

FY 2023 PERFORMANCE PLAN

<p>Tuberculosis (TB) and Newcomer Health Program</p>	<p>PHD/CHPB</p>	<p>Tania St. Clair, x5604 Colleen Kotb, x5664</p>
<p>Program Purpose</p>	<ul style="list-style-type: none"> Prevent the transmission of tuberculosis (TB) and cure individuals with active TB disease 	
<p>Program Information</p>	<p>Tuberculosis spreads when a person with active pulmonary TB disease coughs. Risk factors include prolonged contact (~8 hours or more) with a person with TB disease, or travel to an area with a high TB incidence. In 2022, Arlington’s active TB rate was 3.8 cases per 100,000 population, while the rate for Virginia was 2.3; the U.S. rate of 2.5 reflected a national increase.</p> <p>This mandated program serves two populations:</p> <ul style="list-style-type: none"> Active TB disease: those infected with TB bacteria <u>with symptoms</u> of TB disease. Those with pulmonary TB can spread TB to others. Active disease is categorized by response to standard medications: <ul style="list-style-type: none"> Responsive to all four first line TB drugs Resistant to one first line drug Multidrug Resistant (MDR): resistant to at least isoniazid and rifampin, the two most potent first line TB drugs Extensively Drug Resistant (XDR): a rare type of multidrug-resistant tuberculosis (MDR TB) that is resistant to isoniazid and rifampin, plus any fluoroquinolone and at least one of three injectable second-line drugs (i.e., amikacin, kanamycin, or capreomycin). Latent TB infection (LTBI): those infected with TB bacteria who are without symptoms and cannot spread it to others. Progression from latent to active TB is most likely in children, those with chronic diseases such as diabetes, and those recently infected. Completing treatment for LTBI can reduce the risk of TB disease by 90%. <p>The program treats all with active TB to prevent disease spread and prioritizes LTBI treatment for those most at risk for progression to active TB.</p> <ul style="list-style-type: none"> Treatment of active TB disease typically takes 6 to 9 months. Treatment completion is critical to prevent bacteria in the person from becoming medication resistant. Treatment of drug-resistant TB can take 2 years or longer. Directly Observed Therapy (DOT) is the Centers for Disease Control and Prevention’s (CDC) standard of care for active TB to assure completion. Staff observe the client taking every dose of their medication to ensure compliance. Services are provided in the home, workplace and virtually using a Virginia Dept of Health (VDH) approved video application. Services include laboratory testing, chest x-ray referral, and physician consultation. Environmental and infection prevention controls are used to prevent disease transmission in the clinical area. Nurse case management services for clients with active TB may include arranging temporary housing for isolation and referring to other Department of Human Services (DHS) services to ensure compliance with isolation and treatment until cure. 	

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	<ul style="list-style-type: none"> ○ Contact investigation and screening occurs at congregate settings such as schools, worksites, and nursing homes to identify those exposed to clients with new, active TB disease. <p>The Arlington Newcomer Health Program, required by the Virginia Department of Health, Tuberculosis (TB) Control Program, provides an initial health screening, authorized by federal regulation, to newly arrived refugees and other qualified individuals, refers/addresses health issues that may impact successful resettlement, and identifies and intervenes on diseases and conditions of public health concern.</p> <p>Additionally, immigrants and refugees with TB Class B designations are seen for a TB evaluation soon after arriving in the U.S. The purpose is to evaluate the person for active TB disease and LTBI, and to treat these conditions, if found. This evaluation is completed within 30 days after arrival to the U.S.</p> <p>All TB/Newcomer Health Program services are based on the Virginia Department of Health (VDH) and CDC guidelines. The program is partially funded by a grant from CDC.</p> <p>Partners: VDH, Division of Consolidated Laboratory Services (DCLS) and other labs, Virginia Hospital Center (VHC), and private medical providers.</p>
<p>Service Delivery Model</p>	<ul style="list-style-type: none"> ● After an initial period of in-person DOT and assurance that the client has met criteria for video DOT, video services via a Virginia Dept of Health (VDH) approved application are offered to all clients with active disease and LTBI. Clients report that they prefer the video method - it offers more flexibility, they do not need to leave work, find transportation, or address childcare issues created by in-person visits. Clients may continue in-person DOT if preferred. ● Clients are seen in person to have their blood drawn. Additionally, they have the option to go to LabCorp for TB testing and other treatment-related labs. Clients are referred to VHC for chest x-rays with the cost covered by the TB program. ● Medications for LTBI and active disease treatment can be shipped from the State Pharmacy in Richmond directly to client homes if it is their preference. Clients who need monthly bloodwork pick up their medicine in clinic.
<p>PM1: How much did we do?</p>	
<p>Staff</p>	<p>Total 8.1 FTEs:</p> <ul style="list-style-type: none"> ● 1 FTE Supervisor ● 1 FTE Nurse Practitioner ● 3.6 FTE Public Health Nurses (60% of 6 FTEs 1 PHN from CHSB) ● 2 FTE Outreach Workers ● 0.5 FTE Pharmacy Technician (staffing provided by Community Health Services Bureau) <p>Contractors</p> <ul style="list-style-type: none"> ● TB Nurse Consultant (20 hrs. per week) ● TB Pulmonology Consultant (2 hrs. per month)

