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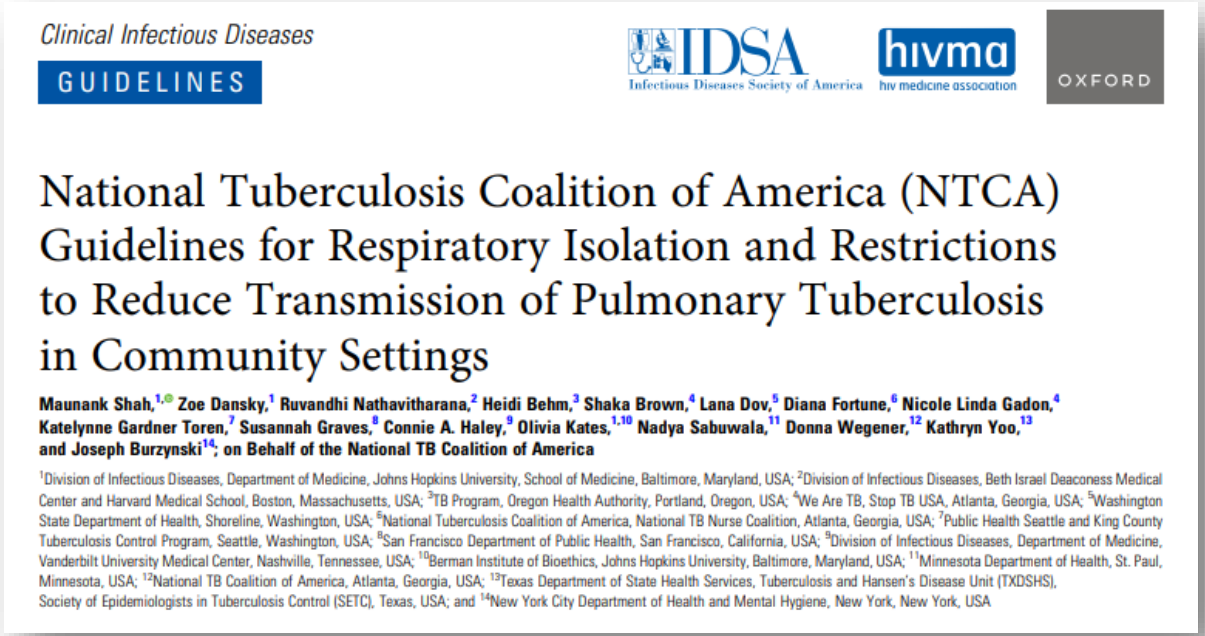
Updated Guidance: Respiratory Isolation and Restrictions in Home and Community Settings

Objectives

- Participant will be able to describe the rationale for changes to existing recommendations
- Participate will be able to summarize key findings from the evidence-based literature
- Participate will be able to list at least three ways changes to these recommendations may impact their TB patients and programs

National Background

- Updated guidance published in April of 2024 by the National TB Coalition of America



Clinical Infectious Diseases

GUIDELINES

IDSA Infectious Diseases Society of America | hivma hiv medicine association | OXFORD

National Tuberculosis Coalition of America (NTCA) Guidelines for Respiratory Isolation and Restrictions to Reduce Transmission of Pulmonary Tuberculosis in Community Settings

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National Background

- NTCA created a Guideline Development Group (GDG) with broad representation and TB expertise and experience
- Evidence Synthesis Group evaluated scientific literature to inform the GDG
  - Focused on impact of isolation for persons with TB on:
    - **Public health outcomes**: TB incidence and mortality
    - **Patient outcomes**: mental health, stigma, costs
- GDG reviewed ethical principles of public health decision-making

- An additional scoping review focused on:
  - Association of sputum smear microscopy results, cough, cavitary disease (based on chest imaging), and tx initiation with potential infectiousness

National Background

- **Community settings** = Home/residence, workplace, school, etc.
- Consider the potential benefits and harm for the community **and** the person with TB
- Final decisions should be individually tailored, considering relevant, patient-specific, setting-specific, and contextual information.

Guidance for isolation duration for other settings is unchanged (i.e., correctional facilities, healthcare facilities)

VDH Background

- In response to these updated guidelines, the Virginia TB Program convened a representative workgroup to develop an updated guidance document for TB isolation for use by Virginia's local health departments.

