using W4SS alone should be reported under the ‘Symptom Screen’ disaggregate.
- Further information on how to use and collect these data is provided by WHO in the following guidelines: [“Latent Tuberculosis Infection: Updated and Consolidated Guidelines for Programmatic Management.”](https://www.who.int/publications/i/item/9789240022676) (<https://www.who.int/publications/i/item/9789240022676>)



# How to Review for Data Quality: TX\_TB

## How to Review for Data Quality:

- Only one disaggregation type is used for age (fine disaggregates).
- Numerator  $\geq$  subtotal of each of the disaggregations

## How to Calculate Annual Total:

- TX\_TB Denominator is a snapshot indicator (i.e., the APR calculation = Q4) because it is intended to capture whether a clinical event (screening) happened within the reporting period.
- This is why TX\_TB Denominator should be compared to TX\_CURR, another snapshot indicator.
- Note that the TX\_TB Numerator, if analyzed on its own, could be summed across semiannual time periods to determine the number of ART patients who were started on TB treatment during the fiscal year.

# Guiding Narrative Questions: TX\_TB

1. If the denominator does not roughly equal TX\_CURR, please describe the main reasons.
2. If there are issues with reporting the disaggregations, please describe.
3. If there are issues with performance (e.g., if specimens are not sent for all persons who screened positive (excluding those who screened positive via mWRD), or if the numerator doesn't equal or exceed positive specimen returned), what are they and how can they be addressed?
4. Are the patients in the numerator all receiving care from PEPFAR-supported sites? Are they receiving TB and HIV care from the same site?
5. Describe access to mWRD testing for ART patients who screen positive for TB



# TB\_PREV



**Global Health Security  
and Diplomacy**  
U.S. DEPARTMENT *of* STATE



**PEPFAR**  
20 YEARS OF IMPACT

# Indicator Definition: TB\_PREV

**Indicator Definition:** Proportion of ART patients who started on a standard course of TB Preventive Treatment (TPT) in the **previous** reporting period who completed therapy

**Numerator:** Among those who started a course of TPT in the **previous** reporting period, the number that completed a full course of therapy (for continuous IPT programs, this includes the patients who have completed the first 6 months of isoniazid preventive therapy (IPT), or any other standard course of TPT such as 3 months of weekly isoniazid and rifapentine, or 3-HP)

---

**Denominator:** Number of ART patients who were initiated on any course of TPT during the **previous** reporting period

## **Numerator Description:**

The numerator is generated by counting the number of PLHIV on ART from the **previous** reporting period who were documented as having received at least six months of IPT or having completed any other standard course of TPT (such as 3-HP).

## **Denominator Description:**

The denominator is generated by counting the total number of patients on ART who were started on any course of TPT during the reporting period **prior to** the one being reported.

# Numerator Disaggregates: TB\_PREV

Disaggregate Groups	Disaggregates
Age/Sex by ART Start: [Required]	<ul style="list-style-type: none"><li>• Newly enrolled on ART: &lt;15 F/M, 15+ F/M, Unknown Age F/M</li><li>• Previously enrolled on ART: &lt;15 F/M, 15+ F/M, Unknown Age F/M</li></ul>

# Denominator Disaggregates: TB\_PREV

Disaggregate Groups	Disaggregates
Age/Sex by ART Start: [Required]	<ul style="list-style-type: none"><li>• <b>Newly enrolled on ART:</b> &lt;15 F/M, 15+ F/M, Unknown Age F/M</li><li>• <b>Previously enrolled on ART:</b> &lt;15 F/M, 15+ F/M, Unknown Age F/M</li></ul>

# Definitions of Disaggregates: TB\_PREV

## Age/Sex by ART Start Descriptions:

- **Newly enrolled on ART:** These individuals initiated TPT within 6 months of being enrolled on ART; data to be submitted by the following disaggregates: <15F/M, 15+F/M Unknown Age F/M
- **Previously enrolled on ART:** These individuals initiated TPT at least 6 months (or longer) after being enrolled on ART; data to be submitted by the following disaggregates: <15F/M, 15+F/M, Unknown Age F/M

# How to Use: TB\_PREV

- This indicator measures the performance of HIV programs in scaling up TPT, with the goal of preventing progression to active TB disease among persons living with HIV (PLHIV).
- As part of a cascade from TX\_CURR to TB screening (captured in TX\_TB), this indicator will inform programs on the pace of scale-up, and the proportion will allow for monitoring of cohorts through completion of therapy.
- Disaggregates on the timing of ART and age/sex breakdowns will allow programs to monitor those who are newly starting ART, an important focal population in all countries and in particular in countries that have already provided TPT for many of their PLHIV in care.