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Customers and Service Data		FY 2020	FY 2021	FY 2022	FY 2023
	TB Clinic Clients*	512	196	299	381
	Newcomer Health Clients***	6	10	71	117
	Total Active TB Cases on Treatment (includes all confirmed, presumptive, and transferred-in cases that received treatment)	24	16	16	13
	New Active TB (diagnosed in Arlington or transferred from other districts)	13	7	10	10
	<i>TB Class B Arrivals</i>	21	2	23	15
	Latent TB on treatment	88	32	64	110
	Visits (all settings, excluding DOT)	1,159	533	694	1,143
	DOT Visits**	1,846	1,115	1,212	1,751
	X-ray services	257	0 [†]	138	147

*Clients who do not have active or latent TB are also served by the TB program. Services include, and are influenced by, the number of contacts to active TB cases, TB testing, chest x-rays, and letters certifying that individuals are free of active TB. Employment-related testing, contact tracing, and referrals to the TB program were reduced during 2020 and early 2021.

**The variation in DOT visits is attributed to the total number of active TB cases, including drug-resistant cases that require added staff, client visits, and treatment time. Also, there's an increase in prescribing 3HP which requires DOT.

†In FY 2021, clients were referred to VHC for x-rays due to COVID precautions. It was decided that going forward x-rays will no longer be done on site at TB Clinic and clients will continue to be referred to VHC. In FY 2022, a mechanism for tracking referrals was created.

***Newcomer Health clients are up (65%) composed primarily of those from Afghanistan and Ukraine. Screenings conducted average 5 hours per client for screening, health assessments and post visit f/u and referrals.

PM2: How well did we do it?

2.1	Clients with active TB disease who were started on the recommended treatment regimen and initiated DOT
2.2	Identified contacts to an active pulmonary TB case who were assessed to determine their infection status
2.3	Clients with active pulmonary TB disease who met the criteria for a safe hospital discharge to the community

PM3: Is anyone better off?

3.1	Clients with active TB who completed or are on schedule to complete treatment according to protocol
3.2	Clients with latent TB infection starting medications who completed or are on schedule to complete treatment according to protocol

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Tuberculosis (TB) Control and Prevention Program

Measure	1	Clients with active TB and LTBI on treatment																																																																										
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Data Summary	<ul style="list-style-type: none"> Non-US born clients have the greatest risk of TB and represented 85% of Arlington cases of active TB in FY 2023. Non-Hispanic Asian and non-Hispanic Black populations continue to be over-represented among those with active TB. Among those on LTBI treatment, Hispanic and Asian populations are over-represented. 																																																																											

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- The number of clients with Active TB has decreased since FY 2020. The number of clients on LTBI treatment increased FY 2023 following COVID.
- Race and ethnicity data was missing for 12 (11%) clients on LTBI treatment and 44 (12%) TB Clinic clients. Region of Birth was missing for 35 (32%) of clients on LTBI treatment.
- Data from local databases and WebVision.

What is the story behind the data?

- Country of birth continues to be a major risk factor for TB in the United States. Reactivation of LTBI rather than recent transmission is the primary cause of TB disease in the US.
- The increase in clients in the Newcomer Health program have been through qualifying agencies/sponsors serving people from Afghanistan and Ukraine.
- In FY 2021, fewer people were working due to the pandemic; this reduced employment requirements for TB testing and resulted in fewer LTBI cases being diagnosed. In FY 2022, the increase in LTBI cases was due to the reversal in the trend. Increase in Newcomer clients may be driving increase in LTBI cases.
- Treatment of all clients diagnosed with LTBI, rather than only those at highest risk of progression, resumed in December 2020 as staff shifted from COVID response.
- The TB Clinic has a diverse bilingual and bicultural staff with staff members from Ghana, Philippines, Mongolia, Ethiopia, and Bolivia to best serve our clients.

