PBMEF TB Diagnosis Indicators

The color of the indicator reference sheet indicates whether the indicator is calculated or not calculated, and whether it could be considered a disaggregate of another indicator:

Calculated indicators:

Indicator name	Ex: PCT_TB_ART: Percentage TB clients who start or continue ART

Non calculated indicators:

Indicator name	Ex: TB_ART_N: Number of TB clients who start or continue ART

Calculated indicators that could be reported as a disaggregate of another indicator:

Indicator name	Ex: PCT_DRTB_ART: Percentage DR-TB clients who start or continue ART

Non calculated indicators that could be reported as a disaggregate of another indicator:

Indicator name	Ex: DRTB_ART_N: Number of DR-TB clients who start or continue ART

Indicator name	PCT_NEWREL_DST: Percent of people with new or recurrent TB with DST results	
Definition	Percent of people with new and recurrent (relapse) pulmonary TB with drug susceptibility testing (DST) results available, among those eligible for DST according to national guidelines.	
Numerator	Number of people with new and recurrent (relapse) pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period.	*PBMEF data element: NEWREL_DST* *WHO data element: varies by country diagnostic algorithm*
Denominator	Number of people with new and recurrent (relapse) TB who are eligible for DST during the reporting period, according to national guidelines.	*PBMEF data element: NEWREL_DST_ELIGIBLE* WHO data element: *varies by country algorithm*
Category	Reach	
Indicator type	Outcome	
PBMEF level	Core Plus	
Unit of measure	Percent of people	
Data type	Percentage	
Disaggregate by	Age (0–4, 5–14, 15+), sex, HIV status, drug and/or drug class e.g.,fluoroquinolones, isoniazid, bedaquiline, linezolid, and pretomanid); DST algorithm which determines patient eligibility for DST along with the type of testing being performed (e.g., Xpert XDR, FL or SL LPA, liquid culture, etc) should be included when reporting this indicator.	
Reporting level	All Core Plus indicators should be reported at the national level; data may also be collected subnationally for more granular monitoring.	
Reporting frequency	This indicator should be reported on a semiannual basis at a minimum. More frequent monitoring on a quarterly or monthly basis is recommended.	
Data source(s)	The data sources are the basic management unit TB register and electronic management information systems at the health facility and district level. This indicator could also be calculated using the WHO Global TB Programme database variables mentioned above, depending on the country algorithm.	
Importance	DST coverage is a critical indicator of programmatic performance on DR-TB detection and treatment as well as stewardship of new drugs and regimens. DST is necessary to ensure that patients are being put onto regimens which include drugs to which they are sensitive. Poor DST coverage may indicate inappropriate DR-TB treatment provision along with generation of additional drug resistance at the national level. DST coverage describes a country's ability to perform sensitivity testing and detect drug resistance among people with active TB disease, prior to initiating patients onto appropriate DR-TB treatment. Data on DST coverage is valuable for understanding where health systems and national programs may require additional strengthening as well as their ability to implement WHO recommendations for diagnosis and treatment. Though DST for all TB drugs used in the country may not be available, NTPs should be	

	working to implement comprehensive testing services over time, along with accompanying data collection and reporting. All people with bacteriologically confirmed TB should have DST results documented for at least rifampicin, to ensure that people with RR-TB are rapidly identified and not placed onto first line treatment. The denominator for this indicator only includes people with bacteriologically confirmed TB. In countries where bacteriological confirmation is low, it is possible the performance of this indicator may appear artificially high even when DST is relatively low. In such instances, countries may want to examine this percent for clinically diagnosed as well as bacteriologically confirmed TB.
Data visualization	This indicator flows from the core indicator of bacteriologic confirmation among people with notified pulmonary TB and provides the basis to calculate indicators such as treatment initiation rate for DR-TB. It also helps to track progress and utilization of investments in c testing strategies for drug resistance, as DST is a necessary step in the diagnostic and care cascade for DR-TB treatment. This indicator can also be presented in a graph with the number of new bacteriologically confirmed pulmonary TB patients (pulm_labconf_new).