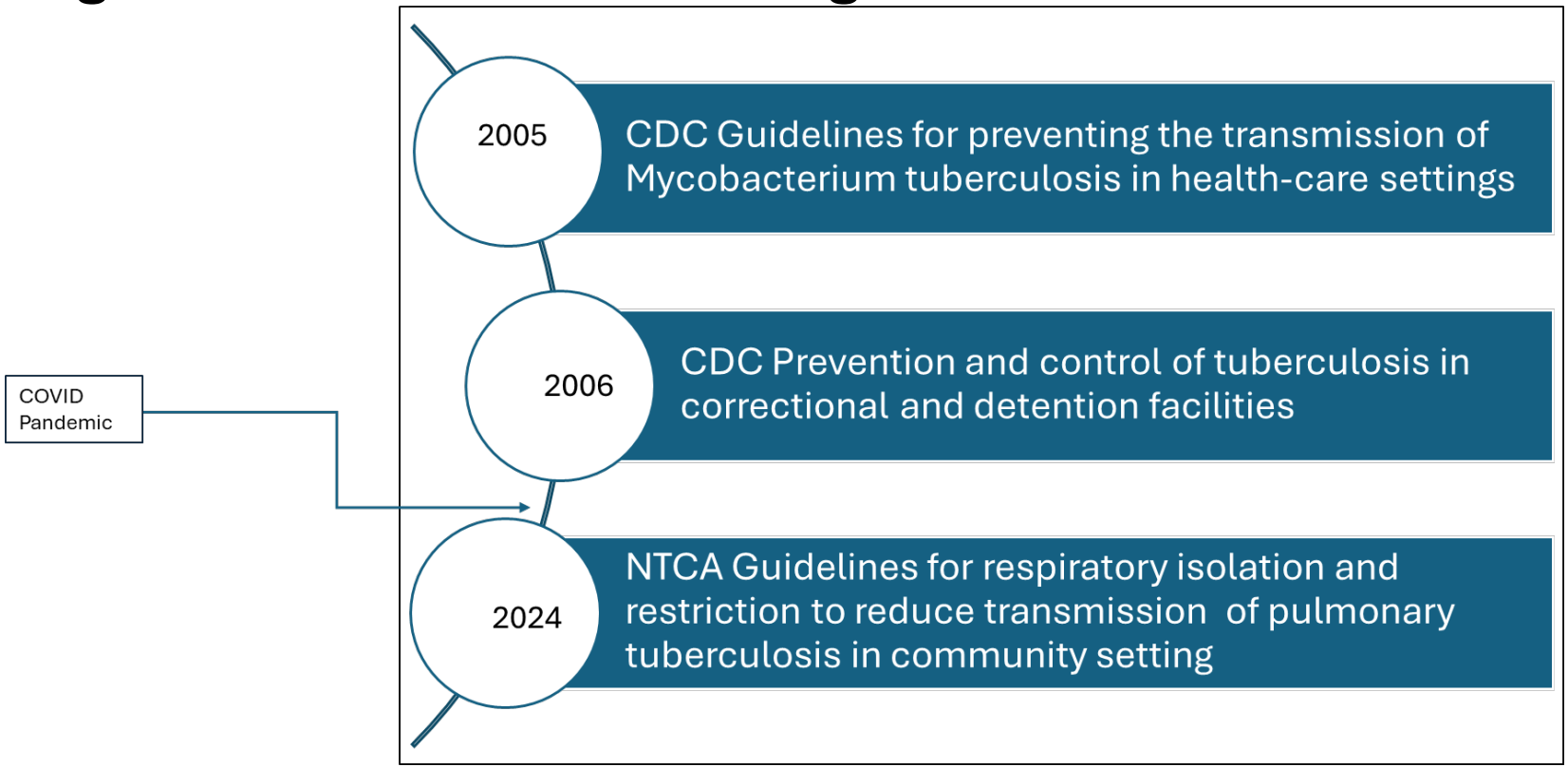
VDH Workgroup

- **Mission**: In response to these updated guidelines, the Virginia TB Program convened a representative workgroup to develop an updated guidance document for TB isolation for use by Virginia's local health departments.
- **Goals**:
  - Critically review and discuss the updated guidelines considering the implications to local health departments, and
  - Develop an updated guidance document for use by local health department staff.

VDH Workgroup

- **Workgroup Members**:
  - Central Region: Cindy Debusk, Rosalie Bieda, Abi Nimitz, Dr. Saritha Gomadam
  - Eastern Region: Marli Laudun, Robie Aubuchon, Michelle Lathrop, Sena Amegbletor
  - Northern Region: Dr. Barbara Andrino, Raheleh Farmand, Evelyn Poppell, Emily Astorga, Nancy Lara, Sergio Suarez-Ruesta
  - Northwest Region: Katrin Wince, Bindi Pathak, Dr. Allison Baroco, Lauren Padlo
  - Southwest Region: Steve Bailey, Megan Carter, Autumn Logsdon, Kathy Waller, Odessa Dunaway
  - DCLS: Kathleen Milloy, Rana Mehr
  - VDH TB Program Staff
- **Workgroup Stakeholders**:
  - Jill Grumbine, Newcomer Health Program Manager, VDH
  - Jasie Hearn, Division Director, Division of Clinical Epidemiology, VDH
  - Dr. Maria Almond, Piedmont Health District Director
  - Tania Shah, TB Survivor, We Are TB
  - Dr. Eric Houpt, TB Program Clinical Consultant, UVA
  - Dr. Tania Thomas, TB Program Clinical Consultant, UVA
  - Dr. Laurie Forlano, Office Director, Office of Epidemiology, VDH
  - VDH Community Health Services Leadership

Background – Guidance Changes



What makes public health guidelines unique?

- Weigh responsibility to the community and the public's health with responsibilities to the patient
- Rights-based limitations to public health power

Main take aways from evidence base

- Sputum examination (smear) does not correlate reliably with infectiousness after treatment initiation
- Appropriate treatment rapidly renders a person non-infectious
- Low certainty that isolation reduces TB incidence and mortality
- Moderate certainty that isolation worsens mental health, stigma, finances

Isolation can be considered balancing community and patient well-being given that most people have a low likelihood of infectiousness after at least five DOT doses of appropriate treatment.

Main take aways from evidence base

- Recent Studies: Infectiousness declines rapidly with effective anti-TB therapy (ATT)
  - Cough aerosol sampling (CASS) studies – cough aerosols become non culturable within days of ATT initiation
  - Multidrug ATT to which organism is susceptible reduces infectivity 48-72 hours, irrespective of sputum AFB smear status
  - Effect of ATT on *M. tuberculosis* likely decreases transmissibility earlier than it inhibits mycobacterial growth
  - Available evidence from early bactericidal activity studies, human-to-guinea pig transmission studies, cohort studies, and transcriptomic studies suggests that transmissibility declines rapidly (i.e., within 2–3 days) with effective ATT in the majority of PWTB, including those with high pre-ATT bacterial burden assessed by pre-ATT smear positivity or pulmonary cavities on chest X-ray.

Table 1. Summary of Key Evidence That Effective TB Treatment Rapidly Renders Persons With TB Noninfectious

Type of Evidence	Brief Summary	Location and Date
Randomized trial	Persons with TB randomized to sanatorium versus home-based treatment with INH and PAS; no difference in LTBI or TB disease among household contacts over 5 y; "major risk to contacts resulted from exposure to patient before diagnosis"	Madras, India, 1956–1959 [16]
Retrospective cohort	Persons with TB discharged from the hospital on treatment while still TB culture positive (majority also AFB smear positive) compared with persons with TB who were AFB smear and culture negative at discharge from hospital; no difference in TST conversion among household contacts	Arkansas, 1967–1971 [17]
Experiment	Guinea pigs susceptible to TB infection exposed to air vented from a TB ward; treatment of persons with TB with INH, PAS, and SM reduced transmission to guinea pigs by 98% immediately compared with untreated persons with TB	Baltimore VA TB Ward, 1959–1961 [18]
Experiment	Guinea pigs susceptible to TB infection exposed to air vented from MDR TB ward; TST conversions in guinea pigs showed infection of 1 (1%) of guinea pigs after 3 mo of exposure to 27 persons with MDR (most AFB smear positive) on treatment with regimen of levofloxacin, kanamycin, ethionamide, and either ethambutol or prothionamide	South Africa, ~2007–2012 [19]
Transcriptomic analysis	Analysis of TB isolates from respiratory aerosols of 7 persons with drug-susceptible TB on TB treatment with rifampin, INH, PZA, and ethambutol showed immediate downregulation of transcription of genes involved in TB virulence and infectiousness after 1 d of treatment	Mumbai, India, 2018–2020 [20]

Abbreviations: AFB, acid-fast bacilli; INH, isoniazid; MDR, multidrug resistant; LTBI, latent tuberculosis infection; PAS, para-aminosalicyclic acid; PZA, pyrazinamide; SM, streptomycin; TB, tuberculosis; TST, tuberculin skin test.