Recommendations

- Continue virtual appointments to clients where appropriate and continue to see clients in person based on their individual need.
- Examine clients eligible for LTBI treatment who do not start treatment.
- Re-examine demographic analysis to confirm most appropriate comparison population.

Target Dates

- On-going
- FY 2024 Q2
- FY 2024 Q3

Forecast

- For FY 2024, the number of clients with active TB and on LTBI treatment will remain about the same.

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Tuberculosis (TB) Control and Prevention Program																
Measure	2.1 Clients with active TB disease who were started on the recommended treatment regimen and initiated DOT															
Data	<p align="center">Percent of clients with presumptive active TB disease who were started on the recommended treatment regimen and initiated DOT</p> <table border="1"> <caption>Percent of clients with presumptive active TB disease who were started on the recommended treatment regimen and initiated DOT</caption> <thead> <tr> <th>Fiscal Year</th> <th>Number of Clients</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>FY 2020</td> <td>13/13 Clients</td> <td>100%</td> </tr> <tr> <td>FY 2021</td> <td>7/7 Clients</td> <td>100%</td> </tr> <tr> <td>FY 2022</td> <td>9/9 Clients</td> <td>100%</td> </tr> <tr> <td>FY 2023</td> <td>10/10 Clients</td> <td>100%</td> </tr> </tbody> </table>	Fiscal Year	Number of Clients	Percentage	FY 2020	13/13 Clients	100%	FY 2021	7/7 Clients	100%	FY 2022	9/9 Clients	100%	FY 2023	10/10 Clients	100%
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Data Summary	<ul style="list-style-type: none"> Data from the Active TB Database. All Arlington residents with clinically presumptive or confirmed active pulmonary or extrapulmonary TB disease, who were recommended to begin treatment during the fiscal year, are included in the data. 															
What is the story behind the data?																
<ul style="list-style-type: none"> In FY 2023, ten out of ten clients with active TB disease were successfully started on treatment and DOT. Provision of DOT via telehealth has reduced barriers to treatment for many clients. 																
Recommendations	Target Dates															
<ul style="list-style-type: none"> Stay the course 	<ul style="list-style-type: none"> On-going 															
Forecast																
<ul style="list-style-type: none"> In FY 2024, treatment initiation and DOT rates are expected to remain 100%. 																

Tuberculosis (TB) Control and Prevention Program

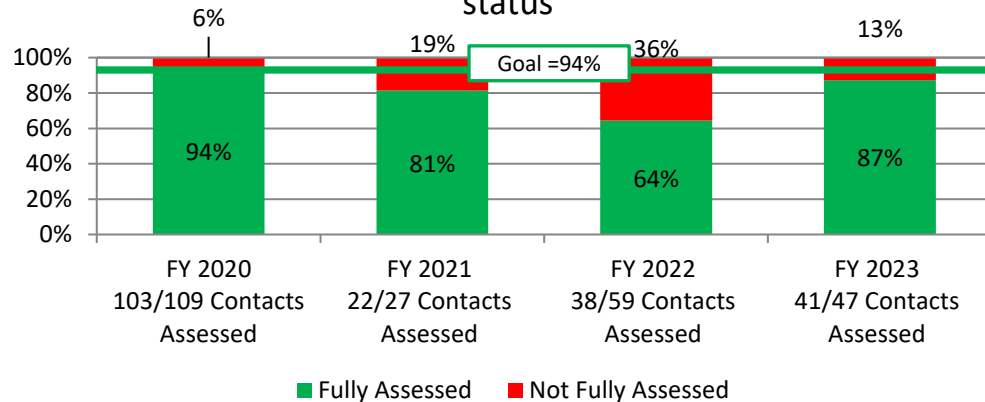
Measure

2.2

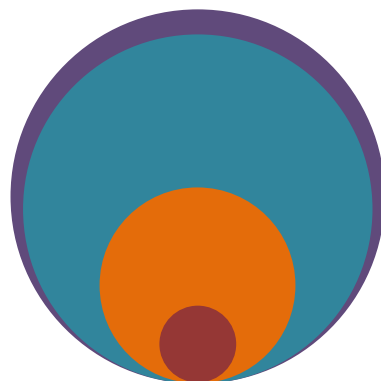
Identified contacts to an active pulmonary TB case who were assessed to determine their infection status