# How to Collect: TB\_PREV

- The denominator can be generated by counting the total number of patients who initiated any regimen of TPT in the semi-annual reporting period that is **prior to** the one being reported on. Ex: If reporting is for Q1 and Q2 of a fiscal year (e.g., Oct. 2023 to Mar. 2024), the denominator would include those started on TPT in Q3 and Q4 of the previous fiscal year (e.g., Apr. to Sep. 2023). If a TPT register is being used, then this requires framing out the dates that define the previous reporting period and counting all those who started TPT.
- **Programs should ensure that patients on continuous isoniazid therapy are counted only once, when they initiate therapy (denominator) and after they complete the first 6 months (numerator); ensure they are not included in future calculations.**
- If a patient is initiated on TPT and dies before TPT completion, this patient should be recorded in the denominator, but not in the numerator. If a patient initiates TPT at one site, completes at another, and is a documented transfer, that patient should be recorded in the denominator at the site where they initiated TPT, and they should be recorded as completed TPT (numerator) at the new site.
- The numerator can be generated by counting the subset of patients from the denominator who received at least 6 months of IPT or have completed another standard course of TPT. If a TPT register is used, this requires framing out the dates that define the previous reporting period, identifying those that initiated TPT during the reporting period (the denominator), and documenting the number of patients who completed the course of TPT that they started during that reporting period. This should include the patients who completed a shorter alternative course, such as 3-HP, and those who are on prolonged or continuous IPT who have completed their first 6 months of therapy.
- Note: If a patient was started on IPT in the previous reporting period (e.g., Q3 or Q4 FY2023), they would have completed during the current reporting period (e.g., Q1 or Q2 FY2024).



# How to Collect: TB\_PREV

## For IPT:

- All patients who started any form of IPT (prolonged or continuous), at any time in the previous 6-month reporting period (i.e., at any time in the 6 months before the start of the period being reported) should be included in the denominator. Among the denominator, those that completed at least 6 months of isoniazid therapy would have done so in the period currently being reported (the numerator). Patients who started and completed IPT in the previous reporting period should be counted in the numerator and the denominator.

## For 3-HP:

- Patients who are taking 3-HP may have initiated and completed therapy in the previous reporting period, or they may have initiated TPT in the previous reporting period and completed TPT in the period currently being reported.
- Any patient who started 3-HP at any point in the previous reporting period would be included in the denominator.
- Any patient from that denominator who completed the course would be included in the numerator; this would include those who completed 3-HP in the first 3 months of the period being reported on.

## For alternative regimens:

- Patients who are taking other regimens (such as 1-HP) may also have initiated and completed therapy in the previous reporting period or they may have initiated TPT in the previous reporting period and completed TPT in the period currently being reported. Include and count patients under both scenarios (start and completion in the same reporting period AND start in the previous reporting period but completion in the one currently being reported).

These data elements can be collected from the ART register or from separate TPT registers. In some countries, TB presumptive registers might contain this information as well, but the information will need to be cross referenced for ART treatment status.



# How to Review for Data Quality: TB\_PREV

## How to Review for Data Quality:

- Data Element  $\geq$  subtotal of each of the disaggregations.

## How to Calculate Annual Total:

- The TB\_PREV denominator and numerator should be analyzed independently of other data and the results reported in Q2 and Q4 should be summed to calculate the total number of ART patients who initiated and completed a course of TPT.
- When analyzing this data in conjunction with data on TB screening for ART patients (TX\_TB), it is important to align the correct reporting periods. For example, TB\_PREV captures those who were initiated on TPT during the **previous** reporting period, so it should be compared to TB screening (TX\_TB Denominator) and TX\_CURR data from the **previous** reporting period.

# Guiding Narrative Questions: TB\_PREV

1. What proportion of patients who completed TPT received IPT, 3-HP, or an alternative TPT regimen (e.g., 1-HP)?
2. Roughly what proportion of patients who received TPT were treated with the 6-month isoniazid regimen?
3. Broadly describe the main reasons why TPT was not completed (e.g., adverse events, interruption in treatment, patients refused to continue, etc.).
4. Roughly what proportion of all PLHIV on treatment have already completed TB preventive therapy prior to this reporting period (and were not eligible for TPT and not include in this indicator)?
5. If TB preventive therapy was not provided to all PLHIV in care, what are the main reasons for limited scale-up?