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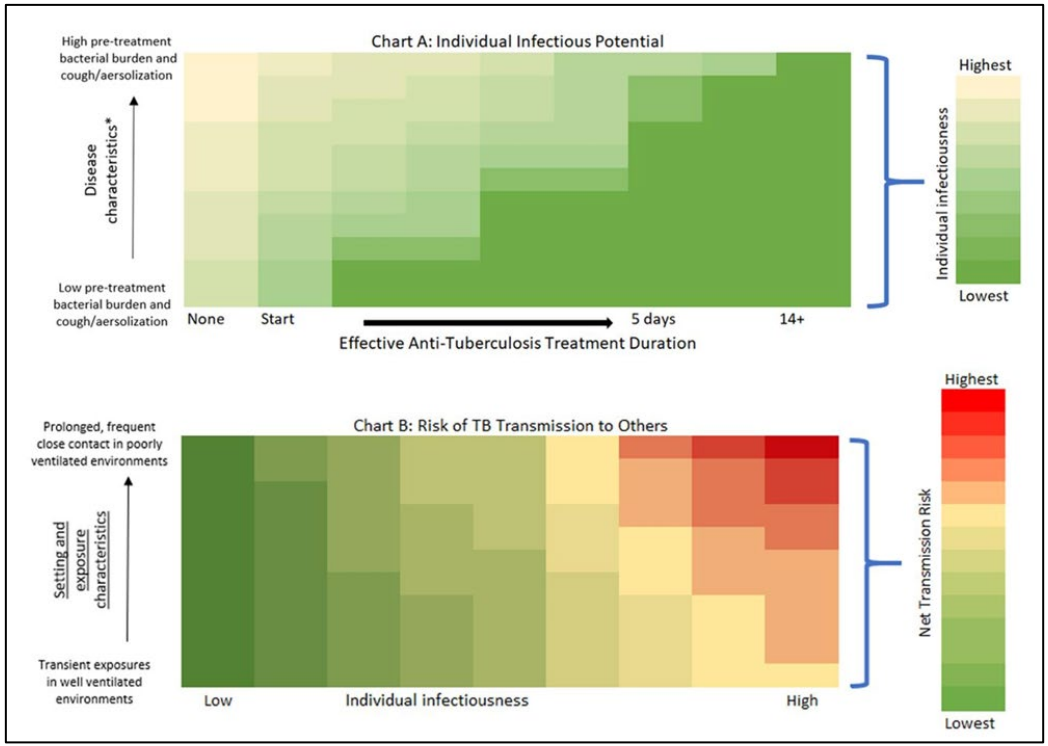
Transmission Risk - Multifactorial

- Infectiousness potential
  - Bacillary burden
  - Clinical picture
  - Radiographic findings
- Environment
  - Ventilation
- Type of contact
  - Duration
  - Proximity
- Susceptibility of contact
  - Immune status



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Main NTCA TB Isolation Guidelines Recommendation

To account for individual variability, time to conduct clinical and public health assessment, allow rapid molecular drug-susceptibility testing and monitoring of ATT adherence and tolerability, 5 days of continuous effective ATT is recommended as a pragmatic approach to determination of infectiousness.

Effective therapy is defined as a multi-drug ATT regimen to which the organism is susceptible or anticipated to be susceptible.

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Virginia Interpretation and Guidelines

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Isolation and Respiratory Restrictions for Persons with Infectious Active Tuberculosis in Household and Community Settings: Virginia Department of Health Guidance for Local Health Departments

April 18, 2025

This guidance is intended for local health departments. Care and management of anyone with active tuberculosis (pulmonary or extrapulmonary) should be done in coordination with VDH and local health departments.

Summary/Purpose

In light of updated national guidelines[1] released in 2024, this document is designed to assist Virginia Department of Health (VDH) TB clinical teams when making decisions about the use of respiratory isolation and restrictions (RIR) for a person with potentially infectious active TB.

In this document, the term RIR is used to delineate both physical isolation of a person with TB (PWTB) and restrictions on movement or activities that would place the PWTB in contact with other susceptible individuals. RIR is only necessary for persons with infectious (or potentially infectious) active TB disease, to reduce risk of infection of others, and it is not recommended for persons with noninfectious forms of TB (i.e., localized extrapulmonary TB without pulmonary or laryngeal involvement, as confirmed by sputum bacteriologic studies and/or chest imaging). RIR is not used for persons diagnosed with latent TB infection (LTBI), which is not infectious.

These guidelines reflect changes to recommendations for implementation of RIR in a household or general community setting (e.g., workplace, school). Recommendations for healthcare (e.g., hospitals, nursing homes) and congregate settings (e.g., correctional facilities, homeless shelters, assisted living facilities) are unchanged and not addressed in this document. Resources for these settings are available from the Centers for Disease Control and Prevention (CDC).