Data

Percent of identified contacts to an active TB case who were assessed to determine their infectious status



Contact Investigation Outcomes, Arlington, FY 2023



- 47 Contacts Identified
- 41 Contacts Evaluated (87%)
- 13 Contacts with TB Infection (32%)
- 2 Contacts with Active TB Disease (15%)

Data Summary

- CDC’s 2025 National TB Indicator target for complete evaluation of contacts to infectious TB cases is 94%.
- Data were obtained from the Active TB Database for cases of pulmonary tuberculosis.
- In FY 2023, 87% (41 of 47) contacts identified were fully evaluated for TB infection. 32% (13 of 41) contacts evaluated were positive for TB infection. 15% (2 of 13) of contacts positive for TB had active TB disease. 85% (11 of 13) of contacts positive for TB had latent TB infection.
- In FY 2023, 87% of identified contacts were fully assessed. Improved over last year.

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What is the story behind the data?

- The greatest challenge to assessing (screening and testing) contacts is the lack of a legal mandate compelling TB screening (compared to clients with presumptive TB disease).
 - Some contacts were located outside of Arlington and were referred to local HD in that district and subsequently lost to follow-up.
- Staff utilize a range of strategies (e.g., phone calls, letters, home visits) to encourage and educate contacts to be screened. Client willingness to be screened varies by investigation and their perception of their risk.

Recommendations

- Continue culturally and linguistically appropriate services.

Target Dates

- On-going

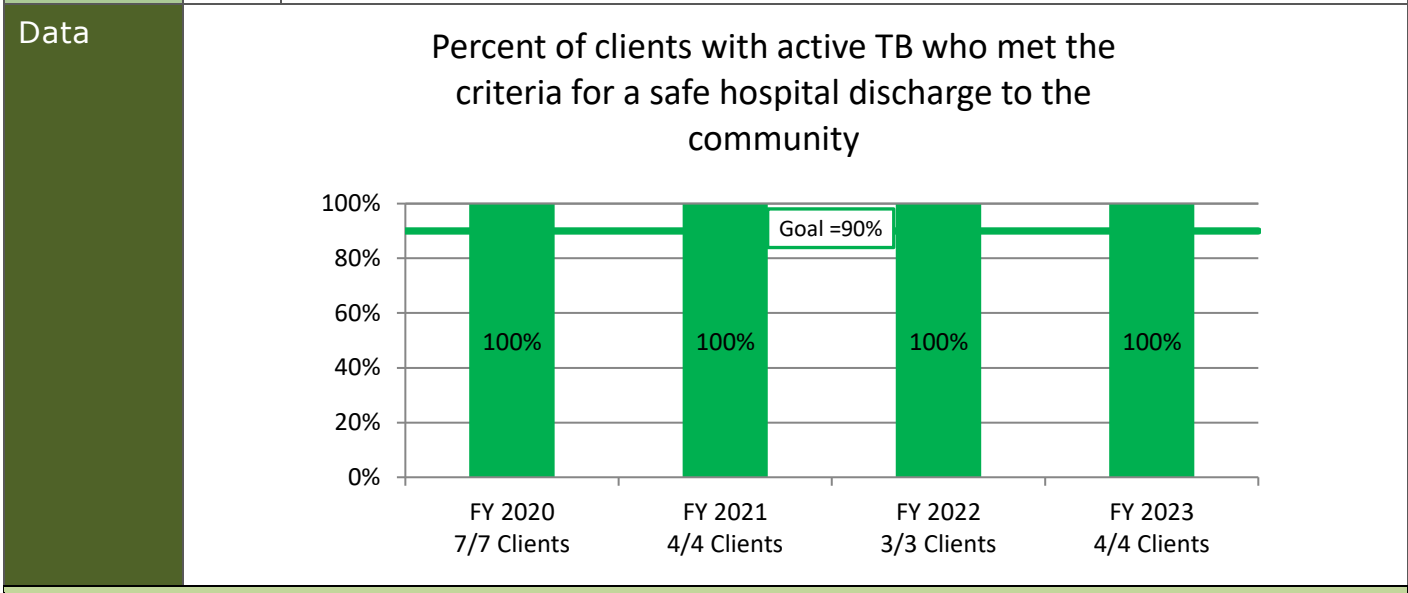
Forecast

- In FY 2024, contact assessment rate is expected to remain at 87%.