# TB\_ART



**Global Health Security  
and Diplomacy**  
U.S. DEPARTMENT *of* STATE



**PEPFAR**  
20 YEARS OF IMPACT

# Indicator Definition: TB\_ART

**Indicator Definition:** Proportion of HIV-positive new and relapsed TB cases on ART during TB treatment.

**Numerator:** Number of TB cases with documented HIV-positive status who start or continue ART during the reporting period

---

**Denominator:** TB\_STAT\_POS (see [TB\\_STAT](#)): Number of registered TB cases with documented HIV- positive status during the reporting period.

**Numerator Description:**

The numerator is generated by counting the total number of TB patients (new and relapse TB cases) with documented HIV- positive status during TB treatment who are newly initiated or already on ART.

**Denominator Description:**

Denominator is not collected as part of this indicator, but is TB\_STAT\_POS.

# Numerator Disaggregates: TB\_ART

Disaggregate Groups	Disaggregates
<p><b>ART Status by Age/Sex: [Required]</b></p>	<ul style="list-style-type: none"> <li>• <b>New on ART:</b> &lt;1 F/M, 1-4 F/M, 5-9 F/M, 10-14 F/M, 15-19 F/M, 20-24 F/M, 25-29 F/M, 30-34 F/M, 35-39 F/M, 40-44 F/M, 45-49 F/M, 50-54 F/M, 55-59 F/M, 60-64 F/M, 65+ F/M, Unknown Age F/M</li> <li>• <b>Already on ART:</b> &lt;1 F/M, 1-4 F/M, 5-9 F/M, 10-14 F/M, 15-19 F/M, 20-24 F/M, 25-29 F/M, 30-34 F/M, 35-39 F/M, 40-44 F/M, 45-49 F/M, 50-54 F/M, 55-59 F/M, 60-64 F/M, 65+ F/M, Unknown Age F/M</li> </ul>

# Denominator Disaggregates: TB\_ART

Disaggregate Groups	Disaggregates
TB_STAT_POS (See <u>TB_STAT</u> ).	<ul style="list-style-type: none"><li>• TB_STAT_POS (See <u>TB_STAT</u>).</li></ul>

# Definitions of Disaggregates: TB\_ART

- **Age Description:** Age is defined as the age at the date of initiation on ART or current age, not the age at the date of reporting.

# How to Use: TB\_ART

- This indicator will measure the extent to which programs effectively link HIV-infected TB patients to appropriate HIV treatment.
- The HIV status of TB patients is often determined at the TB clinics (and will be captured with TB\_STAT), but ART for TB cases is frequently provided by the HIV program.
- Therefore, provision of ART for this population often implies successful linkage between the TB and HIV program, which should be followed from TB\_STAT\_POS to TB\_ART.

# How to Collect: TB\_ART

- The numerator is generated by counting the total number of TB patients (new and relapse TB cases) with documented HIV-positive status during TB treatment who are newly initiated or already on ART.

# How to Review for Data Quality: TB\_ART

## How to Review for Data Quality:

- Only one disaggregation type is used for age/sex.
- Numerator  $\geq$  subtotal of each of the disaggregation.

## How to Calculate Annual Total:

- **TB\_ART**: N/A. Data is reported only once annually at Q4.
- **TB\_STAT\_POS** (See [TB\\_STAT](#)): Sum results across quarters.

# Guiding Narrative Questions: TB\_ART

1. If % coverage for TB\_ART / TB\_STAT\_POS is less than 90%, please explain why.
2. Describe the sources for the data that you are reporting (i.e., are the data from just PEPFAR-supported facilities or do the data reflect national-level data, including those from non-PEPFAR supported facilities)? As above, please describe the sources of the data you are reporting.

# TB\_STAT



**Global Health Security  
and Diplomacy**  
U.S. DEPARTMENT *of* STATE



**PEPFAR**  
20 YEARS OF IMPACT

# Indicator Definition: TB\_STAT

**Indicator Definition:** Percentage of new and relapsed TB cases with documented HIV status

**Numerator:** Number of new and relapsed TB cases with documented HIV status, during the reporting period

---

**Denominator:** Total number of new and relapsed TB cases, during the reporting period

## **Numerator Description:**

The numerator can be generated by counting the number of new and relapsed TB cases with documented HIV test results during the reporting period.