Table 1. RIR recommendations based on clinical characteristics and other risk fa

Group	Clinical Characteristics and Risk Factors	Recommended RIR	Other cons
1	• Extrapulmonary TB with no concern for pulmonary or laryngeal involvement • Child under the age of 10 without adult type cavitation, positive sputa smears etc. (consult with VDH TB) • Asymptomatic clients with a B1 EDN classification	• **Modified isolation** until chest imaging results not consistent with active TB and negative results from 3 sputa smears collected at least 8 hours apart (if applicable) are available	• Additional isolation needed for extrapu draining open wou
2	• Suspected or confirmed multi-drug-resistant TB or mono-resistance to rifampin	• **Extensive restriction** until release deemed appropriate by clinical care team	• RIR may be extend consequences of t resistant disease, a children <5 years o immunosuppresse a congregate settin home) or work (e.g • **Reassess RIR nee health and wellbe**
3	• Extensive disease	• **Extensive restriction** until client tolerating and adherent to **appropriate** TB treatment	• Moderate restrictio depending on the F and activities.
4	• Lives or works risk communit (e.g., househo children <5 ye daycare, grou • Works in a hig congregate se nursing home, facility)		
5	• None of the ab		

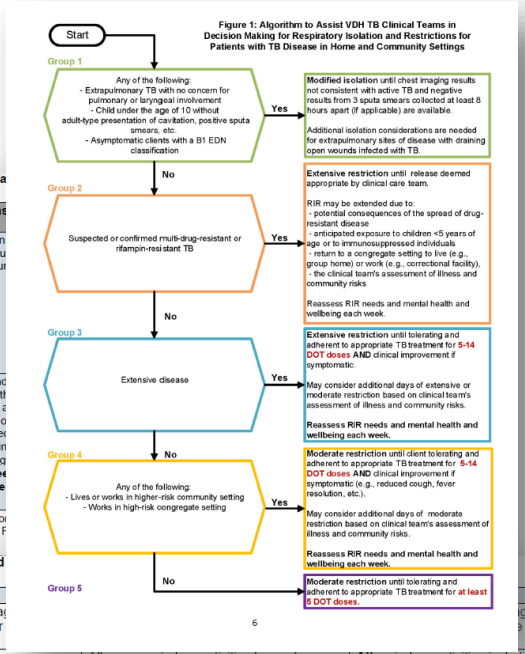

Table 2: Spectrum of Respiratory Isolation and

		Extensive Restriction		
Movement Restrictions	*General*	**Strictly limit** movement to an ag location, such as home or other		greed- e or other
	Indoor Activities	**Limit** indoor activities beyond home/residence (i.e., may attend essential healthcare visit as determined through discussion with local health department).	Allow **some** indoor activities beyond home/residence (e.g., time-sensitive healthcare visit) as determined through discussion with local health department.	**Allow** indoor activities including time-sensitive healthcare visits.
	Outdoor activities	Allow **some** outdoor activities without interacting closely with others (e.g., going for a walk).	Allow **most** outdoor activities as determined through discussion with local health department.	**Allow** outdoor activities
Minimizing Additional Exposure Risk		• **Avoid** close or prolonged (e.g., multiple hours) contact with those in the home/residence who are vulnerable to TB infection/progression (e.g., children, immunosuppressed individuals). • **Wear a surgical mask** (as resources permit) around vulnerable people in the **home/residence** and for any other **indoor activities**. • **Consider** PPE for close contacts (e.g., surgical masks). • Make efforts to **improve ventilation** (open windows during car transportation, HEPA filtration, negative pressure if visiting healthcare setting).		• **Wear a surgical mask** for **indoor activities** beyond the home/residence.
Visitors		**Avoid** visitors during the period of restriction/isolation. If visitors are unavoidable, encourage visiting outside or while masked (as resources permit). Consider providing TB education resources in appropriate languages.		

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Major Shifts

Reduced emphasis on smear status after initiation of appropriate TB treatment

Increased emphasis on effectiveness of appropriate TB treatment

Potential for more clients to be released sooner

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Table 1. RIR recommendations based on clinical characteristics and other risk factors

Group	Clinical Characteristics and Risk Factors	Recommended RIR	Other considerations
1	• Extrapulmonary TB with no concern for pulmonary or laryngeal involvement • Child under the age of 10 without adult type cavitation, positive sputa smears etc. (consult with VDH TB) • Asymptomatic clients with a B1 EDN classification	• **Modified isolation** until chest imaging results not consistent with active TB and negative results from 3 sputa smears collected at least 8 hours apart (if applicable) are available	• Additional isolation considerations are needed for extrapulmonary sites with draining open wounds infected with TB.
2	• Suspected or confirmed multi-drug-resistant TB or mono-resistance to rifampin	• **Extensive restriction** until release deemed appropriate by clinical care team	• RIR may be extended due to potential consequences of the spread of drug-resistant disease, anticipated exposure to children <5 years of age or to immunosuppressed individuals, return to a congregate setting to live (e.g., group home) or work (e.g., correctional facility). • **Reassess RIR needs and mental health and wellbeing each week**
3	• Extensive disease	• **Extensive restriction** until client tolerating and adherent to **appropriate** TB treatment for **5-14** DOT doses **AND** clinical improvement if symptomatic (e.g., reduced cough, fever resolution, etc.) • May consider additional days of extensive restrictions depending on extent of illness and clinical care team's assessment	• Moderate restriction may be appropriate depending on the PWTB's living situation and activities. • RIR may also be extended despite a PWTB's low infectious potential due to community risks including anticipated exposure to children <5 years of age or to immunosuppressed individuals, return to a congregate setting to live (e.g., group home) or work (e.g., correctional facility). • **Reassess RIR needs and mental health and wellbeing each week**
4	• Lives or works in a higher-risk community setting (e.g., household with children <5 years of age, daycare, group home) • Works in a high-risk congregate setting (e.g., nursing home, correctional facility)	• **Moderate restriction** until client tolerating and adherent to appropriate TB treatment for **5-14** DOT doses **AND** clinical improvement if symptomatic (e.g., reduced cough, fever resolution, etc.)	• RIR may be extended despite a PWTB's low infectious potential due to community risks including anticipated exposure to children <5 years of age or to immunosuppressed individuals, return to a congregate setting to live (e.g., group home) or work (e.g., correctional facility). • **Reassess RIR needs and mental health and wellbeing each week**
5	• None of the above	• **Moderate restriction** until tolerating and adherent to appropriate TB treatment for at least **5** DOT doses	

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Group	Clinical Characteristics and Risk Factors	Recommended RIR	Other considerations
1	• Extrapulmonary TB with no concern for pulmonary or laryngeal involvement • Child under the age of 10 without adult type cavitation, positive sputa smears etc. (consult with VDH TB) • Asymptomatic clients with a B1 EDN classification	• **Modified isolation** until chest imaging results not consistent with active TB and negative results from 3 sputa smears collected at least 8 hours apart (if applicable) are available	• Additional isolation considerations are needed for extrapulmonary sites with draining open wounds infected with TB.

