State of Nevada
Department of Health and Human Services

It’s Time to Meet Your Nevada TB Partners

Division of Public and Behavioral Health (DPBH) Tuberculosis (TB) Program

Susan McElhany, DMD, DPBH TB Program Manager

Helping people. It’s who we are and what we do.

Created Mar 2021
Agenda for today’s brief presentation:

• DPBH TB program: Overview of TB in the World/US/NV
• Southern Nevada Health District (SNHD)- serving Clark Co.
  • Highlights of services and TB in Clark County
• Washoe County Health District (WCHD)- serving Washoe Co.
  • Highlights of services and TB in Washoe County
• Closing comments from DPBH TB
WORLD TB DAY, March 24

World TB Day is observed each year on March 24, commemorating this day in 1882 Dr. Robert Koch announced his discovery of the bacillus that causes tuberculosis (TB).
TB in the World

• TB is the greatest *infectious killer worldwide (pre-COVID).*

• TB is one of the top 10 causes of death worldwide.

• 10 million new cases of TB disease occur yearly.

• TB Infection (LTBI) in 25% of the world’s population (a reservoir for TB disease).

TB in the World

TB is endemic in the world. Most countries have incidences > 25 per 100,000 population.
TB in the United States (US)

National TB Cases and Rates 1993-2019

2019 US TB Cases: 8,916 reported cases; 2.7 per 100,000 Persons Incidence rate

Decreasing trend over 2 decades; but the recent decade shows Leveling trend. It’s Time to End TB!

Source: Centers for Disease Control and Prevention, National Tuberculosis Surveillance System
TB in the United States

TB Case Rates in the United States, 2019

US Average 2019 Incidence Rate = 2.7 per 100,000 persons

Source: Centers for Disease Control and Prevention, National Tuberculosis Surveillance System
TB in the United States


2019: US-born Rate = 0.9 per 100,000; Non-US-born Rate = 14.2

Source: Centers for Disease Control and Prevention, National Tuberculosis Surveillance System
TB in Nevada

Nevada and US TB Incidences & Nevada Case Numbers, 2010 - 2019

Data Source: Centers for Disease Control and Prevention, National Tuberculosis Indicator Project Data Sets 2010-2019
TB in Nevada (NV)

TB Case Numbers in Nevada by County, 2013-2020

Source: Nevada National Electronic Data Surveillance System (NBS), data sets 2013 - 2020
TB in Nevada


Data Source: Centers for Disease Control and Prevention, National Tuberculosis Indicators Project, Data Sets 2010-2019
TB in Nevada

Countries of Origin as Percentages of Total Nevada Non-US-Born TB Cases, 2010-2019

- Philippines: 38%
- Mexico: 21%
- Other*: 30%
- Ethiopia: 6%
- China: 5%

*All other countries with less than 5% each.

Data Source: Centers for Disease Control and Prevention, National Tuberculosis Surveillance System, Data Sets 2010-2019
TB in Nevada

Risk Factors/Comorbidities in NV

Total cases 2015-2019 (341), percent of cases with:

- Diabetes: 23%
- HIV Infection: 7%
- TNF antagonists: 1%
- Renal Failure: 1%
- Immunocompromised: 2%

Data Source: Centers for Disease Control and Prevention, National Tuberculosis Surveillance System, Data Sets 2015-2019
TB Transmission

- The TB bacteria are released and spread through the AIR when a person with active TB disease **coughs, speaks or sings**
  - to a person in close proximity, sharing the same air space.

- **TB is NOT** spread by:
  - sharing food/drink,
  - shaking hands,
  - touching bedding,
  - toilet seats,
  - or, generally, touching a surface.
TB Disease Differs from TB Infection (TB vs LTBI)

**TB Disease**
- Active
- Infectious/Contagious
- Symptomatic
- Generally, sick, does not feel well
- Chest X-ray Abnormal

**TB Infection/LTBI**
- Dormant/Latent
- Not Contagious, not infectious
- No symptoms
- Feels fine, normal
- Chest X-ray Normal
TB Disease Differs from TB Infection
(TB vs LTBI)

Active TB Disease:
• About 3 out of 100,000* people have active TB disease in the U.S.
• Most world countries have higher rates of active TB disease, > 10 out of 100,000.** (excluding Western Europe, Canada, Australia, and New Zealand)

TB Infection/LTBI:
• U.S. estimates for LTBI are 2-5% or 10-15 million people infected.*
• World estimate: 1 out of 4 people in the world are infected with TB.*

**Source: TBFACTS.org, https://www.tbfacts.org/countries-tb/
A Need for Partnering

• There is a 5-10% risk of untreated LTBI progressing to active TB disease. This risk increases 20-30% in certain high-risk groups.

