PBMEF Core Plus Indicators: Standard Indicator Reference Sheets (IRS)

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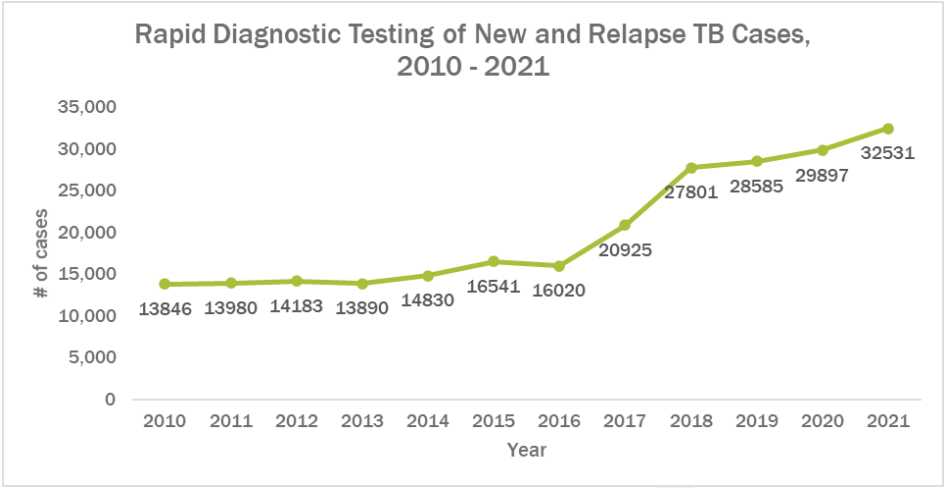
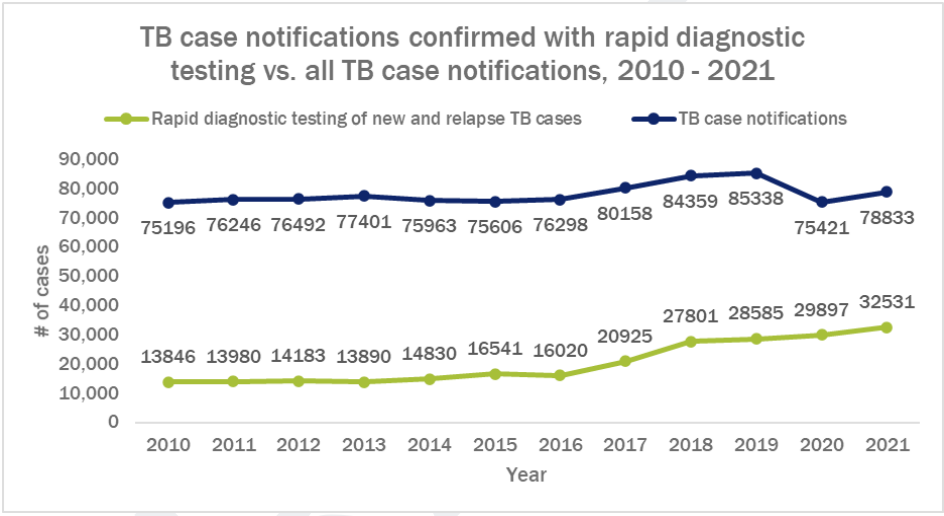
Core Plus Indicators

Indicator name and number	**NEWREL_WRD: Rapid diagnostic testing at time of initial diagnosis** *Previously [DT-15]*
Definition	Percent of people with notified new and relapse TB who were tested using a WHO-recommended diagnostic test (WRD) (Xpert MTB/RIF™ and Ultra™, Truenat™, TB-LAMP™, Abbott™, BD™, Roche™, Hain™ or LF-LAM™) at the time of initial TB diagnosis (regardless of test result).
Numerator	Number of people with new and relapse TB notified during the reporting period who were tested using a WHO-recommended diagnostic test (WRD) (Xpert MTB/RIF™ and Ultra™, Truenat™, TB-LAMP™, Abbott™, BD™, Roche™, Hain™ or LF-LAM™.) at the time of initial TB diagnosis (regardless of test result).
Denominator	Number of people with notified new and relapse TB during the reporting period.
Category	Reach
Indicator type	Outcome
Level	Core plus

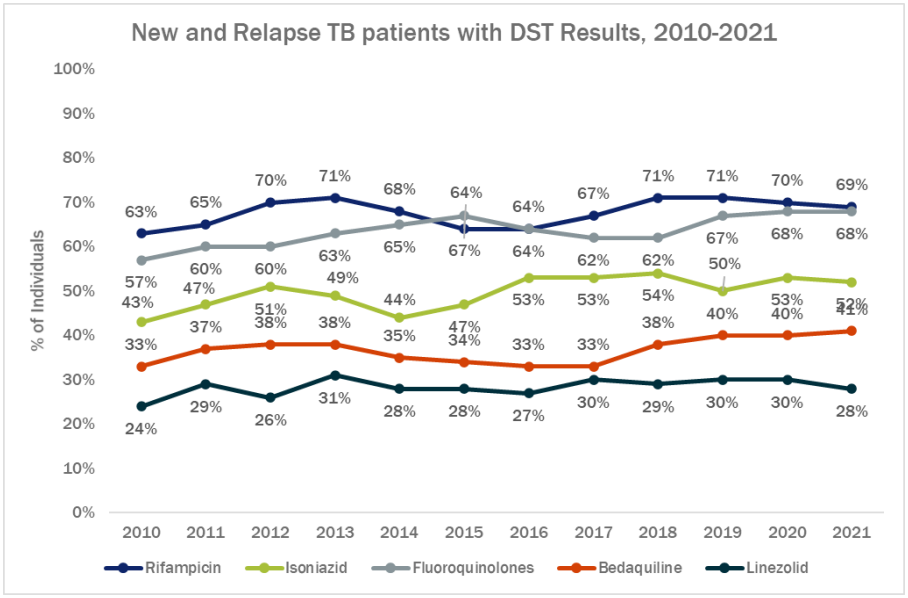
Unit of measure	Number of people
Data type	Integer
Disaggregate by	Age (0-4, 5-14, 15+), sex, type of diagnostic test
Reporting level	All core plus indicators should be reported at national level; data may also be collected subnationally for more granular monitoring.
Reporting frequency	This indicator should be reported on a semi-annual basis at 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 laboratory register at health facility level and district levels. This is a standard WHO indicator and can be calculated using the WHO Global TB Programme database variable: *newinc_rdx*
Importance	As countries intensify efforts to improve TB diagnosis and treatment and close the gap between estimated and notified TB, the number and percentage of people with notified TB that are bacteriologically confirmed needs to be monitored to ensure that people are correctly diagnosed and started on the most effective treatment regimen as early as possible. This indicator measures a program's capacity to detect TB accurately and rapidly using new diagnostics and to increase the percentage of people with TB who are confirmed bacteriologically by scaling up the use of recommended diagnostics that are more sensitive than smear microscopy. The number is also important to monitor for the purposes of estimating procurement needs, especially the disaggregation by type of test. USAID's Global TB Strategy sets a goal of 90% of people with incident TB be diagnosed and initiated on treatment with a minimum of 75% of people treated with TB tested with WHO-recommended rapid molecular diagnostic (mWRD) test in each priority country by 2030. Greater efforts are needed to improve the availability and use of the most sensitive diagnostic tests for TB and to ensure that international standards for TB care are met to avoid missed diagnoses of people who have TB, overtreatment of people who do not have TB, and efficient use of resources.
Data use and visualization	A high number of people with new and relapse TB notified and tested using a mWRD at the time of TB diagnosis reflects multiple processes, including availability and access to adequate bacteriological diagnostic services (trained staff, equipment, etc.), quality of laboratory testing, and adherence to TB guidelines. This indicator can be compared to the core indicator that measures bacteriological confirmation among all people with notified TB. As the use of mWRD is expanded to test all people with new diagnoses of pulmonary TB, one should see an increase in bacteriological confirmation over time. By measuring this indicator, countries can track the rollout and use of molecular WHO-recommended rapid diagnostic (mWRD). Additionally, this indicator can be compared against national and global standards or targets as a proxy for measuring laboratory performance or capacity within a country. Additionally, this indicator should be reviewed in conjunction with measurements on the scale of mWRD testing among people with presumed TB. Example of data visualizations:





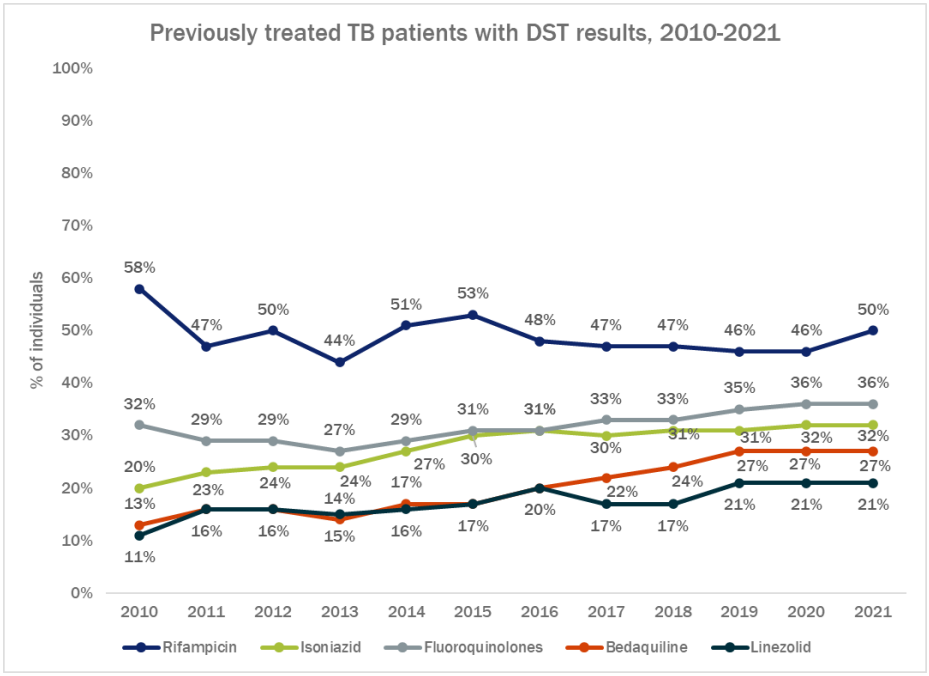
Indicator name and number	**NEWREL_DST: DST results among people with new and relapse TB**
Definition	Percent of people with new and relapse pulmonary TB who have drug susceptibility testing (DST) results for 1) rifampicin, 2) isoniazid, 3) fluoroquinolones 4) bedaquiline and 5) linezolid
Numerator	Number of people with new and relapse pulmonary TB who have drug susceptibility test results for 1) rifampicin, 2) isoniazid, 3) fluoroquinolones 4) bedaquiline and 5) linezolid
Denominator	Number of people with bacteriologically confirmed new and relapse pulmonary TB.
Category	Reach
Indicator type	Outcome
Level	Core plus

Unit of measure	Percent of people
Data type	Percentage
Disaggregate by	Age (0-4, 5-14, 15+), sex, DST type (rifampicin, fluoroquinolones, isoniazid, bedaquiline and linezolid), HIV status
Reporting level	All core plus indicators should be reported at national level; data may also be collected subnationally for more granular monitoring.
Reporting frequency	This indicator should be reported on a semi-annual basis at 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 health facility and district level. Components of this indicator can also be calculated using the WHO Global TB Programme database variables: *Numerator:* *Rifampicin: r_rlt_new* *Isoniazid: dst_rlt_new* *Denominator: new_labconf + ret_rel_labconf*
Importance	DST coverage is an important step in the DR-TB detection and treatment cascade. Drug-sensitivity testing helps to measure the magnitude of drug resistance for anti-TB medicines among people with notified TB, which is a key information for any NTP to understand the burden of DR-TB and respond accordingly. DST coverage indicates a country's ability to detect drug resistance among people with active TB disease and initiate people diagnosed with DR-TB on appropriate treatment regimens. Data on DST coverage are valuable for planning laboratory equipment and supplies as well as drug logistics and supervision. Though data for DST on all five drugs may not be available, countries should be working to implement this testing over time, along with accompanying data collection and reporting. All people with bacteriologically confirmed TB should have drug susceptibility testing results documented for at least rifampicin to ensure that people with DR-TB are rapidly identified and placed on the correct treatment regimen in a timely manner. The denominator for this indicator only includes people with bacteriologically confirmed TB. In countries where bacteriological confirmation is low, the performance of this indicator may appear high even when DST testing among all people with TB is relatively low. In such instances, countries may want to examine this percent for clinically diagnosed as well as bacteriologically confirmed TB. Early detection of resistance to rifampicin ensures that an appropriate drug regimen can be prescribed to increase the chance of treatment success, and to reduce the chance of acquiring additional resistance. It also helps to reduce the risk of transmission of DR-TB.
Data use and visualization	This indicator flows from the core indicator of bacteriologic confirmation among people with notified pulmonary TB and provides the basis to calculate relevant indicators such as rate of positivity, type of resistance, and treatment initiation rate. 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). Data can be presented and visualized using tables, charts, line graphs, etc. Example of data visualizations:



Indicator name and number	**RET_DST: DST results among people with previously treated TB**
Definition	Percent of people with previously treated (including relapse) pulmonary TB who have drug susceptibility test (DST) results for 1) rifampicin, 2) isoniazid, 3) fluoroquinolones 4) bedaquiline and 5) linezolid
Numerator	Number of people with previously treated (including relapse) pulmonary TB who have drug susceptibility test (DST) results for 1) rifampicin, 2) isoniazid, 3) fluoroquinolones 4) bedaquiline and 5) linezolid
Denominator	Number of people with bacteriologically confirmed previously treated (including relapse) pulmonary TB.
Category	Reach
Indicator type	Outcome
Level	Core plus
Unit of measure	Percent of people
Data type	Percentage
Disaggregate by	Age (0-4, 5-14, 15+), sex, DST type (rifampicin, fluoroquinolones, isoniazid, bedaquiline and linezolid), HIV status
Reporting level	All core plus indicators should be reported at national level; data may also be collected subnationally for more granular monitoring.
Reporting frequency	This indicator should be reported on a semi-annual basis at minimum. More frequent monitoring on a quarterly or monthly basis is recommended.

