



## World TB Day – March 24

### TB ELIMINATION: TOGETHER WE CAN!



More than one and a quarter centuries ago, Robert Koch, a German physician, discovered *Mycobacterium tuberculosis*, the cause of tuberculosis (TB). In less than 100 years

following the discovery, antibiotics and a vaccine were developed against tuberculosis. Optimism abounded that this disease that had plagued man for thousands of years would soon be eliminated.

Improved social conditions, effective treatment and cure of tuberculosis have produced encouraging decreases in the number of TB cases in industrialized nations leading many to believe that TB is a disease of the past.

Yet tuberculosis remains the second leading cause of death among infectious diseases, and seventh leading cause of death among all causes in the world.<sup>1</sup>

The number of cases of tuberculosis in the United States is the lowest it has ever been since the Center for Disease Control and Prevention (CDC) began collecting data on TB cases in 1953 and continues to decrease each year. Nevada is a medium incidence state with approximately 100 cases per year. Washoe County treats on average only 15 cases per year.

This year's World TB Day theme: **TB Elimination: Together We Can** rings true for Washoe County. TB elimination is dependant on health care providers, employers and community members remaining aware that TB is still a threat to our wellbeing.

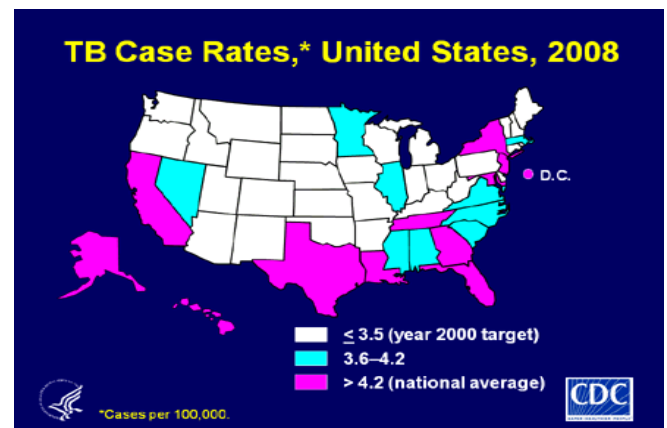
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<http://www.who.int/mediacentre/factsheets/fs310/en/index.html>

Because TB continues to wreak havoc around the world and does not respect geographical boundaries; it is important to remain vigilant and "Think TB" even though Washoe County encounters only a few cases each year.

Prompt diagnosis and effective treatment reduce the infectious period and decreases the risk of transmission. Treatment of latent tuberculosis infection (LTBI) reduces the opportunity for TB to strike future generations.



Prompt diagnosis includes obtaining appropriate diagnostic tests: Tuberculin Skin Test (TST) or Blood Assay for *Mycobacterium tuberculosis* (BAMT) such as Quantiferon TB in tube, chest radiography, sputa and/or tissue specimens for acid fast bacilli (AFB) smear and culture. Tissue samples must be placed in an appropriate transport medium, not formalin. Even when extra-pulmonary TB is diagnosed, approximately 9% of cases also have pulmonary TB, making chest radiography and sputa for AFB critical components in the complete evaluation of these patients.

Effective curative treatment of TB disease requires the use of multiple anti-tuberculosis drugs in adequate doses for a sufficient duration of time to ensure tuberculocidal effects and prevent the development of drug resistance.

The Washoe County Health District Tuberculosis Prevention and Control Program (TBPCP) staff and contract physicians provide the most current and effective treatment regimens to persons residing in Washoe County who have been diagnosed with TB disease.

The TBPCP welcomes your questions and referrals: 775-785-4785. Please visit our website for additional information and links to other TB resources:  
<http://www.washoecounty.us/health/cchs/tbp.html>

## Think TB

### When a person has:

- ◆ Symptoms – Cough, weight loss, loss of appetite, night sweats, fever, fatigue, etc.
- ◆ Unexplained, unresolved pneumonia
- ◆ Traveled to or resided in a TB endemic country
- ◆ Lived or lives in a congregate setting (eg. correctional facilities, homeless shelters, extended care facilities)
- ◆ A positive TST or Blood Assay for *Mycobacterium tuberculosis* (BAMT) (may be negative if immunosuppressed)
- ◆ A chest x ray consistent with TB – upper lobe infiltrates, cavitory lesions, pleural effusions, lymphadenopathy
- ◆ Immunosuppressive conditions (Diabetes, HIV, etc)
- ◆ Risk factors for extra-pulmonary TB – consumption of unpasteurized milk products, traveled or resided in Mexico or Central America.

The TBPCP utilizes directly observed therapy (DOT) throughout treatment for TB disease. The use of DOT provides persons with TB disease the support and encouragement needed to get through a minimum of 6 months of treatment. Additionally, DOT is a proven effective method to reduce the risk of drug resistance, assess response to therapy, and provide early identification of potentially harmful medication side effects.

## Washoe County TB Statistics

Figure 1. Reported Cases of TB by Gender, Washoe County, 1999-2008

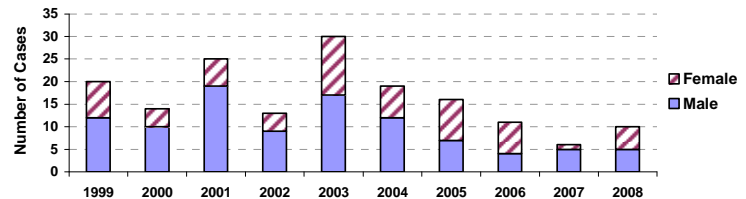


Figure 2. Incidence Rates (per 100,000) of Reported Cases of TB, Washoe County, 1999-2008

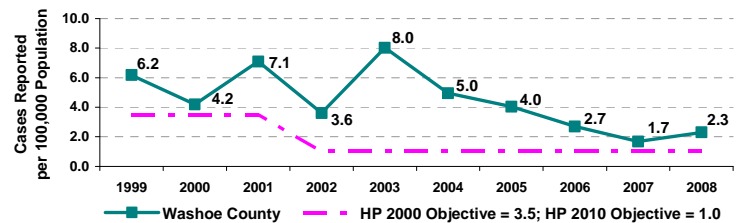


Figure 3. Incidence Rates (per 100,000) of Reported Cases of TB by County, Nevada, 1999-2008

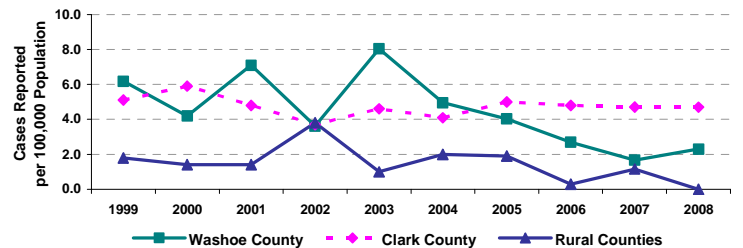
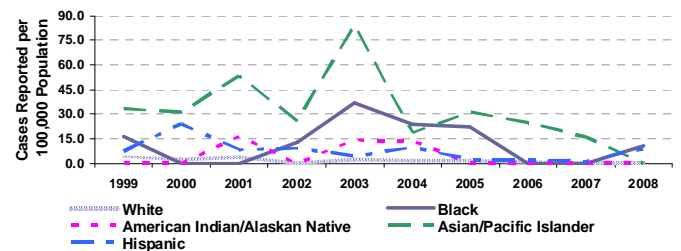


Figure 4. Incidence Rates (per 100,000) of Reported Cases of TB by Race/Ethnicity, Washoe County, 1999-2008



**TB Elimination: Together We Can!**