• In the US, most active TB disease cases, ~80%, come from **progression from TB infection into active TB disease.**

• Too many people still suffer from TB disease. We must continue to find and treat cases of active TB disease and test and treat latent TB infection to prevent progression to disease and turn TB elimination into a reality.

Source: CDC, [https://www.cdc.gov/tb/topic/basics/default.htm](https://www.cdc.gov/tb/topic/basics/default.htm)
Southern Nevada Health District

• **Patients:**
  • Active (adult/pediatric)
  • Contacts
  • Class B
  • Change of Status
  • Refugees
  • LTBI (High Risk)

• **Consultation:**
  • Testing guidance
  • Treatment guidance

• **Educational Sessions:**
  • TB 101 for various audiences
  • Screening for and treatment of LTBI
  • Customized trainings

Slide courtesy of the Southern Nevada Health District TB Program.
Southern Nevada Health District

- **Current Actives: 32**
  - Pulmonary Multidrug Resistant: 2
  - Pulmonary: 26
  - Pulmonary/Lymphatic: 1
  - Pulmonary/Potts: 1
  - Meningitis: 1
  - Pleural: 1

- **Current Cases with Drug Resistance**
  - INH Resistance: 5
  - PZA Resistance: 2
  - Multidrug: 2

Slide courtesy of the Southern Nevada Health District TB Program.
Southern Nevada Health District

- **Case Management:**
  - Complete Needs Assessment
  - Housing
  - Groceries
  - Transportation
  - Medication Compliance/Completion
  - Education

- **Contact Investigation:**
  - Infectious Period Determination
  - Exposure sites – including medical offices/procedures
  - Screening and referral for further testing/treatment

- **Surveillance:**
  - Active and suspected cases
  - LTBI

Slide courtesy of the Southern Nevada Health District TB Program.
Southern Nevada Health District

• **Cohort Review:**
  • Quarterly – open to health care providers, infection control/prevention, case managers/social workers, etc.

• **Reporting:**
  • Active and suspected cases, regardless of disease site
  • LTBI
  • Dispensing of two or more drugs used for treatment of TB
  • Online: [https://www.southernnevadahealthdistrict.org/news-info/reportable-diseases/](https://www.southernnevadahealthdistrict.org/news-info/reportable-diseases/)
  • Fax: 702-759-1435
  • Phone: 702-759-1015

• **Treatment Consultation:**
  • Phone: 702-759-1370

Slide courtesy of the Southern Nevada Health District TB Program.
Washoe County Health District

WCHD TB Program

- Where We Are
- Who We Are
- What Is Our Mission
- What We Provide
- Who Do We Serve
- When Are We Available

Slide courtesy of the Washoe County Health District TB Program.
Where Are We

• 10 Kirman Avenue, Reno, NV 89502
• Corner of Kirman and 2nd Street. Same block as the main Renown Campus.
• 775-785-4785      Fax: 775-785-4737
Who We Are

- Angela Penny, RN, PHN III
  Program Manager
- Charles Krasner, MD
  Infectious Disease Consultant
- Sonia Budhecha, MD
  Pediatric Pulmonology Consultant
- Cory Sobrio, RN, PHN II
  TB Program Coordinator
- Judy Medved-Gonzalez, RN, PHN II
  TB Case Manager
- Lisa Iacoboni, RN, PHN II
  TB Case Manager
- Lorena Solorio
  Office Assistant

Slide courtesy of the Washoe County Health District TB Program.
What is Our Mission

To provide the most current expertise in TB services to our clients and providers with dignity and compassion.
What We Provide

- Case management and treatment for all active TB cases in Washoe County, including DOT and contact investigations related to these cases.
- Case management and treatment for LTBI clients who have a high risk for disease progression in Washoe County.
- Evaluation, diagnosis, and treatment of class B immigrants referred from CDC’s Division of Global Migration and Quarantine (DGMQ).
- Evaluate clients with signs and symptoms of TB.
  - Hospital referrals
  - Positive AFB lab reports
  - Sputum coaching and observation
  - Review abnormal chest x-rays for community providers
- Support for primary care providers in the diagnosis and treatment of LTBI in their own patients.
- Support for community providers in the screening of healthcare workers/patients in a variety of settings.
- Screening of high-risk populations who do not have access to a medical provider.
- Phone consultations-TB education to anyone requesting it.
- Direct communication with high-risk settings for enhanced TB control and prevention.

Slide courtesy of the Washoe County Health District TB Program.
Who Do We Serve

Washoe County Residents:

Clinic services:

- Provide directly observed therapy (DOT) to persons with active TB disease
- Provide TB disease evaluation and consultation for clients referred by their physicians
- Identify and test persons exposed to someone with active TB disease (contact investigation)
- Evaluate new immigrants planning to reside in Washoe County for active TB disease
- Test household members of new immigrants
- Evaluate symptomatic persons living at shelters
- Test new group home residents referred by Washoe County Social Services
- Provide TB education to all persons residing in Washoe County
- Provide Latent Tuberculosis Infection (LTBI) treatment to:
  - Infected contacts to active TB
  - Children under 5 years of age and members of their household
  - Immigrants and members of their household
  - Homeless persons
  - Former inmates who are homeless upon release from jail or prison
  - Persons with high medical risk for developing TB disease

Slide courtesy of the Washoe County Health District TB Program.
When are We Available

• 24/7 for active and suspect TB cases.
• Monday through Friday, 8-Noon and 1-5.
• We are flexible to meet the needs of our community and provide DOT services for active cases 7 days/week.

Slide courtesy of the Washoe County Health District TB Program.
Reach out to us for TB help

• If it is at all TB related, please don’t hesitate to give us a call. A call to us first will alleviate problems going forward.

• If we don’t know the answer, we will get the answer for you.

• For providers who ask themselves, what do I do next-one answer could be to call WCHD TB.

Slide courtesy of the Washoe County Health District TB Program.
Thanks to our community comrades helping us each day in fighting TB

- Our infection preventionists in the hospitals
- WC Infectious Disease and Pulmonology Providers
- Washoe County Primary Care Providers
- WC FQHC’s- helping to establish care for our most vulnerable
- Davita Dialysis Center
- NSPHL
- NSHD TB Program
- WC shelter staff and treatment programs
- WC Detention Facility

Slide courtesy of the Washoe County Health District TB Program.
Rural and Smaller Counties

Carson City Health and Human Services (CCHHS) and the DPBH Community Health Services (CHS) serve the counties of Nevada excluding Clark and Washoe.

Services:

• Consultation on LTBI and suspected TB
  • Please report suspected TB or confirmed TB – we’re only a phone call away.

• Case management of individuals with TB disease
• Surveillance/contact investigations as necessary

CCHHS: Phone 775-887-2190, Fax 775-887-2138

DPBH CHS: Phone 775-684-5911, Fax 775-684-5999

DPBH TB: Phone 775-684-5936, Fax 775-684-5999
Communicate and Collaborate

It’s time we all partner to END TB in Nevada.

Please reach out to your local TB program, or state DPBH TB program; we are here to assist. (Only a call away.)

RESOURCES AVAILABLE ON WEBSITES

Tuberculosis (TB) Prevention and Control Program (TBPCP)

The Washoe County Tuberculosis Control Program is dedicated to controlling the spread of tuberculosis by ensuring effective treatment for persons with active TB disease, identification and
Communicate and Collaborate

DPBH TB Program Manager:
email contact: smcelhany@health.nv.gov

Tuberculosis (TB) Prevention, Control and Elimination Program

General Information

The Tuberculosis Prevention, Control, and Elimination Program aims to reduce the incidence of tuberculosis (TB) within Nevada’s diverse communities and institutions. All individuals with newly diagnosed TB disease are ensured patient-centered best practice treatment and case management. To reduce the morbidity and mortality of TB disease, identification of and preventative treatment for individuals at high-risk for latent TB infection (LTBI) and progression to TB disease are actively promoted by the Program.

TB and COVID-19 Resources (new 2/2021)

- CDC Guidance Tuberculosis and Public Health Emergencies, for Patients and Professionals
- TB/COVID-19 Comparisons, Clinical comparisons and testing recommendations from DPBH TB
- TB Testing Around COVID-19 Vaccinations, Interim guidance for Healthcare facilities and TB testing

Primary Functions of the Tuberculosis Prevention, Control and Elimination Program

- Identify every TB disease case in Nevada and assure rapid TB disease reporting, treatment, and prevention activities are conducted, as well as required surveillance and genotyping data management;
Thank You!

• Questions?

• Future Presentations/Education Outreach — needs?

Please email DPBH TB with requests, ideas
(smcelhany@health.nv.gov)

Acknowledgement:

This presentation was supported by the Nevada State Department of Health and Human Services through Grant Number NU52PS910224 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Department nor the Centers for Disease Control and Prevention.