## **Denominator Description:**

The denominator can be generated by counting the number of new and relapsed TB cases during the reporting period.

# Numerator Disaggregates: TB\_STAT

Disaggregate Groups	Disaggregates
<p data-bbox="76 721 657 768"><b>Status by Age/Sex [Required]</b></p> <p data-bbox="76 835 871 939"><u><b>Underlined portions auto-populate into the TB HTS_TST modality.</b></u></p>	<ul data-bbox="912 449 2446 1213" style="list-style-type: none"><li data-bbox="912 449 2446 606">• <b>Known Positive:</b> &lt;1 F/M, 1-4 F/M, 5-9 F/M, 10-14 F/M, 15-19 F/M, 20-24 F/M, 25-29 F/M, 30-34 F/M, 35-39 F/M, 40-44 F/M, 45-49 F/M, 50+ F/M, Unknown Age F/M</li><li data-bbox="912 649 2446 806">• <u><b>Newly Tested Positive:</b> &lt;1 F/M, 1-4 F/M, 5-9 F/M, 10-14 F/M, 15-19 F/M, 20-24 F/M, 25-29 F/M, 30-34 F/M, 35-39 F/M, 40-44 F/M, 45-49 F/M, 50+ F/M, Unknown Age F/M</u></li><li data-bbox="912 849 2446 1006">• <u><b>New Negative:</b> &lt;1 F/M, 1-4 F/M, 5-9 F/M, 10-14 F/M, 15-19 F/M, 20-24 F/M, 25-29 F/M, 30-34 F/M, 35-39 F/M, 40-44 F/M, 45-49 F/M, 50+ F/M, Unknown Age F/M</u></li><li data-bbox="912 1049 2446 1206">• <b>Recently Tested Negative:</b> &lt;1 F/M, 1-4 F/M, 5-9 F/M, 10-14 F/M, 15-19 F/M, 20-24 F/M, 25-29 F/M, 30-34 F/M, 35-39 F/M, 40-44 F/M, 45-49 F/M, 50+ F/M, Unknown Age F/M</li></ul>

# Definitions of Disaggregates: TB\_STAT

**"Recently Tested Negative:"** Number of TB cases who recently tested HIV-negative within a 6-week period, or more recently according to country clinical guidelines, and are not eligible for another HIV test at the time of presentation in the TB clinic in accordance with national HTS guidelines.

For example, an individual with symptoms of TB (presumptive TB) who underwent HIV testing as part of their clinical evaluation prior to being referred to a TB clinic and arrive at the TB clinic with a negative HIV test result not older than 6 weeks and who may not yet be eligible for additional HTS according to national HTS guidelines.

# Denominator Disaggregates: TB\_STAT

Disaggregate Groups	Disaggregates
Age/Sex: [Required]	<ul style="list-style-type: none"><li>&lt;1 F/M, 1-4 F/M, 5-9 F/M, 10-14 F/M, 15-19 F/M, 20-24 F/M, 25-29 F/M, 30-34 F/M, 35-39 F/M, 40-44 F/M, 45-49 F/M, 50+ F/M, Unknown Age F/M</li></ul>

# How to Use: TB\_STAT

This indicator measures the performance of the TB program in ensuring that TB cases know their HIV status. It can also be used to understand local TB and HIV epidemiology based on the proportion of HIV-positive TB patients.

# How to Collect: TB\_STAT

- The numerator and denominator can be obtained from basic management unit TB registers as well as additional data collection sources (i.e., HIV testing registers) that may contain relevant information (i.e., HIV test results, enrollment in HIV care programs). Programs should modify the register as needed to easily capture this information (sex and age at fine age bands, and whether status was known at entry).
- The data source is the TB register. There is a risk of double counting as TB patients could be tested multiple times during their TB treatment; therefore, partners should ensure a data collection and reporting system is in place to minimize double counting. There is also a risk of undercounting if those patients who already knew their HIV status prior to attending TB clinics are not documented; therefore, the TB register at a minimum should document “Known HIV-positive at service entry; Newly tested HIV-positive; Tested HIV-negative; Recently tested HIV-negative.”



# How to Review for Data Quality: TB\_STAT

## How to Review for Data Quality:

- Only one disaggregation type is used for age and gender (fine age and gender disaggregations)
  - Denominator  $\geq$  Numerator.
  - Numerator  $\geq$  subtotal of each of the disaggregations.
  - Denominator  $\geq$  subtotal of each of the disaggregations.

