



TB SURVEILLANCE IN CLARK COUNTY.  
CURRENT SITUATION IN THE SCHOOL DISTRICT.

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# Office of Disease Surveillance- TB Surveillance

- Surveillance investigates all reports of suspected and confirmed TB cases
- Surveillance receives reports from hospitals, specialists, and laboratories
- Suspected cases are followed closely
  - Recommendation for rapid molecular testing
- All suspect or confirmed started on TB medications is immediately investigated
- All confirmed, culture positive or clinical cases receive contact investigations

# **TB Surveillance and TB Clinic**

- Surveillance works closely with the TB Clinic
- DIIS station in the clinic
- Daily communication and information sharing
- Collaborate on cases with Nurse Case Managers

# TB in Clark County



## Division of Public and Behavioral Health - Tuberculosis Program Fast Facts Nevada Tuberculosis Cases, 2018 - 2022~

	2018			2019			2020			2021			2022		
	N	%	Rate†	N	%	Rate†	N	%	Rate†	N	%	Rate†	N	%	Rate†
<b>Nevada Total</b>	<b>69</b>	<b>100%</b>	<b>2.3</b>	<b>53</b>	<b>100%</b>	<b>1.7</b>	<b>57</b>	<b>100%</b>	<b>1.8</b>	<b>61</b>	<b>100%</b>	<b>1.9</b>	<b>62</b>	<b>100%</b>	<b>1.9</b>
<b>County</b>	<b>n</b>	<b>%</b>	<b>Rate†</b>	<b>n</b>	<b>%</b>	<b>Rate†</b>	<b>n</b>	<b>%</b>	<b>Rate†</b>	<b>n</b>	<b>%</b>	<b>Rate†</b>	<b>n</b>	<b>%</b>	<b>Rate†</b>
Clark	60	87.0%	2.7	45	84.9%	2.0	51	89.5%	2.2	54	89.0%	2.3	54	87.1%	2.3
Washoe	9	13.0%	2.0	7	13.2%	1.5	4	7.0%	0.8	7	11.0%	1.5	6	9.7%	1.2
Carson City	0	0.0%	0.0	1	1.9%	1.8	1	1.8%	1.8	0	0.0%	0.0	0	0.0%	0.0
All Other Counties*	0	0.0%	0.0	0	0.0%	0.0	1	1.8%	0.3	0	0.0%	0.0	2	3.2%	0.7

**2022-54 Cases / 584 Contacts / 1 TB Disease / 112 LTBI**

**Of the 54 active cases, 43 were born outside of the United States**

# Screening Cascade – Step 1

**Screening is a tool used to determine if a person should get tested for TB**

**Higher risk populations include**

**Infants, children, and adolescents exposed to adults who are at increased risk for latent tuberculosis infection or TB disease**

**People from a country where TB disease is common (most countries in Latin America, the Caribbean, Africa, Asia, Eastern Europe, and Russia)**

**People who have spent time with someone who has TB disease**

**People who live or work in high-risk settings (for example: correctional facilities, long-term care facilities or nursing homes, and homeless shelters)**

**Health-care workers who care for patients at increased risk for TB disease**

# Screening Cascade - Step 2

## Testing

- **Interferon Gamma Release Assay (IGRA)**
  - **Increased specificity for TB infection in persons vaccinated with Bacille Calmete-Guerin (BCG).**
  - **Many persons born outside of the United States have been vaccinated with BCG.**
  - **QuantiFERON (QFT)**
    - **Gold standard for testing**
    - **simple blood draw**
    - **only requires one visit**
- **Tuberculin Skin Test (TST)**
  - **Only used for children under 2**
  - **injection under the skin**
  - **requires return visit to read results**

**SNHD provides free testing to any contact to an active case**

# Current Situation

## 3 Confirmed active TB cases at CCSD Schools since January 2023

- 2 Elementary school, special education, teachers
  - › (96 total contacts)
- 1 High school, math teacher, is also a student at UNLV
  - › (212 total contacts)
- All 3 were originally from high burden countries
  - › Year of US entry - 2002, 2007, 2020

2013 CCSD dropped the requirement for mandatory TB testing based on updated CDC guidance and SNHD recommendations



# SNHD Response

- Strong collaboration with CCSD authorities
- Voluntary TB Risk Assessment
- Risk Assessment User Guide
- Frequently asked Questions



## Voluntary Tuberculosis Risk Assessment

- The purpose of this tool is to identify individuals with infectious tuberculosis (TB) or untreated tuberculosis disease (also known as latent TB infection - LTI), to prevent the spread of disease.
- Do not repeat testing unless there are **new** risk factors since the last negative test.
- Do not treat for latent TB infection (LTI) until active TB disease has been excluded. For individuals with signs or symptoms of TB disease or abnormal chest x-ray consistent with TB disease, evaluate for active TB disease with a chest x-ray, symptom screen, and T (Tuberculin), sputum AFB smears, culture, and nucleic acid amplification testing. A negative tuberculin skin test (TST) or interferon gamma release assay (IGRA) does not rule out active TB disease.