Data source(s)	The data sources are basic management unit TB register, RR/MDR-TB register and electronic management information systems available at health facility and district level. Components of this indicator can also be calculated using the WHO Global TB Programme database variables*:* *Numerator:* *Rifampicin: r_rlt_ret* *Isoniazid: dst_rlt_ret* *Denominator: pulm_labconf_ret*
Importance	The risk of drug resistance is high among people with previously treated TB, particularly among those treated irregularly, or with incorrect regimens and doses. Many studies have reported that the most important risk factor for the development of DR-TB is the previous treatment of TB. Hence, DST coverage among people with previously treated TB (including relapse) provides valuable data to monitor coverage of drug-sensitivity testing for anti-TB drugs among this high-risk group. It also helps to understand the prevalence and types of drug resistance. This indicator gives the basis to conduct further cascade analysis for DR-TB diagnosis, such as linkage to laboratory, testing, rate of positivity, treatment initiation, etc. Though data for DST on all five drugs may not be available, countries should be working to implement this testing over time, along with accompanying data collection and reporting. The denominator for this indicator only includes people with bacteriologically confirmed TB. In countries where bacteriological confirmation is low, the performance of this indicator may appear high even when DST testing among all people with TB is relatively low. In such instances, countries may want to examine this percent for clinically diagnosed as well as bacteriologically confirmed TB. It is helpful for NTPs to understand the burden of drug resistance and respond accordingly to initiate people diagnosed with DR-TB on appropriate treatment. The data are valuable for planning laboratory equipment and supplies as well as drug logistics and supervision.
Data use and visualization	This indicator flows from the core indicator of bacteriologic confirmation among people with pulmonary TB and complements the core plus indicators on people with new and relapse pulmonary TB who have DST results. This indicator can be used to track progress and investment in coverage of testing for drug resistance. This is helpful to monitor performance on drug resistance testing for early detection of DR-TB among people with previously treated (including relapses) pulmonary TB and timely initiation for care and treatment. Based on availability of data this can be plotted as a graph, with the number of previously treated (including relapses) which is pulm_labconf_ret and how many were tested for rifampicin resistance. Data can be presented and visualized using tables, charts, line graphs, etc.

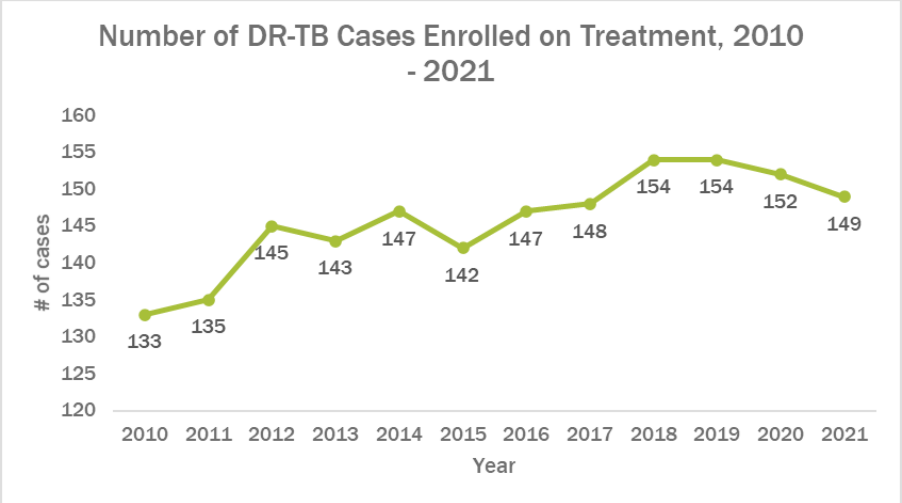


Indicator name and number	**XDR_NOTIF: Pre-XDR/XDR Notifications**
Definition	Number of people with pre-extensively drug-resistant (pre-XDR) and extensively drug-resistant (XDR) tuberculosis notified during the reporting period. Pre-XDR/XDR-TB: XDR-TB is caused by a strain of M. tuberculosis complex that is resistant to rifampicin (and may also be resistant to isoniazid), and that is also resistant to at least one fluoroquinolone (levofloxacin or moxifloxacin) and to at least one other "Group A" drug (bedaquiline or linezolid); pre-XDR-TB meets these qualifications but is resistant to a fluoroquinolone ***or*** a "Group A" drug, but not both. Note: This indicator is reported separately from RR and MDR notifications. Values for these indicators should not be added together.
Numerator	Number of people with pre-extensively drug-resistant (pre-XDR) and extensively drug-resistant (XDR) tuberculosis notified during the reporting period.
Denominator	N/A
Category	REACH
Type	Core outcome
Unit of measure	Number of people
Data type	Integer
Disaggregate by	Age (<15, 15+), sex
Reporting level	All core plus indicators should be reported at national level; data may also be collected subnationally for more granular monitoring.
Reporting frequency	This indicator should be reported on a semi-annual basis at minimum. More frequent monitoring on a quarterly basis is recommended.

