



Nevada State Health Division Technical Bulletin



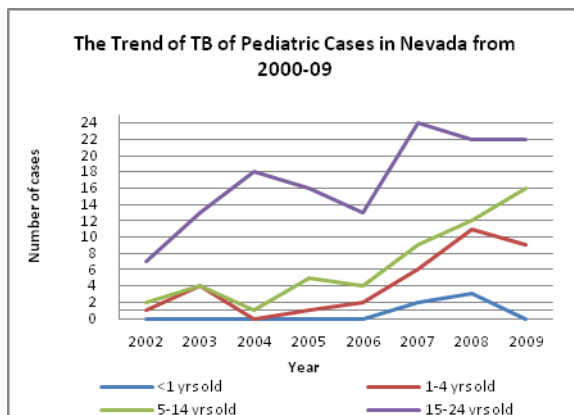
Topic: Screening Pediatric Patients at Risk for Tuberculosis Disease
Section/Program/Contact: Office of Epidemiology / Tuberculosis Program /
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Date: 07/26/10

TO: All Healthcare Providers, Law Enforcement and Emergency Response Staff

Recently Identified TB Risk Factors for Pediatric Patients

The Nevada State Health Division (NSHD) is alerting health care providers, law enforcement and emergency responders to be aware that illicit drug use in Nevada has been strongly associated with the spread of *M. tuberculosis* (TB).

Nevada has been experiencing an alarming increase in the frequency of pediatric TB cases for the past three years (as illustrated in the attached chart). A diagnosis of an active TB disease or a latent tuberculosis infection (LTBI) in a child frequently represents a recent transmission of *M. tuberculosis complex*.¹ Preliminary results of investigations conducted by local county health departments, in conjunction with the NSHD, identified several risk factors that were common among these cases; most significant of these risks are the following:



1. A large number of these cases have a household contact or a very close relationship with an individual who uses illegal drugs, most notably methamphetamine, marijuana and cocaine.
2. Many of these cases are children of young mothers or are young mothers themselves.
3. Individuals who have spent time in jails, detention centers and prisons have also been identified as contacts to these pediatric TB cases.
4. Most of the cases (especially < 5 years of age) had recent prior interactions with healthcare providers prior to being diagnosed with TB. Most notably, these cases are presenting in Emergency Departments and urgent care centers with respiratory or unresolved pediatric issues (e.g. ear infections, gastric symptoms, enlarged lymph nodes without an established infection, or are being seen as part of well baby exams without screening for TB as it is recommended by the American Academy of Pediatrics).


Such missed opportunities to prevent, early detect and properly and timely manage TB cases are well recognized and documented in numerous TB control plans. The Center for Disease Control and Prevention's (CDC) task order 3ⁱⁱ noted that delays and missed opportunities for the

diagnosis of TB in children and their source cases occur at the patient, provider, and health department level, leading to:

- a. missed opportunities for preventing exposure to *M. Tb*
- b. missed opportunities for reducing the period of exposure to *M. Tb*
- c. missed opportunities for preventing the progression of *M. Tb* infection to disease.

At this time, the NSHD is recommending that public health providers and clinicians screen pediatric patients for *M. tuberculosis* infection who may be associated with the above risk factors. Due to the fact that symptoms of primary pulmonary disease in the pediatric population is often meager (fever, night sweats, anorexia, nonproductive cough, failure to thrive, and difficulty gaining weight) and that most of these children were diagnosed late in their course of disease when they already had symptoms,ⁱⁱⁱ the NSHD encourages the routine use of TB screening tests in emergency departments, clinics, and family practice for this population. Special attention to parental and adult contacts risks factors (e.g. foreign-birth or extended travel abroad, previous contact to TB case, previous LTBI diagnosis or treatment, age, incarceration, or illegal drug use) should be taken into consideration when collecting the comprehensive history.

Suspected TB disease in Nevada is a reportable condition. Reporting forms can be found at: <http://health.nv.gov/Epidemiology/MorbidityForm-interactive.pdf>

Signed:  Date: July 27, 2010
Tracey Green, MD, State Health Officer
Nevada State Health Division

Signed:  Date: July 27, 2010
Richard Whitley, Administrator
Nevada State Health Division

ⁱ Underuse of Effective Measures to Prevent and Manage Pediatric Tuberculosis in the United States. ©2008 American Medical Association.
<http://archpedi.ama-assn.org/cgi/reprint/162/5/426?maxtoshow=&hits=10&RESULTFORMAT=&fulltext=pediatric+TB&searchid=1&FIRSTINDEX=0&resourcetype=HWCIT>

accessed June 7, 2010

ⁱⁱ <http://www.cdc.gov/tb/topic/research/TBESC/task3.htm>

ⁱⁱⁱ <http://emedicine.medscape.com/article/969401-overview>