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2	• Suspected or confirmed multi-drug-resistant TB or mono-resistance to rifampin	• **Extensive restriction** until release deemed appropriate by clinical care team	• RIR may be extended due to potential consequences of the spread of drug-resistant disease, anticipated exposure to children <5 years of age or to immunosuppressed individuals, return to a congregate setting to live (e.g., group home) or work (e.g., correctional facility). • **Reassess RIR needs and mental health and wellbeing each week**

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3	• Extensive disease	• **Extensive restriction** until client tolerating and adherent to **appropriate** TB treatment for **5-14** DOT doses **AND** clinical improvement if symptomatic (e.g., reduced cough, fever resolution, etc.) • May consider additional days of extensive restrictions depending on extent of illness and clinical care team's assessment	• Moderate restriction may be appropriate depending on the PWTB's living situation and activities. • RIR may also be extended despite a PWTB's low infectious potential due to community risks including anticipated exposure to children <5 years of age or to immunosuppressed individuals, return to a congregate setting to live (e.g., group home) or work (e.g., correctional facility). • **Reassess RIR needs and mental health and wellbeing each week**

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4	• Lives or works in a higher-risk community setting (e.g., household with children <5 years of age, daycare, group home) • Works in a high-risk congregate setting (e.g., nursing home, correctional facility)	• **Moderate restriction** until client tolerating and adherent to appropriate TB treatment for **5-14** DOT doses **AND** clinical improvement if symptomatic (e.g., reduced cough, fever resolution, etc.)	• RIR may be extended despite a PWTB's low infectious potential due to community risks including anticipated exposure to children <5 years of age or to immunosuppressed individuals, return to a congregate setting to live (e.g., group home) or work (e.g., correctional facility). • **Reassess RIR needs and mental health and wellbeing each week**

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5	• None of the above	• **Moderate restriction** until tolerating and adherent to appropriate TB treatment for at least **5** DOT doses	

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Table 2: Spectrum of Respiratory Isolation and Restrictions for Persons with Tuberculosis

		Extensive Restriction	Moderate Restriction	Modified Isolation
Movement Restrictions	*General*	**Strictly limit** movement to an agreed-upon location, such as home or other residence.	Spend **majority of time** at agreed-upon location, such as home or other residence.	Spend **majority of time** at agreed-upon location, such as home or other residence.
	Indoor Activities	**Limit** indoor activities beyond home/residence (i.e., may attend essential healthcare visit as determined through discussion with local health department).	Allow **some** indoor activities beyond home/residence (e.g., time-sensitive healthcare visit) as determined through discussion with local health department.	**Allow** indoor activities including time-sensitive healthcare visits.
	Outdoor activities	Allow **some** outdoor activities without interacting closely with others (e.g., going for a walk).	Allow **most** outdoor activities as determined through discussion with local health department.	**Allow** outdoor activities
Minimizing Additional Exposure Risk		• **Avoid** close or prolonged (e.g., multiple hours) contact with those in the home/residence who are vulnerable to TB infection/progression (e.g., children, immunosuppressed individuals). • **Wear a surgical mask** (as resources permit) around vulnerable people in the **home/residence** and for any other **indoor activities**. • **Consider** PPE for close contacts (e.g., surgical masks). • Make efforts to **improve ventilation** (open windows during car transportation, HEPA filtration, negative pressure if visiting healthcare setting).		• **Wear a surgical mask** for **indoor activities** beyond the home/residence.
Visitors		**Avoid** visitors during the period of restriction/isolation. If visitors are unavoidable, encourage visiting outside or while masked (as resources permit). Consider providing TB education resources in appropriate languages.		

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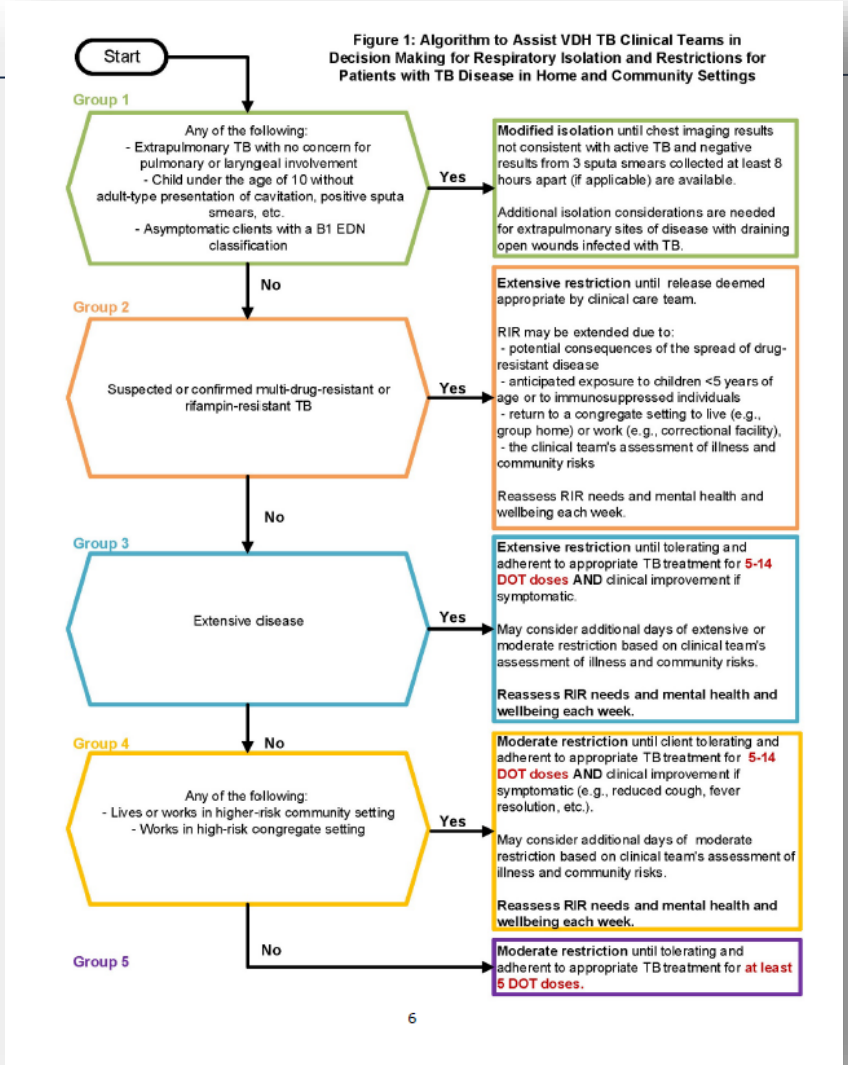

Glossary:

AII – Airborne infection isolation

Clinical improvement – Examples of clinical improvement include reduced cough, increased weight, improved appetite, decreased fatigue, decreased night sweats, resolution of fever, resolution of hemoptysis.