Indicator name	PCT_RET_DST: Percent of people with previously treated TB with DST results available	
Definition	Percent of people with previously treated pulmonary TB who have drug susceptibility testing (DST) results available, among those who are eligible for DST according to national guidelines.	
Numerator	Number of people with previously treated pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period.	*PBMEF data element: RET_DST* WHO data element: *varies by country algorithm*
Denominator	Number of people with previously treated TB who are eligible for DST during the reporting period, according to national guidelines.	WHO data element: *varies by country algorithm* *PBMEF data element: RET_DST_ELIGIBLE*
Category	Reach	
Indicator type	Outcome	
PBMEF level	Core Plus	
Unit of measure	Percent of people	
Data type	Percentage	
Disaggregate by	Age (0–4, 5–14, 15+), sex, HIV status, drug and/or drug class tested for (e.g.,fluoroquinolones, isoniazid, bedaquiline linezolid, and pretomanid); DST algorithm which determines DST eligibility, and type of DST is being done should be included when reporting this indicator.	
Reporting level	All Core Plus indicators should be reported at the national level; data may also be collected subnationally for more granular monitoring.	
Reporting	This indicator should be reported on a semiannual basis at a minimum. More frequent	

frequency	monitoring on a quarterly or monthly basis is recommended.
Data source(s)	The data sources are the basic management unit TB register and electronic management information systems at the health facility and district level. This indicator could also be calculated using the WHO Global TB Programme database variables mentioned above, depending on the country algorithm.
Importance	DST is particularly important for individuals who were previously treated for TB, as they are at higher risk for having DR-TB. For this reason, previously treated TB cases may be prioritized for DST where laboratory services needed to perform it are limited.

Though DST for all TB drugs used in the country may not be available, NTPs should be working to implement comprehensive testing services over time, along with accompanying data collection and reporting. All people with bacteriologically confirmed TB should have DST results documented for at least rifampicin, to ensure that people with RR-TB are rapidly identified and not placed onto first line treatment. The denominator for this indicator only includes people with bacteriologically confirmed TB. In countries where bacteriological confirmation is low, it is possible the performance of this indicator may appear artificially high even when DST is relatively low. In such instances, countries may want to examine this percent for clinically diagnosed as well as bacteriologically confirmed TB. |
| Data visualization | This indicator flows from the core indicator of bacteriologic confirmation among people with notified pulmonary TB and provides the basis to calculate indicators such as DST coverage and treatment initiation rate for DR-TB. It helps to track progress and investment in coverage of testing for drug resistance in order to monitor performance for early detection of DR-TB and timely initiation for care and treatment. This indicator can also be presented in a graph with the number of new bacteriologically confirmed pulmonary TB patients (pulm_labconf_new). |

Indicator name	DT_TST: Number of people with presumptive TB who received diagnostic testing
Note:	Number of people with presumptive TB who received diagnostic testing to confirm or exclude active TB disease during the reporting period.

(This indicator is an essential indicator and already has an associated PIRS) |

Indicator name	BAC_CONF: Percent bacteriologically confirmed
Note:	Percent of people with new and relapse pulmonary TB who are bacteriologically confirmed. (This indicator is an essential indicator and already has an associated PIRS)

Indicator name	DT_PRES: Number of people with presumptive TB

Note:	Number of people with presumptive TB identified during the reporting period.
	(This indicator is an essential indicator and already has an associated PIRS)

Indicator name	PCT_WRD_RR: Percent of people with diagnostic WRD test results confirming rifampicin resistance (RR)	
Definition	Percent of people with new or recurrent TB who had diagnostic mWRD test results confirming rifampicin resistance (RR), among people with new or recurrent TB who received a mWRD for diagnostic testing.	
Numerator	Number of people with new or recurrent TB who had diagnostic WRD test results confirming rifampicin resistance (RR).	*PBMEF data element: WRD_CONF_RR*
Denominator	Number of people with new or recurrentTB who received a mWRD for diagnostic testing.	*PBMEF data element:*
Category	Reach	
Indicator type	Outcome	
PBMEF level	Extended	
Unit of measure	Number of people	
Disaggregate by	mWRD test type	

Indicator name	NEWREL_DST_INH: Number of people with TB with DST results for isoniazid	
Definition	Number of people with new and recurrent pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period for isoniazid.	
Numerator	Number of people with new and recurrent treated pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period for isoniazid.	*PBMEF data element: NEWREL_DST_INH* *WHO data element:* *Tested for Isoniazid: dst_rlt_new*
Denominator	N/A	*N/A*
Category	Reach	

Indicator type	Outcome
PBMEF level	Extended
Unit of measure	Number of people
Disaggregate by	DST type, test result, new and recurrent TB vs previously treated TB