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Tuberculosis (TB) Control and Prevention Program

Measure	2.3	Clients with active pulmonary TB disease who met the criteria for a safe hospital discharge to the community
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Data Summary	<ul style="list-style-type: none"> Data from Active TB database. All clients who met the following criteria are included: a) Presumptive or confirmed active pulmonary TB disease, b) recommended to begin treatment during the fiscal year, c) were admitted to the hospital, and d) were Arlington residents.
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What is the story behind the data?

- All hospitalized clients discharged met the criteria for a safe discharge.
- Criteria to ensure a safe discharge from a hospital to the community include:
 - Client has an approved treatment plan that is signed off by the PHD director.
 - Case manager visits the client in hospital to discuss PHD role, including the need for the client’s isolation at home to prevent disease spread.
 - Case manager visits the client’s home to make sure it is appropriate for isolation. If home is unsuitable (e.g., young children living in the house), case manager works with Economic Independence Division and VDH to find alternate housing.
- In person hospital and home visits resumed in the latter part of Fiscal Year (FY) 2022 following changes implemented during COVID.

Recommendations	Target Dates
<ul style="list-style-type: none"> Continue to provide safe hospital discharge. As this goal is consistently met, consider replacing this measure with a measure for Newcomer Health. 	<ul style="list-style-type: none"> FY 2024 Q2

Forecast

- In FY 2024, the safe hospital discharge rate is expected remain at 100%.

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Tuberculosis (TB) Control and Prevention Program																						
Measure	3.1	Clients with active TB who completed or are on schedule to complete treatment according to protocol																				
Data	<p align="center">Percent of clients with active TB who completed or are on schedule to complete treatment according to protocol</p> <table border="1"> <caption>Treatment Completion Data</caption> <thead> <tr> <th>Fiscal Year</th> <th>Completed (%)</th> <th>On schedule (%)</th> <th>Client Count</th> </tr> </thead> <tbody> <tr> <td>FY 2020</td> <td>38%</td> <td>63%</td> <td>24/24 Clients</td> </tr> <tr> <td>FY 2021</td> <td>75%</td> <td>25%</td> <td>16/16 Clients</td> </tr> <tr> <td>FY 2022</td> <td>60%</td> <td>40%</td> <td>15/15 Clients</td> </tr> <tr> <td>FY 2023</td> <td>62%</td> <td>38%</td> <td>13/13 Clients</td> </tr> </tbody> </table> <p align="center">■ Completed ■ On schedule ■ Did not complete</p>		Fiscal Year	Completed (%)	On schedule (%)	Client Count	FY 2020	38%	63%	24/24 Clients	FY 2021	75%	25%	16/16 Clients	FY 2022	60%	40%	15/15 Clients	FY 2023	62%	38%	13/13 Clients
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Data Summary	<ul style="list-style-type: none"> • Data from the Active TB Database. • Includes confirmed cases of active TB who received treatment during the fiscal year. Does not include presumptive TB cases on treatment. • Determination of treatment “completed” is made by TB provider based on treatment protocol and client condition, not on length of treatment. • “On schedule” totals include clients who were on schedule to complete treatment at the time that they left Arlington or died. 																					
What is the story behind the data?																						
<ul style="list-style-type: none"> • All clients on treatment in FY 2023 either already completed treatment or are on target to complete treatment. • Treatment completion is critical to prevent bacteria in the person from becoming medication resistant. Additionally, if clients fail to complete treatment, they are at risk of potential relapse. • Mail order pharmacy directly from VDH to client has made a tremendous difference for both the client and County, offering greater convenience to clients. 																						
Recommendations		Target Dates																				
<ul style="list-style-type: none"> • Continue to offer mail order pharmacy. 		<ul style="list-style-type: none"> • On-going 																				
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<ul style="list-style-type: none"> • In FY 2024, treatment completion rates are expected to remain at 100% completed or on schedule to complete. 																						