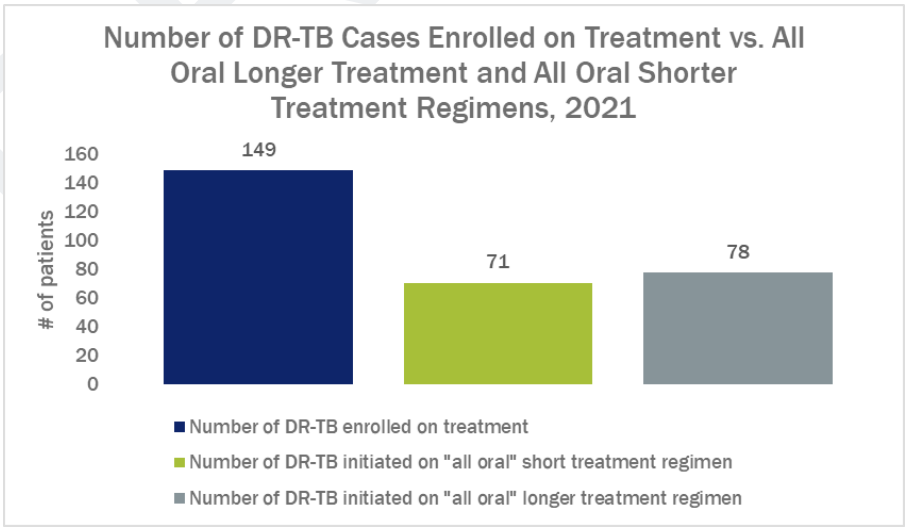
Data sources	This indicator is reported from national TB program (NTP) official records. *Quarterly report on TB case registration in the basic management unit.* The WHO equivalency for this indicator is: *conf_rr_fqr (lab confirmed pre-XDR and XDR)*
Importance	This DR-TB indicator has been modified to allow for reporting pre-XDR and XDR-TB in a separate indicator from RR/MDR-TB. pre-XDR/XDR notifications should not be added to RR/MDR notifications to avoid double counting of DR-TB notifications. People who are diagnosed with pre-XDR and XDR TB will already have been identified and recorded as having RR/MDR-TB. The number of RR/MDR-TB notifications should therefore equal the total number of DR-TB notifications, with this indicator as a subset. Note that when assessing treatment success rate, all people on DR-TB treatment will be monitored together. Ongoing analysis of DR-TB notification data is critical to understanding transmission dynamics and to ensure accurate planning for second line TB drugs and the human resources needed to manage DR-TB. These people account for a much higher percent of overall TB deaths, and the number of people with DR-TB has been increasing over time. DR-TB notification measures a country's ability to detect drug resistance among the TB-infected population and initiate TB patients on appropriate treatment. Data on DR-TB notification are also valuable for planning drug logistics and supervision. Closing the large DR-TB detection gap will require improvements in diagnostic capacity. Point-of-care (or near point-of-care) rapid diagnostic tools that detect TB and drug resistance are the new standard of care. Early detection of resistance to rifampicin and isoniazid ensures that an appropriate drug regimen can be prescribed from the outset to increase the likelihood of treatment success, and to reduce the chance of acquiring additional resistance.
Data use and visualization	Understanding DR-TB notification trends is important to gauge the overall performance of the NTP in preventing the emergence of drug resistance, either due to issues with adherence to treatment regimens or due to direct transmission of DR-TB. Drug-resistant TB notification can be analyzed on its own as a trend over time to see the total number of people with notified DR-TB within a given country. It can also be compared to the estimated incidence of DR-TB to determine the magnitude of the gap between estimated people with DR-TB and those that have been diagnosed. These gaps should also be reviewed in the context of availability of diagnostic services for DR-TB. The number of diagnostic facilities per 100,000 population can also give some indication of how accessible these services are to the population. The geographical distribution of the diagnostic facilities can help to understand the level of accessibility in different regions. Regional comparisons of this indicator could be helpful. DR-TB diagnosis and notification is an important step in the DR-TB treatment cascade. Data can also be collected at the subnational level and used to learn from the geographic distribution of people with DR-TB and detect outbreaks. Data should be reported annually at a minimum but semiannually or quarterly reporting will improve the timeliness of data for decision making.

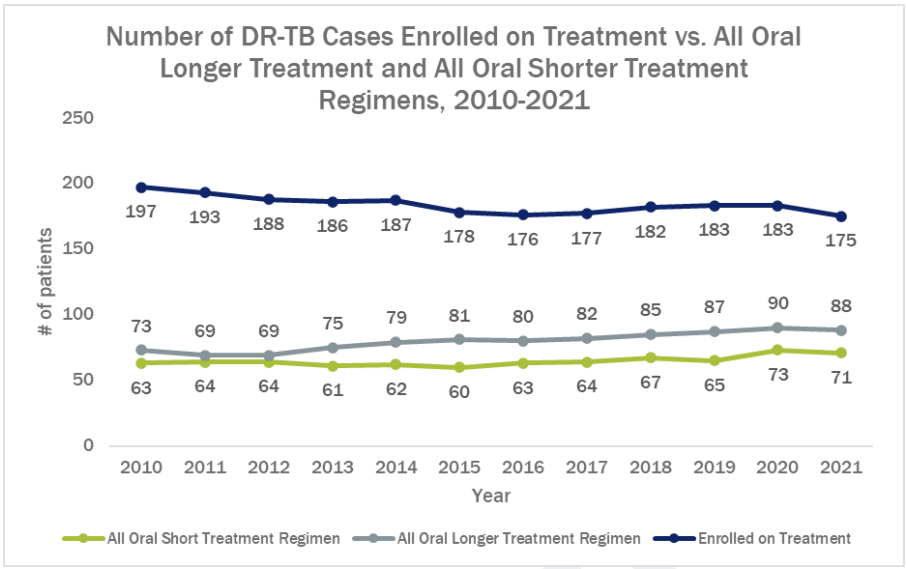
Indicator name and number	**TX_DR_ENROLL: DR-TB treatment initiations** *Previously [RN-4]*
Definition	Number of people with laboratory-confirmed or clinically diagnosed DR-TB (RR/MDR-TB and pre-XDR/XDR-TB) who initiated treatment for DR-TB during the reporting period. RR/MDR TB: RR-TB is TB caused by Mycobacterium Tuberculosis (M. tuberculosis) strains that are resistant to rifampicin; MDR-TB strains are resistant to at least both rifampicin and isoniazid. Pre-XDR/XDR-TB: XDR-TB is caused by a strain of M. tuberculosis complex that is resistant to rifampicin (and may also be resistant to isoniazid), and that is also resistant to at least one fluoroquinolone (levofloxacin or moxifloxacin) and to at least one other "Group A" drug (bedaquiline or linezolid); pre-XDR-TB meets these qualifications but is resistant to a fluoroquinolone ***or*** a "Group A" drug, but not both.

Numerator	Number of people with laboratory-confirmed or clinically diagnosed DR-TB who initiated treatment for DR-TB during the reporting period.
Denominator	N/A
Category	Cure
Indicator type	Outcome
Level	Core plus
Unit of measure	Number of people
Data type	Integer
Disaggregate by	Age (<15, 15+), sex, HIV status
Reporting level	All core plus indicators should be reported at national level; data may also be collected subnationally for more granular monitoring.
Reporting frequency	This indicator should be reported on a semi-annual basis at minimum. More frequent monitoring on a quarterly or monthly basis is recommended.
Data source(s)	The data sources are basic management unit TB register, RR/MDR-TB register and electronic management information systems at health facility and district levels. This standard WHO indicator can also be calculated using the WHO Global TB Programme database variables: *unconf_rr_nfqr_tx* plus *conf_rr_nfqr_tx plus conf_rr_fqr_tx*
Importance	This indicator on initiation of people with DR-TB on treatment measures a TB program's ability to ensure people diagnosed with DR-TB are linked to care and started on appropriate second line drug regimens. This is a very important measure of the effectiveness of the NTP in terms of improving access to DR-TB treatment and improving quality of patient care. This indicator measures the gap between the number diagnosed with DR-TB and the subset of those diagnosed who are initiatied on DR-TB treatment. This gap is a critical measure of TB programs. The data are valuable for planning second line drug procurement and prioritizing supervision. The indicator provides data for a critical step in cascade analysis for DR-TB and treatment.