Name of Person Assessed for TB Risk Factors: \_\_\_\_\_  
 Assessment Date: \_\_\_\_\_ Date of Birth: \_\_\_\_\_

History of Tuberculosis Disease or Infection (Check appropriate box below)	
<input type="checkbox"/> Yes	If there is a <b>documented</b> history of positive TB test or TB disease, then a symptom review and chest x-ray (if not performed in the previous 6 months) should be performed. It must be done by a physician, physician assistant, or nurse practitioner. If there is any doubt as to the evidence of TB, the person is not eligible required to submit to a TB risk assessment or repeat chest x-ray.
<input type="checkbox"/> No (Answer for Risk Factors for Tuberculosis only below)	

TB testing is recommended if any of the 3 boxes below are checked	
<input type="checkbox"/> One or more signs (or symptoms) of TB disease	TB symptoms include prolonged cough, soaping up blood, fever, night sweats, weight loss, or excessive fatigue.
<input type="checkbox"/> Birth, travel, or residence in a country with an elevated TB rate for at least 2 months	Includes countries including the United States, Canada, Australia, New Zealand, all states and District of Columbia countries. Includes any non-risk or stay (did) is performed over tuberculin skin test (TST) for non-risk or persons.
<input type="checkbox"/> Close contact to someone with infectious TB disease during lifetime	

**Treat for LTI if TB test result is positive and active TB disease is ruled out**

If the answer is YES to any of the above questions, you should be tested for TB. Please bring this document with you to your healthcare provider who can order this testing for you. If you do not have a healthcare provider, please contact SNHD 702-750-5015.

If the answer to all the above questions is NO, no further action is required.



## Voluntary Tuberculosis (TB) Risk Assessment User Guide

### Background

The shift from tuberculosis (TB) control to TB elimination requires enhanced and new prevention methods. Travel to countries with high rates of disease is associated with increased rates of TB disease and latent infections. This is of particular concern because of the high risk of active disease following new infection.

The U.S. Centers for Disease Control and Prevention (CDC) recommends that travelers "who anticipate possible prolonged exposure to tuberculosis" should undergo tuberculin tests before and after travel, while those "who anticipate repeated travel with possible prolonged exposure or an extended stay over a period of years in an endemic country" should undergo baseline two-step tuberculin testing, with subsequent annual tests if negative at baseline.

The Health District plans to use this survey to identify at-risk travelers and recommend the screening and follow-up for students, teachers, and those who work in public settings.

### Testing for latent TB infection (LTI)

Because an interferon gamma release assay (IGRA) blood test has increased specificity for TB infection in persons vaccinated with BCG, IGRA is preferred over the tuberculin skin test (TST) in these persons. Most persons born outside the United States have been vaccinated with BCG.

### Previous or inactive tuberculosis

Persons with a previous chest radiograph showing findings consistent with previous or inactive TB should be tested for LTI. In addition to LTI testing, evaluate for active TB disease.

Negative test for LTI does not rule out TB disease. It is important to remember that a negative TST or IGRA result does not rule out active TB disease. In fact, a negative TST or IGRA in a person with active TB can be a sign of extensive disease and poor outcomes.

Symptoms of TB should trigger evaluation for active TB disease. Persons with any of the following symptoms that are otherwise unexplained should be medically evaluated: cough for more than 2-3 weeks, fever, night sweats, weight loss, hemoptysis.

### Most patients with LTI should be treated

Because testing of persons at low risk of LTI should not be done, persons that test positive for LTI should generally be treated so an active TB disease has been ruled out. However, clinicians should not be compelled to treat low-risk persons with a positive test for LTI.

### Emphasize an short course for treatment of LTI

Shorter regimens for treating LTI have been shown to be more likely to be completed and the 3-month RI dose regimen has been shown to be as effective as 9 months of isoniazid. Use of these shorter regimens is preferred in most patients. Drug-drug interactions and contact to drug resistant TB are typical reasons these regimens cannot be used.

### Repeat risk assessment and testing

If there is a documented history of positive TB test or TB disease, then a symptom review and chest x-ray should be performed at least 6-12 months. Do not a person has a documented positive test for TB infection that has been followed by a chest x-ray (CXR) that was determined to be free of infectious TB, the TB risk assessment (and repeat x-ray) is not necessary.