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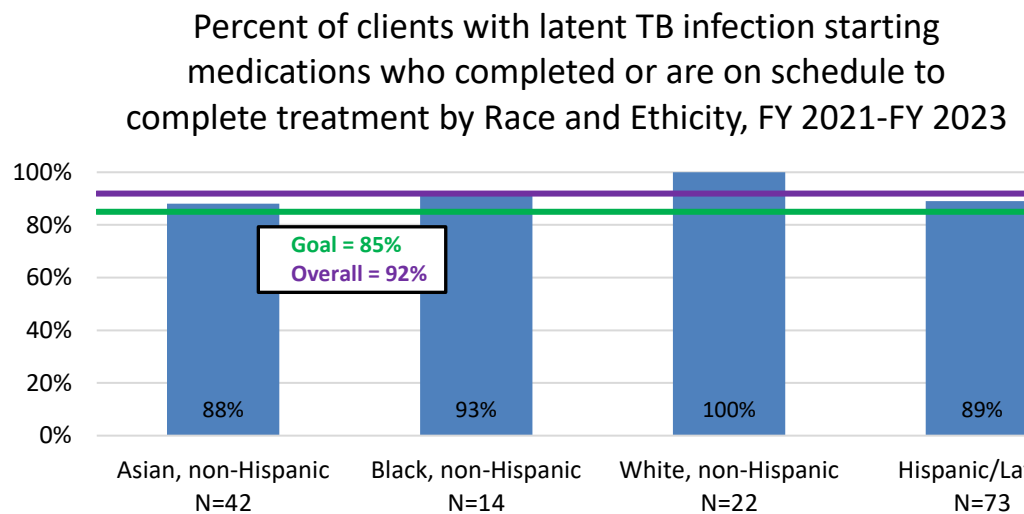
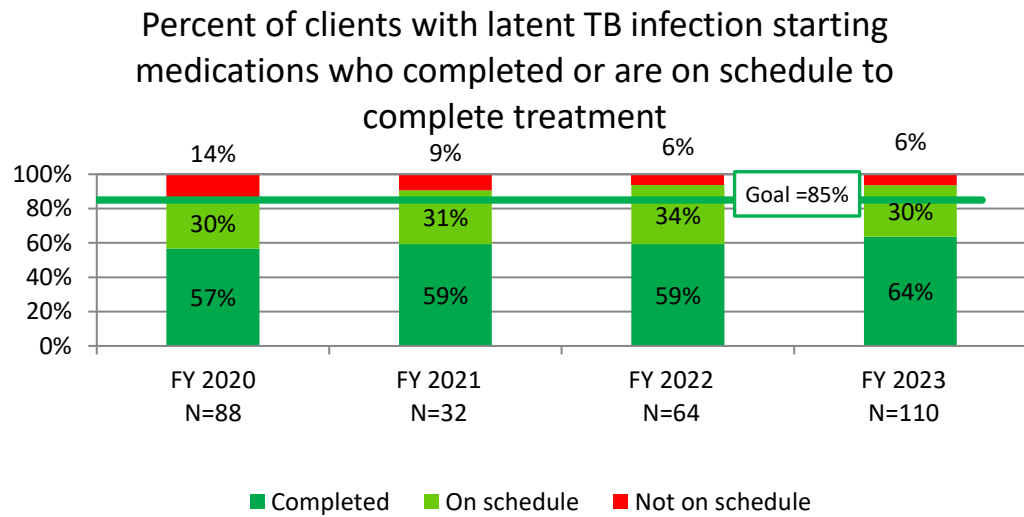
Tuberculosis (TB) Control and Prevention Program

Measure

3.2

Clients with latent TB infection starting medications who completed or are on schedule to complete treatment according to protocol

Data



Data Summary

- LTBI treatment may cross fiscal years and as such, clients may be duplicated across fiscal years.
- Data on clients with LTBI is maintained in a local database.
- Data on race and ethnicity combined for FY 2021-FY 2023 because of small numbers. LTBI clients treated in multiple fiscal years were deduplicated. Bar chart does not reflect the 22 clients with unknown race and ethnicity.

What is the story behind the data?

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- There are multiple LTBI treatment options that vary by the type of medication and length of treatment. New treatment options are offered as they become available.
- LTBI clients are case managed in Arlington County to increase compliance with treatment adherence and completion. LTBI can vary in length from 3 months to 9 months depending on the type of medication given. Clients have visits at a minimum monthly to check for side effects and monitor adherence. High-risk clients, including children under 5 who are close contacts to an active case and clients on intermittent dosing, receive directly observed therapy (DOT).
- VDH currently provides all medications free of charge through CDC funding.

Recommendations

Target Dates

- Continue offering telehealth for treating new LTBI clients.
- Continue direct VDH mail order pharmacy for clients who prefer.
- Based on the race equity analysis conducted in FY 2023, explore ways to increase treatment among those recommended for LTBI treatment but do not start.

- On-going
- On-going
- FY 2024 Q2

Forecast

- In FY 2024, completion rates are expected to remain 94% completed or on schedule to complete.