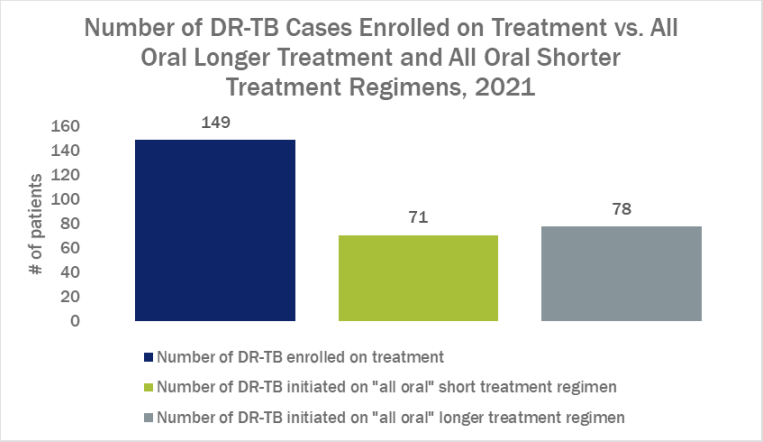
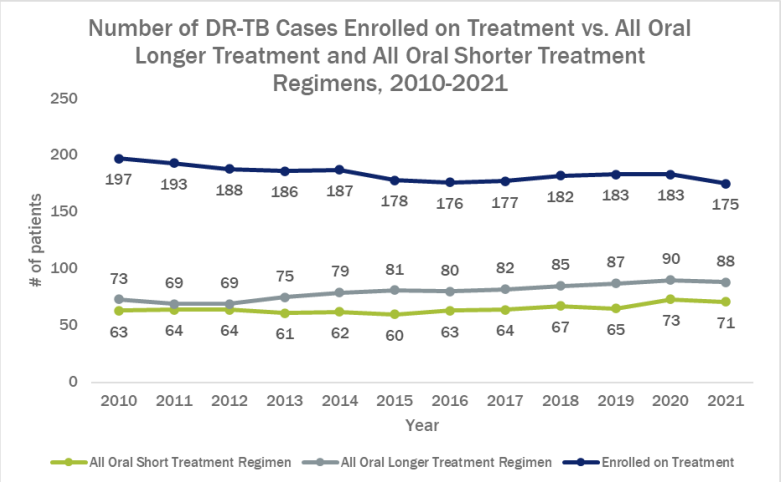
Data use and visualization	This indicator can be used to track performance of the NTP in initiating people diagnosed with DR-TB on second line treatment. It is important for guiding programmatic decisions on scale up of treatment services for management of DR-TB. It can be presented and visualized using tables, charts, line graphs, etc. This indicator can be compared to the DR-TB treatment cohort size, which is the denominator for all the DR-TB treatment outcomes (i.e. treatment success, lost-to follow-up, etc.). The gap between the number of people initiated on DR-TB treatment and the subsequent cohort size reported can also be visualized. Example of data visualizations: 

Indicator name and number	**TX_STR_ENROLL: DR-TB "all oral" short treatment regimen initiations** *Previously [RN-7]*
Definition	Number of people with DR-TB initiated on "all oral" short treatment regimen during the reporting period. “Short treatment regimens” refer to regimens with a duration of 12 months or less.
Numerator	Number of people with DR-TB initiated on "all oral" short treatment regimen during the reporting period.
Denominator	N/A
Category	Cure
Indicator type	Outcome
Level	Core plus
Unit of measure	Number of people

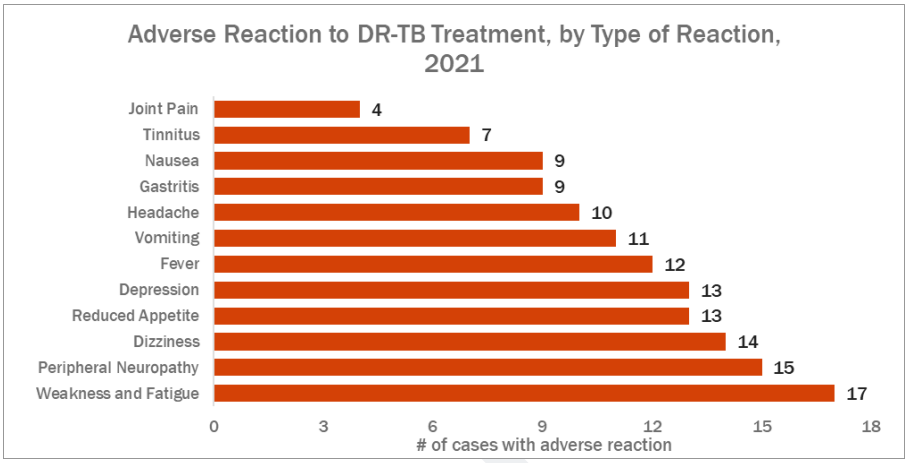
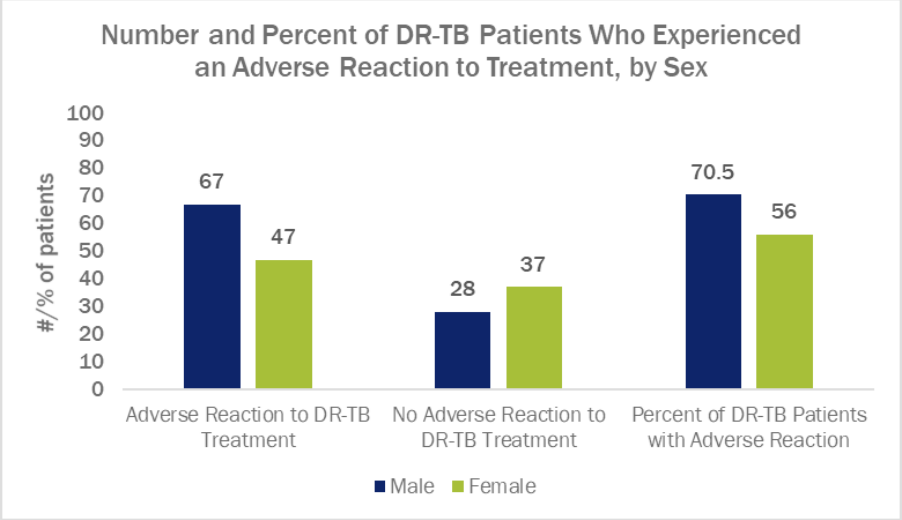
Data type	Integer
Disaggregate by	Age (<15, 15+), sex
Reporting level	All core plus indicators should be reported at national level; data may also be collected subnationally for more granular monitoring.
Reporting frequency	This indicator should be reported on a semi-annual basis at minimum. More frequent monitoring on a quarterly basis is recommended.
Data source(s)	The data sources are basic management unit TB register, RR/MDR-TB register and electronic management information systems at health facility and district levels. This standard WHO indicator can also be calculated using the WHO Global TB Programme database variable: *mdr_alloral_short_tx*
Importance	This indicator helps to monitor access to the newly recommended fully oral short treatment for drug resistant TB. The consolidated WHO 2022 guidelines on drug resistant TB treatment and the associated operational handbook recommend new shorter fully oral regimen for people with MDR-TB which replaces a previously recommended shorter regimen which contained an injectable agent. The newly recommended shorter regimen is 9-11 months long and research has shown that patients find it easier to complete the regimen, when compared to the longer regimens which last up to 20 months. WHO urges all countries to enable access to fully oral drug-resistant TB treatment regimens. It is valuable programmatic data to NTP for monitoring the rate of initiation for all oral short treatment, drug supply chain management and supervision.
Data use and visualization	This indicator can be used to track progress in achieving high coverage of treatment with all oral shorter treatment regimens for DR-TB. It is helpful to guide programmatic decisions for scale up of treatment for DR-TB. This indicator can be compared with the number of people with DR-TB initiated on treatment, and the number of people with DR-TB initiated on "all oral" longer treatment regimens. This data can be presented and visualized using tables, charts, line graphs, etc. Example of data visualizations: 