Repeat risk assessments should occur every four years (unless otherwise required) to identify any additional risk factors, and TB testing based on the results of the TB risk assessment. Re-testing should only be done in persons who previously tested negative and have **new** risk factors since the last assessment.

Please consult with your local public health department as any other recommendations and considerations that should also be considered.

### Scan to use the electronic Risk Assessment



## Voluntary Tuberculosis Risk Assessment Frequently Asked Questions

SNHD's recommendation is that school staff working with children complete a voluntary tuberculosis risk assessment and if indicated, test for TB. Additionally, this risk assessment follows recommendations for targeted TB testing from the Federal Centers for Disease Control and Prevention (CDC).

### Who developed the voluntary TB risk assessment?

The Southern Nevada Health District developed the TB risk assessment. The risk assessment was adapted from a form developed by Minnesota Department of Health TB Prevention and Control Program and the Centers for Disease Control and Prevention. The Health District plans to use this survey to identify at-risk individuals and recommend the screening and follow-up for students, teachers, and those who work in public settings.

### What happens after taking the risk assessment?

If a risk is identified - No further follow-up is required. If you experience future risk, you can take the screening again.

If risk is identified - Take the results of the screening to your health care provider. If you do not have a health care provider, call SNHD at 702-750-5015 for referrals.

Who receives the results of this screening? Health district staff review the results and provide referrals as needed.

Who is this information shared with? The risk assessment is confidential, and the information is not shared with anyone outside of the agency.

### What is a "health care provider"?

A "health care provider" means any organization, facility, institution, or person licensed, certified, or otherwise authorized or permitted by state law to deliver or furnish health services.

### In regard to travel, what is meant by "prolonged exposure"?

While the CDC does not define "prolonged exposure" they do recommend pre- and post-travel screening if going to live or spend significant time in a TB-endemic country. For example, if a person stayed in an endemic country and then returned. If you wish to discuss this further or need additional guidance, you may contact the local health department at 702-750-5015.

### What if I have TB screening or treatment questions?

If you have specific TB screening or treatment questions, please contact your local TB control program <https://www.snhd.com/health/district.org/communit-health-center/tuberculosis-treatment-control-distro/>

### Who may I contact to get further information or to download the TB risk assessment?

Southern Nevada Health District  
<https://www.snhd.com/health/district.org/communit-health-center/tuberculosis-treatment-control-clinic/tuberculosis-tb-screening-questionnaire/>


### Other resources:

Nevada Tuberculosis (TB) Prevention, Control and Elimination Program  
[https://snhd.com/Program/TB/Tuberculosis\\_TB\\_Prevention\\_Control\\_and\\_Elimination\\_Program\\_0609/](https://snhd.com/Program/TB/Tuberculosis_TB_Prevention_Control_and_Elimination_Program_0609/)



# SNHD Response

- Online Screening Tool
  - QR Code
  - <https://www.southernnevadahealthdistrict.org/community-health-center/tuberculosis-treatment-control-clinic/tuberculosis-tb-screening-questionnaire/>
- One page flyer



**Are you at risk for TB?**

Southern NV Health District (SNHD) recommends that school staff working with children screen for risk of LTBI and infectious tuberculosis (TB). **Early detection and treatment of TB Infection (also known as Latent TB) can prevent Active TB Disease.**

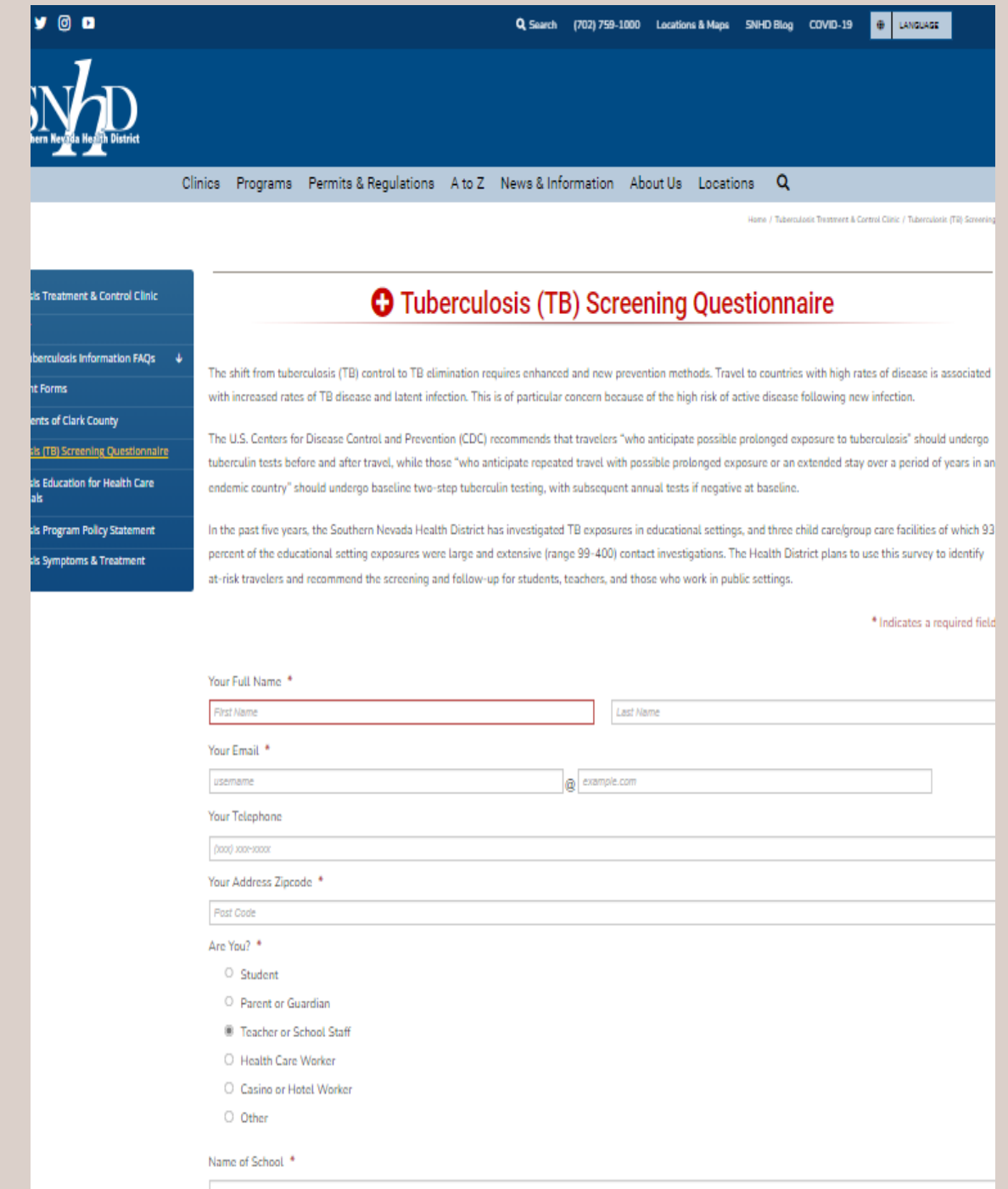

**Who should be tested for TB**

- Infants, children, and adolescents exposed to adults who are at increased risk for latent tuberculosis infection or TB disease
- People from a country where TB disease is common (most countries in Latin America, the Caribbean, Africa, Asia, Eastern Europe, and Russia)
- People who have spent time with someone who has TB disease
- People who live or work in high-risk settings (for example: correctional facilities, long-term care facilities or nursing homes, and homeless shelters)
- Health-care workers who care for patients at increased risk for TB disease

It's easy to screen for TB infection!

After completing the **confidential** screening, you will know if you should get tested. You can visit your own healthcare provider for testing or if you need help finding a provider or other resources, SNHD can help! If you qualify based on the screening you will receive an email with guidance and additional information.

Scan to use the electronic Risk Assessment



**Tuberculosis (TB) Screening Questionnaire**

The shift from tuberculosis (TB) control to TB elimination requires enhanced and new prevention methods. Travel to countries with high rates of disease is associated with increased rates of TB disease and latent infection. This is of particular concern because of the high risk of active disease following new infection.

The U.S. Centers for Disease Control and Prevention (CDC) recommends that travelers "who anticipate possible prolonged exposure to tuberculosis" should undergo tuberculin tests before and after travel, while those "who anticipate repeated travel with possible prolonged exposure or an extended stay over a period of years in an endemic country" should undergo baseline two-step tuberculin testing, with subsequent annual tests if negative at baseline.

In the past five years, the Southern Nevada Health District has investigated TB exposures in educational settings, and three child care/group care facilities of which 93 percent of the educational setting exposures were large and extensive (range 99-400) contact investigations. The Health District plans to use this survey to identify at-risk travelers and recommend the screening and follow-up for students, teachers, and those who work in public settings.

\* Indicates a required field

Your Full Name \*

First Name Last Name

Your Email \*

username @example.com

Your Telephone

(xxx) xxx-xxxx

Your Address Zipcode \*

Post Code

Are You? \*

Student

Parent or Guardian

Teacher or School Staff

Health Care Worker

Casino or Hotel Worker

Other

Name of School \*

**THANK YOU**

**Questions?**