Extensive disease – Disease with more extensive damage to the lungs, often identified by the presence of cavitation on chest imaging and sputum smear and nucleic acid amplification test positivity prior to anti-tuberculosis treatment initiation. Seek clinical consultation to determine if the patient has extensive disease.

Extensive restriction – See Table 2

Higher-risk community setting – These are community settings that are not considered "congregate" settings, but where there may be increased risk for transmission of TB. Examples include schools, factories, group homes, etc. Poor ventilation can increase the risk of certain community settings.

High-risk congregate setting – These are congregate settings where there is increased risk for transmission of TB. Examples include correctional facilities, nursing homes, detention facilities, homeless shelters, etc.

Moderate restriction - See Table 2

Modified isolation – See Table 2

PWTB – Person with tuberculosis, in this document this refers to individuals with infectious TB disease

RIR – Respiratory isolation and restrictions

Scenarios

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Scenario 1

- 29-year-old male
- Born in Honduras
- Productive cough x3 weeks, 15 lb weight loss
- IGRA positive, x-ray shows cavity
- Initial sputa 3+, PCR positive for TB, no rpoB detected
- No history of prior TB/LTBI treatment
- Works alone outside
- Lives with one roommate
- Has received 7 DOT doses of RIPE and reports decreased cough

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Scenario 1 - Decision

- Consider severity of disease
  - Extensive disease (smear+, cough, cavity)
- Consider other risk
  - Works outside, alone
  - Lives with one roommate
  - Lower risk

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Scenario 1 - Decision

- Determine duration and level of isolation and restriction
  - Has completed 7 DOT doses of RIPE
  - Decreased cough

3	• Extensive disease	• **Extensive restriction** until client tolerating and adherent to **appropriate** TB treatment for **5-14** DOT doses **AND** clinical improvement if symptomatic (e.g., reduced cough, fever resolution, etc.) • May consider additional days of extensive restrictions depending on extent of illness and clinical care team's assessment	• Moderate restriction may be appropriate depending on the PWTB's living situation and activities. • RIR may also be extended despite a PWTB's low infectious potential due to community risks including anticipated exposure to children <5 years of age or to immunosuppressed individuals, return to a congregate setting to live (e.g., group home) or work (e.g., correctional facility). • **Reassess RIR needs and mental health and wellbeing each week**

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Scenario 1 - Decision

Release from isolation

- 7 DOT doses completed (meets 5-14 day threshold)
- Clinical improvement
- No new exposures at home (1 roommate)
- Low risk work environment (works alone, outside)

Scenario 2

- 80-year-old male from Vietnam
- IGRA positive
- 3-month history of cough, fevers, weight loss
- Abnormal x-ray, no cavities
- Does not work
- Diabetic
- Lives alone
- Initial smears negative, PCR negative
- Clinical TB diagnosis
- Starting TB treatment today

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Scenario 2 - Decision

- Consider severity of disease
  - Not extensive disease (cough, but smear and PCR -, no cavities)
  - DM; SDLs indicated
- Consider other risk
  - Lives alone
  - Not working
  - Lower risk

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Scenario 2 - Decision

- Determine duration of isolation and level of restriction

5	• None of the above	• **Moderate restriction** until tolerating and adherent to appropriate TB treatment for at least **5** DOT doses	

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Scenario 2 - Decision

Moderate restriction for 5 days of DOT

Moderate Restriction
Spend **majority of time** at agreed-upon location, such as home or other residence.
Allow **some** indoor activities beyond home/residence (e.g., time-sensitive healthcare visit) as determined through discussion with local health department.
Allow **most** outdoor activities as determined through discussion with local health department.

Scenario 3

- 25-year-old woman
- Born in Peru
- Recent weight loss, hemoptysis, night sweats
- Hx of partial treatment for TB disease as a child
- Initial sputa smears 3+, PCR positive, rpoB mutation detected, culture growing
  - MDDR results pending
- Works in a daycare
- Has not started regimen yet

Scenario 3 - Decision

- Consider severity of disease
  - Extensive disease (smear+, cough, rifampin resistance)
- Consider other risk
  - Daycare worker
  - High risk

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Scenario 3 - Decision

- Determine duration of isolation and level of restriction

2	• Suspected or confirmed multi-drug-resistant TB or mono-resistance to rifampin	• **Extensive restriction** until release deemed appropriate by clinical care team	• RIR may be extended due to potential consequences of the spread of drug-resistant disease, anticipated exposure to children <5 years of age or to immunosuppressed individuals, return to a congregate setting to live (e.g., group home) or work (e.g., correctional facility). • **Reassess RIR needs and mental health and wellbeing each week**

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Scenario 3 - Decision

Extensive restriction until release deemed appropriate by clinical care team

	Extensive Restriction
General	**Strictly limit** movement to an agreed-upon location, such as home or other residence.
Indoor Activities	**Limit** indoor activities beyond home/residence (i.e., may attend essential healthcare visit as determined through discussion with local health department).
Outdoor activities	Allow **some** outdoor activities without interacting closely with others (e.g., going for a walk).

TABLE 4.

Criteria for Release from Isolation to High and Lower Risk Settings*

Patient Category	Setting	Criteria
TB case (or suspect on treatment for TB) at increased risk for MDR-TB	High or Lower risk	• Obtain direct NAAT, if available, for RIF and/or INH resistance. • If direct NAAT not available, while phenotypic DST for RIF is pending, at the discretion of the local TB controller, either criteria for patients with known MDR-TB or criteria for patients not at increased risk of MDR-TB may be applied.
Known MDR-TB case	High risk	• Three consecutive respiratory specimens collected on separate days, including at least one early AM or induced sputum, or BAL, are AFB smear negative, and no subsequent sputum specimen is AFB smear positive; • At least 14 daily doses of treatment for MDR-TB taken and tolerated by DOT; • Clinical improvement; and • At least 2 consecutive negative sputum cultures without a subsequent positive culture.
	Lower risk**	• Three consecutive sputum specimens collected on separate days are AFB smear negative; • At least 14 daily doses of treatment for MDR-TB taken and tolerated by DOT; and • Clinical improvement.

Definitions:

High Risk Setting

- A housing or work setting in which others will share air with the TB patient and which is characterized by 1 or more of the following factors:
  - A large number or high density of persons.
  - The presence of persons at high risk of progression to active TB disease (e.g., children < 5, persons with HIV infection)
  - The presence of persons who have not been previously exposed to the TB patient.

Lower Risk Setting

- A **residential** setting not characterized as high risk, and:
  - No other persons will share the air with the TB patient; OR
  - Other persons who will share the air with the TB patient are not at increased risk for progression to TB disease if infected; OR
  - All persons at increased risk of progression to TB disease if infected, including all children under the age of 5 years, who will share the air with the TB patient,have been previously exposed to the TB patient, have had a complete medical evaluation and have been started on therapy, including window period treatment for presumed LTBI (TB1),as appropriate.
- A **work** setting not characterized as high risk, and in which no contacts are known or reasonably expected to be at increased risk of progression to TB disease if infected

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Scenario 4

- 44 y/o immigrated from Philippines many years ago
- Seen at local hospital in March
  - Smear positive, no NAA
  - Culture positive three weeks later
  - Asymptomatic, no cavities
- New sputum testing – smear and NAA negative, culture pending
- Started on RIPE
- Works as special needs teacher with pre-K – 5th grade at local elementary school
  - Significant contact with 50-60 kids (10 under age 5)
  - Broader school population ~300 kids
- Patient: concerned about stigma/work backlash

Scenario 4 - Decision

- Classify severity of disease
  - Not extensive disease
- Consider other risk
  - Higher risk work setting

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Scenario 4 - Decision

- Determine duration of isolation and level of restriction

4	• Lives or works in a higher-risk community setting (e.g., household with children <5 years of age, daycare, group home) • Works in a high-risk congregate setting (e.g., nursing home, correctional facility)	• **Moderate restriction** until client tolerating and adherent to appropriate TB treatment for **5-14** DOT doses **AND** clinical improvement if symptomatic (e.g., reduced cough, fever resolution, etc.)	• RIR may be extended despite a PWTB's low infectious potential due to community risks including anticipated exposure to children <5 years of age or to immunosuppressed individuals, return to a congregate setting to live (e.g., group home) or work (e.g., correctional facility). • **Reassess RIR needs and mental health and wellbeing each week**

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Scenario 4 - Decision

Moderate restriction for 5-14 day of DOT

- Given vulnerability of school setting, likely more days out of work (e.g., after 14 DOT doses), but perhaps allowing non-work activities sooner (e.g., after 5 DOT doses)

Scenario 5

- B1 from Afghanistan
- Abnormal x-ray abroad, no cavity, no symptoms
- IGRA positive
- No hx of treatment
- Lives with partner and school-aged children
- Works in office setting

Scenario 5 - Decision

- Classify severity of disease
  - Not extensive/possibly no disease
- Consider other risk
  - Lower risk

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Scenario 5 - Decision

- Determine duration of isolation and level of restriction

1	• Extrapulmonary TB with no concern for pulmonary or laryngeal involvement • Child under the age of 10 without adult type cavitation, positive sputa smears etc. (consult with VDH TB) • Asymptomatic clients with a B1 EDN classification	• **Modified isolation** until chest imaging results not consistent with active TB and negative results from 3 sputa smears collected at least 8 hours apart (if applicable) are available	• Additional isolation considerations are needed for extrapulmonary sites with draining open wounds infected with TB.

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Scenario 5 - Decision

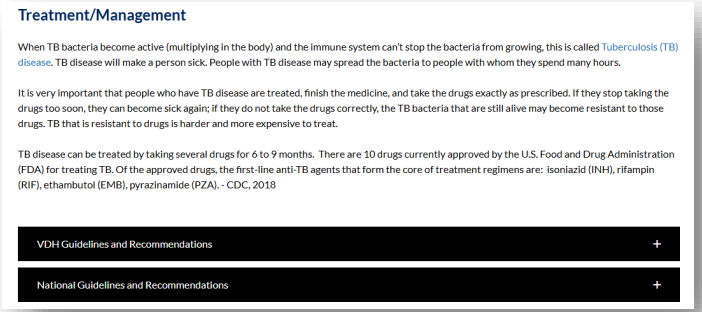
Modified isolation until chest imaging results not consistent with active TB and negative results from 3 sputa smears collected at least 8 hours apart (if applicable) are available

Modified Isolation
Spend **majority of time** at agreed-upon location, such as home or other residence.
Allow indoor activities including time-sensitive healthcare visits.
Allow outdoor activities
• **Wear a surgical mask** for **indoor activities** beyond the home/residence.

Questions and Further Discussion

Where to find documents:

- www.vdh.virginia.gov/tuberculosis/tb-disease/
  - Treatment/Management
    - VDH Guidelines and Recommendations: Isolation and Respiratory Restrictions for Persons with Infectious Active TB in Household and Community Settings: VDH Guidance for Local Health Departments **(NEW)**
    - National Guidelines and Recommendations: NTCA Guidelines for Respiratory Isolation and Restrictions to Reduce Transmission of Pulmonary Tuberculosis in Community Settings (2024)



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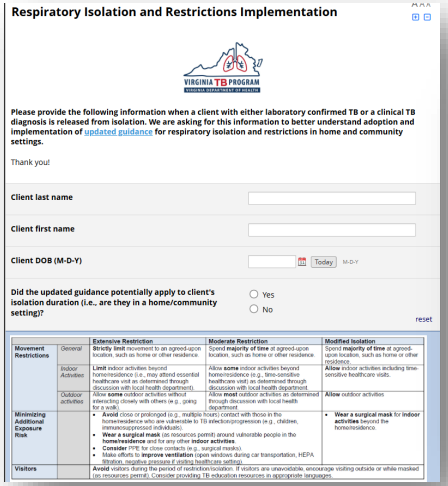
Help us collect some data about implementation!


Respiratory Isolation and Restrictions Implementation

Please provide the following information when a client with either laboratory confirmed TB or a clinical TB diagnosis is released from isolation. We are asking for this information to better understand adoption and implementation of updated guidance for respiratory isolation and restrictions in home and community settings.

Thank you!

Client last name

Client first name

Client DOB (M-D-Y)

Today M-D-Y

Did the updated guidance potentially apply to client's isolation duration (i.e., are they in a home/community setting)?

Yes
No

reset

		Extensive Restriction	Moderate Restriction	Modified Isolation
Movement Restrictions	General	**Strictly limit** movement to an agreed-upon location, such as home or other residence.	Spend **majority of time** at agreed-upon location, such as home or other residence.	Spend **majority of time** at agreed-upon location, such as home or other residence.
	Indoor Activities	**Limit** indoor activities beyond home/residence (i.e., may attend essential healthcare visit as determined through discussion with local health department).	Allow **some** indoor activities beyond home/residence (e.g., time-sensitive healthcare visit) as determined through discussion with local health department.	**Allow** indoor activities including time-sensitive healthcare visits.
	Outdoor activities	Allow **some** outdoor activities without interacting closely with others (e.g., going for a walk).	Allow **most** outdoor activities as determined through discussion with local health department.	**Allow** outdoor activities
Minimizing Additional Exposure Risk		• **Avoid** close or prolonged (e.g., multiple hours) contact with those in the home/residence who are vulnerable to TB infection/progression (e.g., children, immunosuppressed individuals). • **Wear a surgical mask** (as resources permit) around vulnerable people in the **home/residence** and for any other **indoor activities**. • **Consider** PPE for close contacts (e.g., surgical masks). • Make efforts to **improve ventilation** (open windows during car transportation, HEPA filtration, negative pressure) of shared healthcare settings.		• **Wear a surgical mask** for **indoor activities** beyond the home/residence.
Visitors		**Avoid** visitors during the period of restriction/isolation. If visitors are unavoidable, encourage visiting outside or while masked (as resources permit). Consider providing TB education resources in appropriate languages.		

What level of respiratory isolation and restriction did you initially select for this client? (See table above)

How many DOT doses did the clinical team determine were necessary to end isolation?

Isolation start date (M-D-Y)

Today M-D-Y

Isolation end date (M-D-Y)

Today M-D-Y

Was the client ever sputa smear positive?

Yes
No

reset

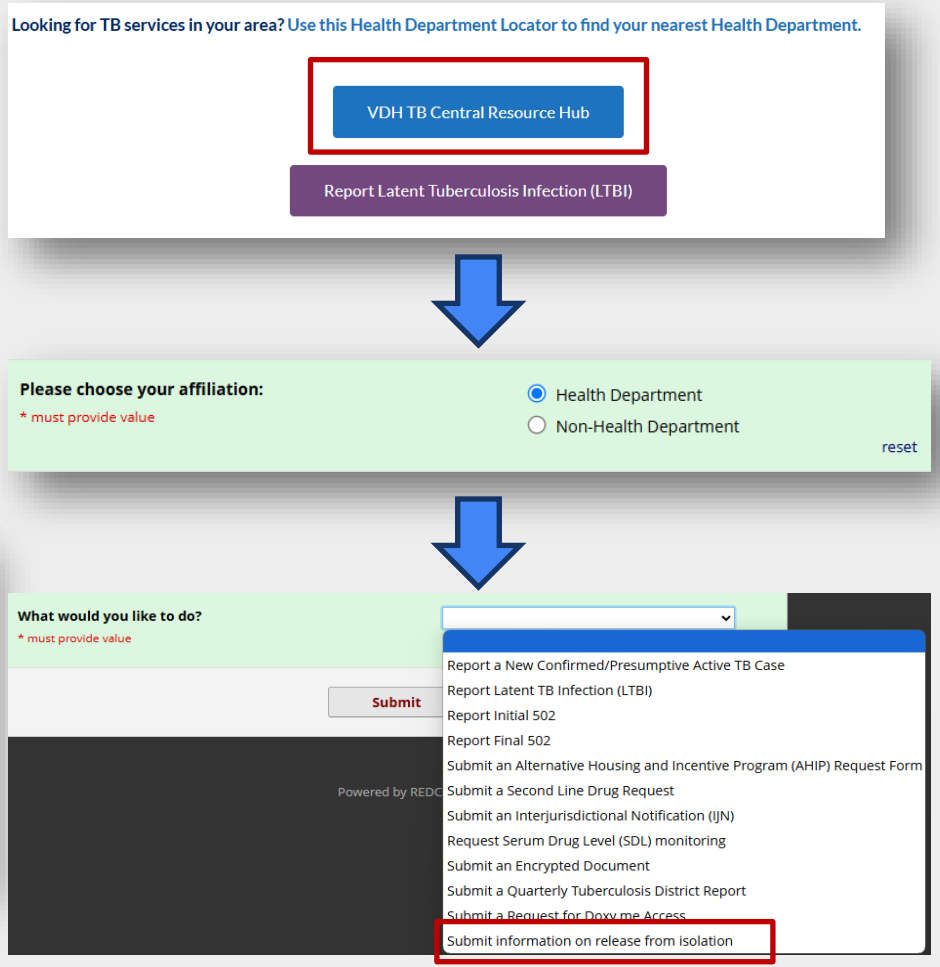
Did the client have to be placed back on isolation after initial release?

Yes
No

reset

Please provide any comments if needed

Submit


Looking for TB services in your area? Use this Health Department Locator to find your nearest Health Department.

VDH TB Central Resource Hub

Report Latent Tuberculosis Infection (LTBI)

Please choose your affiliation:

* must provide value

Health Department
Non-Health Department

reset

What would you like to do?

* must provide value

Submit

Powered by REDC

Report a New Confirmed/Presumptive Active TB Case
Report Latent TB Infection (LTBI)
Report Initial 502
Report Final 502
Submit an Alternative Housing and Incentive Program (AHIP) Request Form
Submit a Second Line Drug Request
Submit an Interjurisdictional Notification (IJN)
Request Serum Drug Level (SDL) monitoring
Submit an Encrypted Document
Submit a Quarterly Tuberculosis District Report
Submit a Request for Doxy.me Access
Submit information on release from isolation

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Thank you!

Contact:
laura.r.young@vdh.virginia.gov

General TB email:
tuberculosis@vdh.virginia.gov