Indicator name and number	**TX_LTR_ENROLL: DR-TB "all oral" longer treatment regimen initiations** *Previously [RN-8]*
Definition	Number of people with DR-TB who initiated "all oral" longer treatment regimen during the reporting period. "Longer treatment regimens" refer to regimens with a duration of 14 months or more, usually lasting 18-24 months.
Numerator	Number of people with DR-TB who initiated "all oral" longer treatment regimen during the reporting period.
Denominator	N/A
Category	Cure
Indicator type	Outcome
Level	Core plus
Unit for analysis	Number of people
Data type	Integer
Disaggregate by	Age (<15, 15+), sex
Reporting level	All core plus indicators should be reported at national level; data may also be collected subnationally for more granular monitoring.
Reporting frequency	This indicator should be reported on a semi-annual basis at minimum. More frequent monitoring on a quarterly basis is recommended.

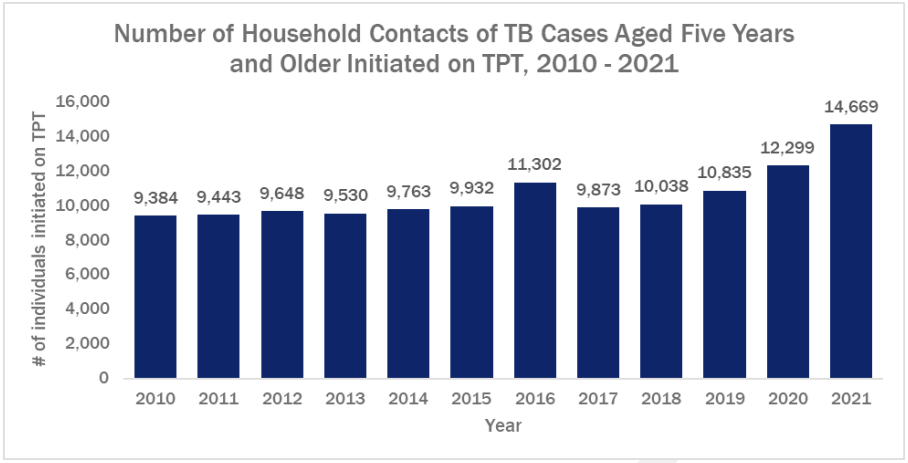
Data source(s)	The data sources are basic management unit TB register, RR/MDR-TB register and electronic management information systems at health facility and district levels. This standard WHO indicator can also be calculated using the WHO Global TB Programme database variable*: mdrxdr_alloral_tx.*
Importance	This indicator provides important information for monitoring initiation of people with DR-TB on all oral longer course regimens. The WHO consolidated guidelines on drug resistant TB treatment signal an important departure from previous approaches to treat DR-TB, recommending fully oral regimens to be prioritized and to be the preferred option for most patients. Many countries have adopted this approach as their national policy. These data are valuable for monitoring initiation of people diagnosed with DR-TB on all oral longer treatment and for planning procurement of second line drugs.
Data use and visualization	This indicator can be used to track progress in achieving high rates of all oral longer treatment regimen use for people diagnosed with DR-TB. It is helpful to guide programmatic decisions for scale up of treatment for DR-TB. This indicator can be compared with the number of people with DR-TB who were initiated on treatment, and the number of people with DR-TB initiated on "all oral" shorter treatment regimens. It can be presented and visualized using tables, charts, line graphs, etc. Example of data visualizations:  

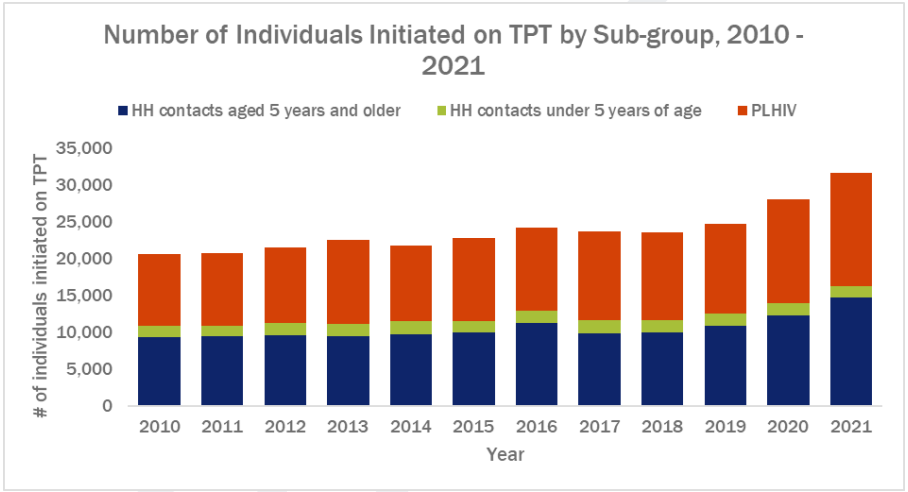
Indicator name and number	**TX_DR_ADR: Number of people with adverse reactions to DR-TB treatment** *Previously [RS-6]*
Definition	Number of people on DR-TB treatment who developed at least one adverse drug reaction (ADR) to DR-TB treatment during the reporting period; this includes all people on treatment during the specified reporting period and is not related to a cohort. An ADR (sometimes referred to as an “adverse event”) is any negative medical occurrence that may present in a person with TB during treatment with a pharmaceutical product, but which does not necessarily have a causal relationship with this treatment.
Numerator	Number of people on DR-TB treatment who developed at least one ADR to DR-TB treatment during the reporting period; this includes all people on treatment during the specified reporting period and is not related to a cohort.
Denominator	N/A
Category	Cure
Indicator type	Outcome
Level	Core plus
Unit for analysis	Number of people
Data type	Integer
Disaggregate by	Age (<15, 15+), sex, type of adverse reaction (e.g., vomiting, dizziness, reduced appetite, gastritis)
Reporting level	All core plus indicators should be reported at national level; data may also be collected subnationally for more granular monitoring.
Reporting frequency	This indicator should be reported on a semi-annual basis at minimum. More frequent monitoring on a quarterly basis is recommended.
Data source(s)	The data sources are the basic management unit TB register, RR/MDR-TB register and electronic management information systems at health facility and district levels. This standard WHO indicator can also be calculated using the WHO Global TB Programme database variable: *mdrtx_adverse_events*
Importance	Monitoring ADRs can help health programs with preventing and managing ADRs, relieve patient suffering, and improve treatment outcomes. ADRs can lead to TB patients interrupting treatment before completion, and can thus contribute to avoidable morbidity, drug-resistance, treatment failure, reduced quality of life, or even death. Therefore, it is important that adverse reactions be monitored in TB patients undergoing treatment, especially those with DR-TB, who often take regimens combining new or repurposed medicines for which the safety profile is incomplete. Systematically gathering this data assists with drug safety monitoring and the ability to detect, manage, and report suspected or confirmed drug toxicities. Unlike other monitoring activities inherent to TB programs, TB programs have not consistently monitored adverse reactions to treatment in the past. Once monitoring of this