## How to Calculate Annual Total:

- Sum results across quarters for both the numerator and denominator.

# Guiding Narrative Questions: TB\_STAT

1. If coverage for this indicator is less than 95%, please explain why. If there are any age/sex bands that are below the 95% threshold (even if overall reporting is over 95%), please explain why.
2. Please describe how the denominator was determined.
3. Describe the sources for the data that you are reporting (i.e., are the data from just PEPFAR-supported facilities or do the data reflect national-level data, including those from non-PEPFAR supported facilities)?



# Section 4: Data Use

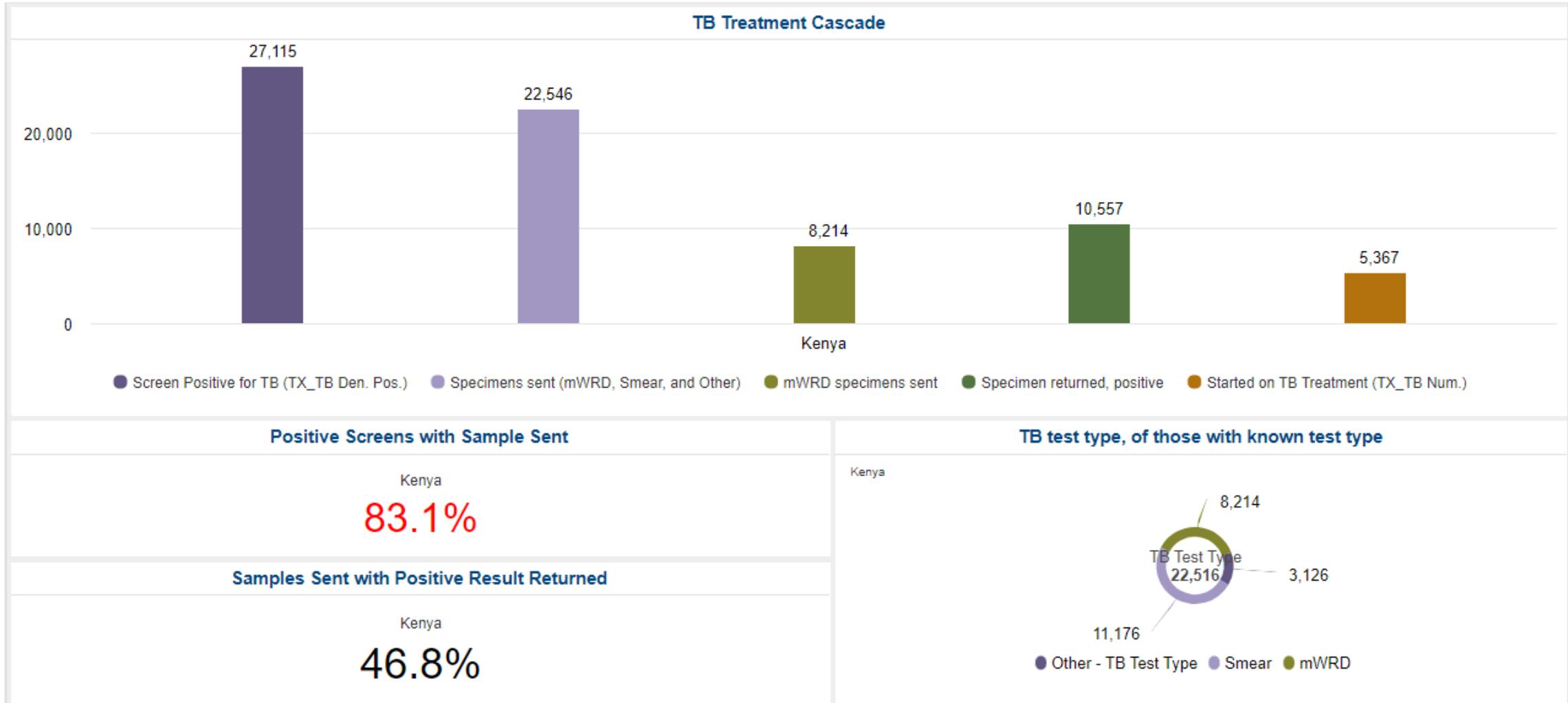


**Global Health Security  
and Diplomacy**  
U.S. DEPARTMENT *of* STATE

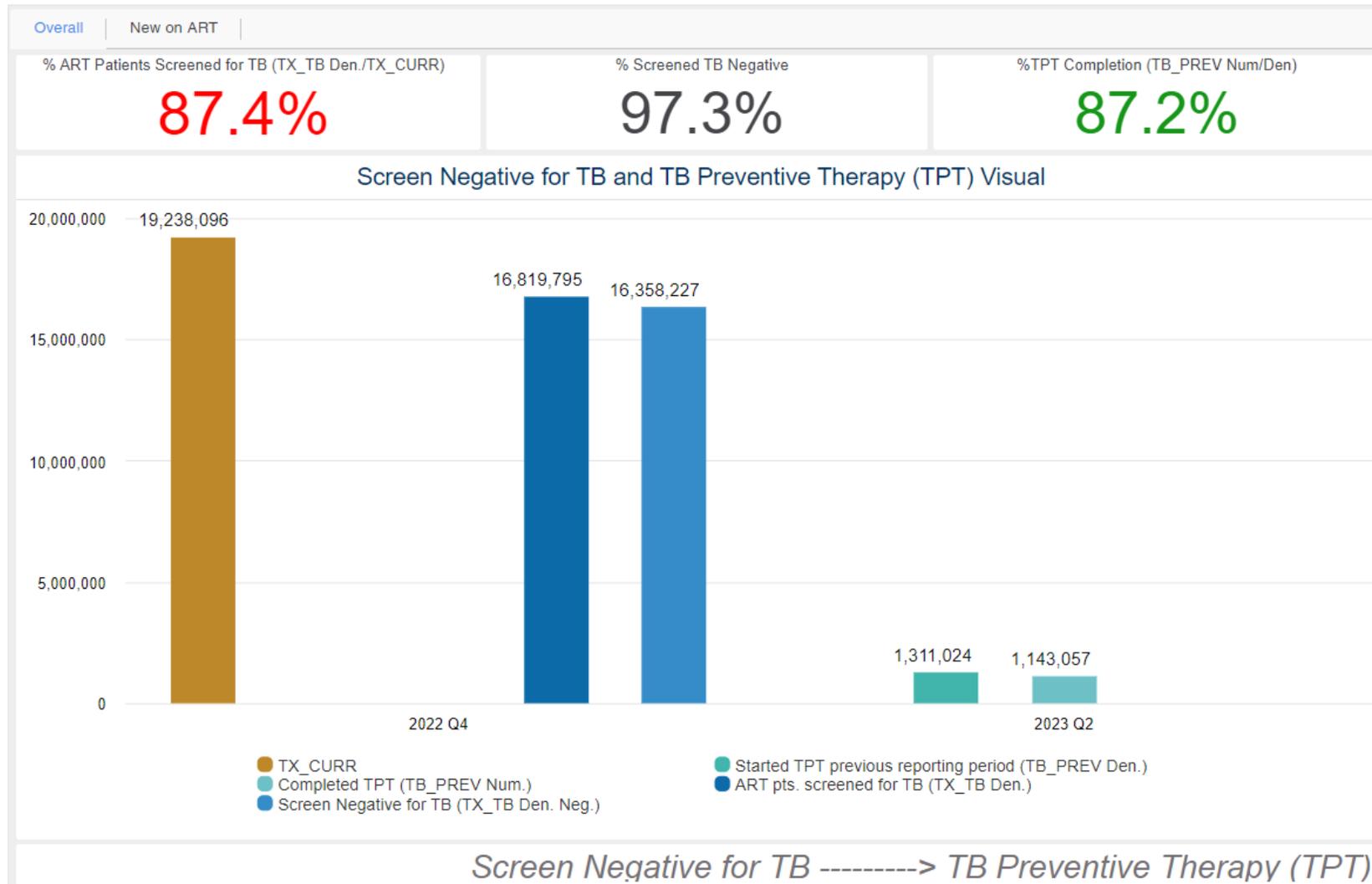


**PEPFAR**  
20 YEARS OF IMPACT

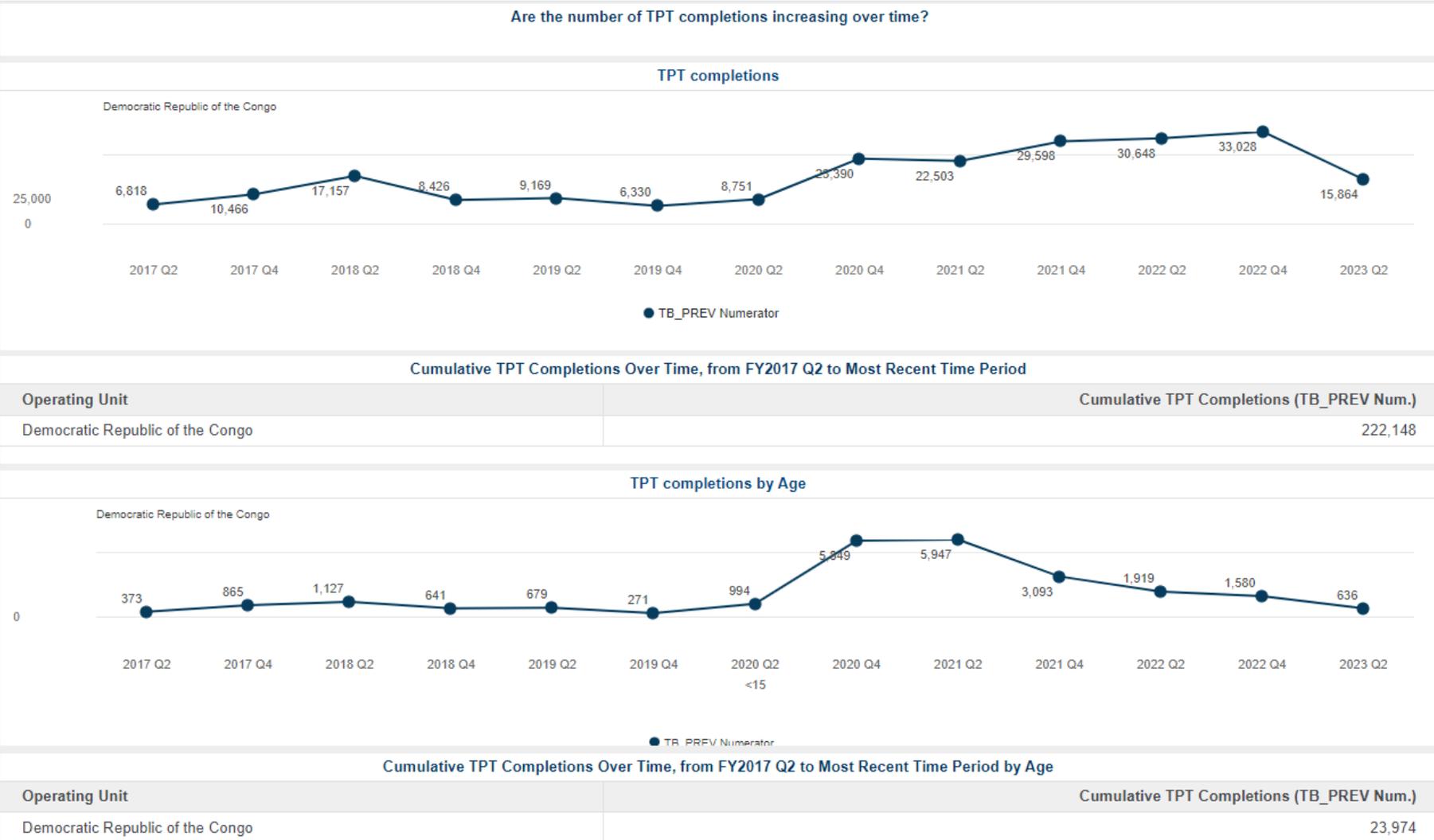
# Data Visualization and Use Examples: TX\_TB



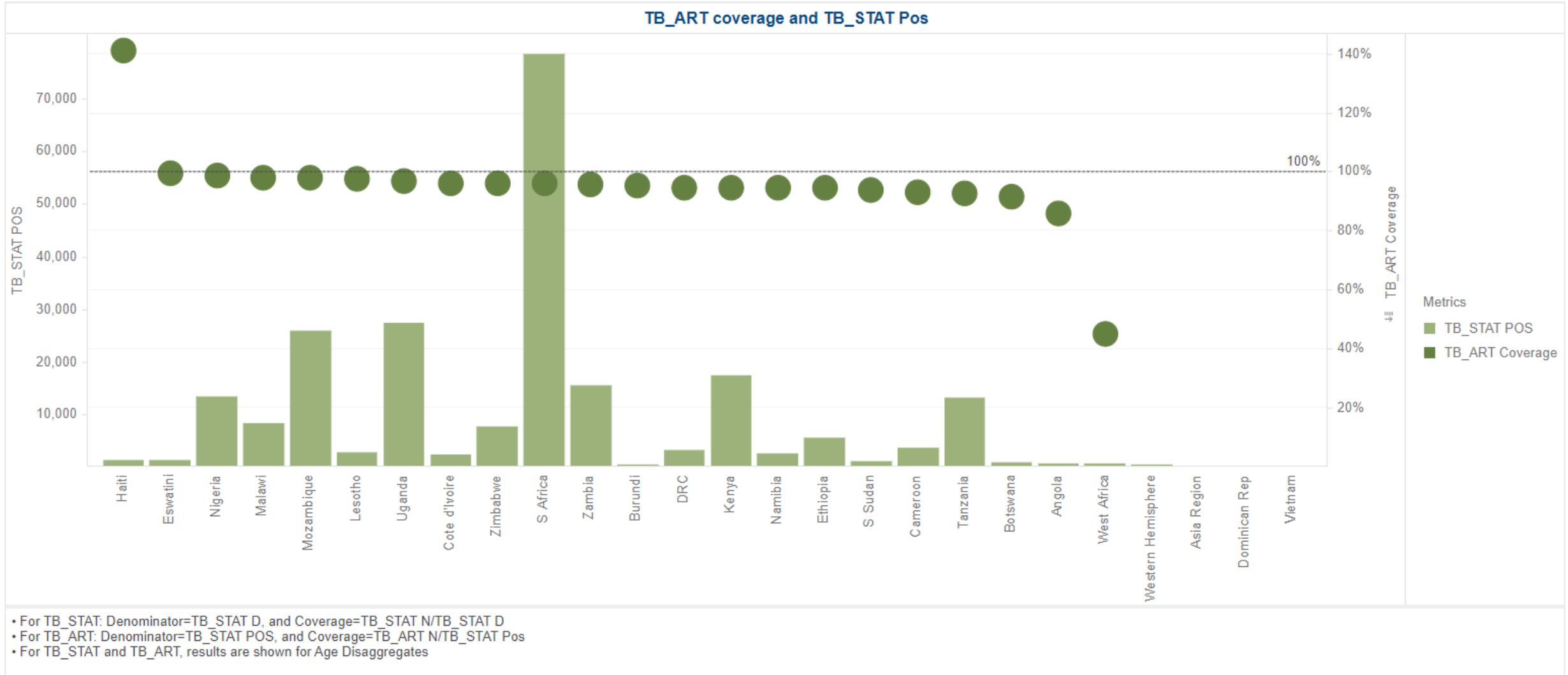
# Data Visualization and Use Example: TX\_TB, TX\_CURR, & TB\_PREV



# Data Visualization and Use Example: TB\_PREV



# Data Visualization and Use Example: TB\_ART Coverage and TB\_STAT\_POS



# Section 5: Additional Resources and Acknowledgements



**Global Health Security  
and Diplomacy**  
U.S. DEPARTMENT *of* STATE



**PEPFAR**  
20 YEARS OF IMPACT

# Additional Resources and Acknowledgements

## Additional Resources:

- Global Tuberculosis Report, 2023; WHO: [Global tuberculosis report 2023 \(who.int\)](https://www.who.int/publications/m/item/global-tuberculosis-report-2023)
- Consolidated Guidelines on Tuberculosis Screening, 2021; WHO: [WHO consolidated guidelines on tuberculosis: module 2: screening: systematic screening for tuberculosis disease](https://www.who.int/publications/m/item/consolidated-guidelines-on-tuberculosis-screening)
- Latent TB Infection : Updated and consolidated guidelines for programmatic management; WHO: [Latent tuberculosis infection: updated and consolidated guidelines for programmatic management \(who.int\)](https://www.who.int/publications/m/item/latent-tuberculosis-infection)
- Please refer to the COP/ROP23 Guidance and Technical Considerations for additional information on viral load testing and suppression: [2023 Country and Regional Operational Plan Guidance and Technical Considerations - United States Department of State](https://www.state.gov/2023-country-and-regional-operational-plan-guidance-and-technical-considerations)

**Acknowledgements:** Thank you to the following contributors:

*Paul Pierre, DOS/USAID; Samuel Kalibala, DOS; Matias Grande, DOS*

# Thank you!



**Global Health Security  
and Diplomacy**  
U.S. DEPARTMENT *of* STATE



**PEPFAR**  
20 YEARS OF IMPACT