Indicator name	**RET_DST_INH: Number of people with TB with DST results for isoniazid**	
Definition	Number of people with previously treated pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period for isoniazid.	
Numerator	Number of people with previously treated pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period for isoniazid.	*PBMEF data element: RET_DST_INH* *WHO data element:* *Tested for Isoniazid: dst_rlt_ret*
Denominator	N/A	*N/A*
Category	Reach	
Indicator type	Outcome	
PBMEF level	Extended	
Unit of measure	Number of people	
Disaggregate by	DST type, test result, new and recurrent TB vs previously treated TB	

Indicator name	**NEWREL_DST_FQL: Number of people with TB with DST results for fluoroquinolones**	
Definition	Number of people with new and recurrent pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period for fluoroquinolones.	
Numerator	Number of people with new and recurrent treated pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period for fluoroquinolones.	*PBMEF data element: NEWREL_DST_FQL*
Denominator	N/A	*N/A*

Category	Reach
Indicator type	Outcome
PBMEF level	Extended
Unit of measure	Number of people
Disaggregate by	DST type, test result, new and recurrent TB vs previously treated TB

Indicator name	RET_DST_FQL: Number of people with TB with DST results for fluoroquinolones	
Definition	Number of people with previously treated pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period for fluoroquinolones.	
Numerator	Number of people with previously treated pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period for fluoroquinolones.	*PBMEF data element: RET_DST_FQL*
Denominator	N/A	*N/A*
Category	Reach	
Indicator type	Outcome	
PBMEF level	Extended	
Unit of measure	Number of people	
Disaggregate by	DST type, test result, new and recurrent TB vs previously treated TB	

Indicator name	NEWREL_DST_BDQ: Number of people with TB with DST results for bedaquiline	
Definition	Number of people with new and recurrent pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period for bedaquiline.	
Numerator	Number of people with new and recurrent treated pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period for bedaquiline.	*PBMEF data element: NEWREL_DST_BDQ*

Denominator	N/A	*N/A*
Category	Reach	
Indicator type	Outcome	
PBMEF level	Extended	
Unit of measure	Number of people	
Disaggregate by	DST type, test result, new and recurrent TB vs previously treated TB	

Indicator name	**RET_DST_BDQ: Number of people with TB with DST results for bedaquiline**	
Definition	Number of people with previously treated pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period for bedaquiline.	
Numerator	Number of people with previously treated pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period for bedaquiline.	*PBMEF data element: RET_DST_BDQ*
Denominator	N/A	*N/A*
Category	Reach	
Indicator type	Outcome	
PBMEF level	Extended	
Unit of measure	Number of people	
Disaggregate by	DST type, test result, new and recurrent TB vs previously treated TB	

Indicator name	**NEWREL_DST_LZD: Number of people with TB with DST results for linezolid**
Definition	Number of people with new and recurrent pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period for linezolid.

Numerator	Number of people with new and recurrent treated pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period for linezolid.	*PBMEF data element: NEWREL_DST_LZD*
Denominator	N/A	*N/A*
Category	Reach	
Indicator type	Outcome	
PBMEF level	Extended	
Unit of measure	Number of people	
Disaggregate by	DST type, test result, new and recurrent TB vs previously treated TB	

Indicator name	RET_DST_LZD: Number of people with TB with DST results for linezolid	
Definition	Number of people with previously treated pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period for linezolid.	
Numerator	Number of people with previously treated pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period for linezolid.	*PBMEF data element: RET_DST_LZD*
Denominator	N/A	*N/A*
Category	Reach	
Indicator type	Outcome	
PBMEF level	Extended	
Unit of measure	Number of people	
Disaggregate by	DST type, test result, new and recurrent TB vs previously treated TB	

Indicator name	NEWREL_DST_PA: Number of people with TB with DST results for pretomanid

Definition	Number of people with new and recurrent pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period for pretomanid.	
Numerator	Number of people with new and recurrent treated pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period for pretomanid.	*PBMEF data element: NEWREL_DST_PA*
Denominator	N/A	*N/A*
Category	Reach	
Indicator type	Outcome	
PBMEF level	Extended	
Unit of measure	Number of people	
Disaggregate by	DST type, test result, new and recurrent TB vs previously treated TB	

Indicator name	**RET_DST_PA: Number of people with TB with DST results for pretomanid**	
Definition	Number of people with previously treated pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period for pretomanid.	
Numerator	Number of people with previously treated pulmonary TB who have drug susceptibility testing (DST) results available during the reporting period for pretomanid.	*PBMEF data element: RET_DST_PA*
Denominator	N/A	*N/A*
Category	Reach	
Indicator type	Outcome	
PBMEF level	Extended	
Unit of measure	Number of people	
Disaggregate by	DST type, test result, new and recurrent TB vs previously treated TB	