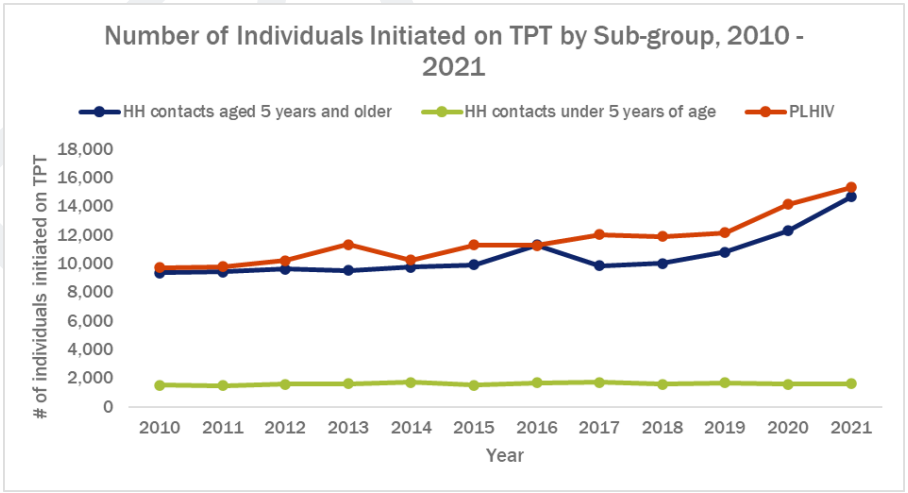
	aspect of TB treatment becomes mainstream, it is expected that its value will extend beyond the individual patient monitored, to benefit other patients from improved knowledge of the medicines tracked as well as endowing programs with a robust mechanism to enable the introduction of future TB treatments at an accelerated pace.
Data use and visualization	Number of people on DR-TB treatment who developed an ADR can be analyzed as a trend showing whether adverse reactions for DR-TB patients are improving or getting worse over time. This data can be disaggregated by type of ADR to analyze which reactions are more common.  The data may also be analyzed by sex to see if males or females are disproportionately affected. In the example shown below, it appears that a much higher percent of males being treated for DR-TB experience adverse reactions than females (70.5% versus 56%, respectively). 

Indicator name and number	**TPT_CON_ENROLL: TPT initiation among contacts**

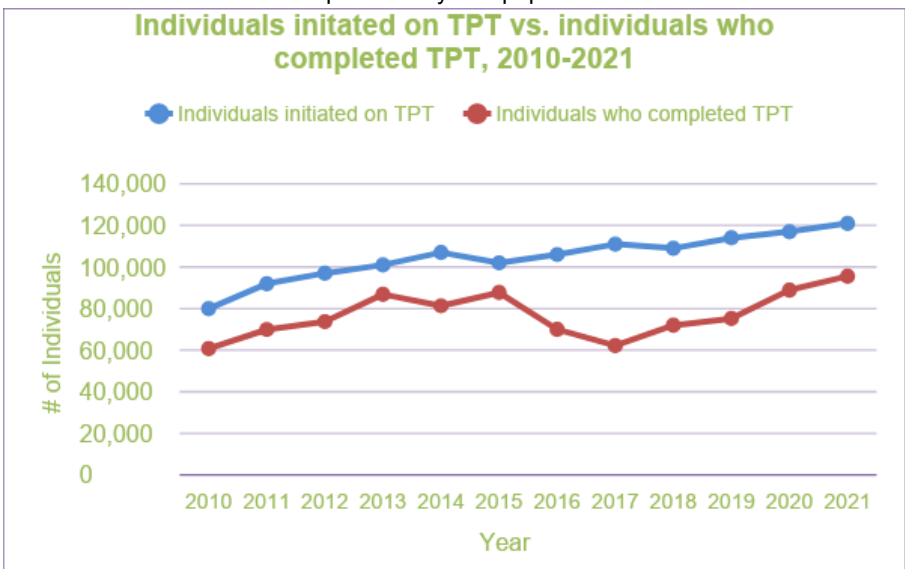
Definition	Number of household contacts and other close contacts of people with bacteriologically confirmed, notified pulmonary TB who initiated TPT during the reporting period. This indicator is a subset of the core indicator “TPT initiations”.
Numerator	Number of adult, adolescent, and children <5 years who are household or other close contacts of people with bacteriologically confirmed, notified pulmonary TB who initiated TPT during the reporting period.
Denominator	N/A
Category	Prevent
Indicator type	Outcome
Level	Core plus
Unit of measure	Number of people
Data type	Integer
Disaggregate by	Age (0-4, 5-14, 15+), sex, public vs private
Reporting level	All core plus indicators should be reported at national level; data may also be collected subnationally for more granular monitoring.
Reporting frequency	This indicator should be reported on a semi-annual basis at minimum. More frequent monitoring on a quarterly or monthly basis is recommended.
Data source(s)	The data sources for this indicator may vary country to country. In some settings, data will be found in basic management unit TB registers, TPT register, community health worker contact investigation registers or electronic management systems at health facility and district level. This standard WHO indicator can also be calculated by using the WHO Global TB Programme Database variables: *newinc_con_prevtx*
Importance	Understanding the specifics of TPT coverage within a given country / region is key for national TB programs to monitor and manage TB prevention efforts. This indicator is a drilled down view into the core indicator, TPT Coverage (PT-4). While many TPT efforts and activities focus on children under five years of age or people living with HIV (PLHIV) this indicator functions to specifically look at TPT coverage of adults and children aged five years and older. This is particularly important as many countries expand their guidelines for TPT to expand coverage beyond the traditional risk groups of children under five years of age and PLHIV.
Data use and visualization	This indicator can be visualized with basic graphs to show trends in TPT coverage of adults and children aged 5 years and older over time. It could also be plotted against other sub groups (children under five years of age, PLHIV, etc.) to demonstrate the breakdown of TPT coverage among all people initiated on TPT within a given reporting period. Example of data visualizations:


Number of Household Contacts of TB Cases Aged Five Years and Older Initiated on TPT, 2010 - 2021
# of individuals initiated on TPT
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
9,384
9,443
9,648
9,530
9,763
9,932
11,302
9,873
10,038
10,835
12,299
14,669
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
Year


Number of Individuals Initiated on TPT by Sub-group, 2010 - 2021
HH contacts aged 5 years and older
HH contacts under 5 years of age
PLHIV
# of individuals initiated on TPT
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
Year


Number of Individuals Initiated on TPT by Sub-group, 2010 - 2021
HH contacts aged 5 years and older
HH contacts under 5 years of age
PLHIV
# of individuals initiated on TPT
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
Year

Indicator name and number	**TPT_COMPL: Number of people who completed TPT**
Definition	Number of people who completed TB preventive treatment (TPT) among those who initiated TPT in the previous reporting period. During a given reporting period, the cohort of people who initiated TPT should be tracked to monitor the number who complete TPT. Completion data should be disaggregated by: 1.) Household contacts aged <5 years 2.) Household contacts 5 years and up 3.) People living with HIV (PLHIV)
Numerator	Number of contacts or other eligible people who completed TPT during the reporting period
Denominator	N/A
Category	Prevent
Indicator type	Outcome
Level	National
Unit of measure	Number of people
Data type	Integer
Disaggregate by	Age (0-4, 5-14, 15+), sex, risk group (contacts, PLHIV)
Reporting level	National level indicators should be reported at the national level; data may also be reported subnationally or at the project level if national data is not available.
Reporting frequency	This indicator should be reported on an annual basis at minimum. More frequent monitoring on a quarterly or monthly basis is recommended.
Data source(s)	The data sources for this indicator may vary country to country. In some settings, data will be found in the TB register, TPT register, ART register or electronic management systems at health facility and district level. This is a standard WHO indicator that can be calculated using the WHO Global TB Programme Database variable name: *newinc_con_prevtx_cmplt*
Importance	Successful completion of TPT for eligible people is a performance indicator for TPT scale up. TPT is one of the key interventions with targets set at the UNHLM and recommended by WHO to achieve the End TB Strategy targets. It is also a component of the USAID strategy to provide TPT to 30 million people by 2030. This indicator, along with the number of people who initiate TPT, measures country-level progress toward meeting targets set in a country's NSP or aligned with the UNHLM targets. Historically, TPT initiation was the only TB prevention indicator recorded by National TB Programs. In the past several years, however, the global community has made a concerted effort to monitor TPT outcomes and the completion of TPT. A person's level of protection from a course of TPT depends on the extent to which they are able to complete a full course of TPT. Therefore, it is important to monitor this indicator together with TPT initiations to ensure that a high percent of people who initiated TPT complete their treatment.
Data use	This indicator is one of four indicators reported to the U.S. Congress as required on an annual basis. See *Report to Congress on the Prevention of Tuberculosis*. Monitoring this indicator in the TPT cascade is a measure of impact and identifies where in the cascade there are gaps in screening, testing for TBI, initiating or completing TPT.

	Example charts/graphs: ● TB preventive treatment cascade ● Trends over time comparisons by sub-populations 

Indicator name and number	**SN_TB_INSUR: Existence of a national or social health insurance system whose benefit package includes TB clinical services** *Previously [SN-8B]*
Definition	Country has a national or social health insurance scheme whose benefit package includes TB clinical services. *National/Social health insurance*: forms of health insurance that are often administered by the government or a quasi-governmental agency, funded through contribution from taxes and/or employers and employees, and cover a package of services. Community based health insurance (CBHI) schemes are usually voluntary and characterized by community members pooling funds to offset the cost of healthcare. Some countries with CBHI schemes are adjusting the model towards integration into broader NHI/SHI schemes. For the purpose of this indicator, NHI/SHI/CBHI schemes should only be scored as being "available" if they exceed the following threshold: >50% population coverage and >2% of current health expenditure (CHE) comes from pre-payment. These schemes should include diagnosis, treatment and prevention of all forms of TB, including MDR-TB, for all populations of the country. This indicator is intended to measure whether a country is able to source funding for TB from an insurance scheme; countries with no insurance scheme should score "0" (even if TB care is free).
Numerator	0 = EITHER No national / social health insurance scheme OR national / Social health insurance available but DS-TB & DR-TB (diagnosis and treatment costs) are excluded 2 = National / Social health insurance is available and includes diagnosis and treatment costs for DS- or DR-TB but not both

	4 = National / Social health insurance is available and includes diagnosis and treatment costs for both DS- and DR-TB
Denominator	N/A
Category	Sustain
Indicator type	Output
Level	Core plus
Unit of measure	Score between 0-4
Data type	Integer
Disaggregate by	N/A
Reporting level	All core plus indicators should be reported at national level.
Reporting frequency	This indicator should be reported on an annual basis at minimum.
Data source(s)	The data sources for this indicator may include a country's NHI/SHI Policy and Benefits Package. Key informant interviews with the NTP may also be conducted if further review is needed.
Importance	High medical costs and lack of health insurance can contribute to catastrophic out of pocket expenditure as a result of active TB disease. Inclusion of clinical TB services (i.e., diagnostic and treatment services) in NHI/SHI schemes should help to reduce out of pocket costs for people on TB treatment. Medical care is necessary and essential in the course of people's lives, and care is increasingly expensive worldwide. However, health insurance covers all or some costs of care and protects patients or clients from very high expenses that may prevent them from seeking medical care. Studies show that insured people are more likely than uninsured people to have regular curative health care and to have routine preventive care. Those people without health insurance coverage often delay seeking needed care and find services difficult to afford.
Data use and visualization	This indicator complements the following indicators to provide a more complete picture of social support protections and health insurance schemes that support people with TB: ● Country has social protection schemes available for TB patients ● Percent of people with TB covered by insurance ● Percent of people on DS-TB treatment who receive TB care package ● Percent of people on DR-TB treatment who receive TB care package

Example of data visualizations: