Overview of Enforcement for Occupational Exposure to Tuberculosis (TB)
Tuberculosis

• Infectious disease caused by the bacterium, *Mycobacterium tuberculosis*.

• Spread by airborne droplets, “droplet nuclei,” which may be generated when a person with TB disease coughs, sneezes, speaks or sings.
Occurrence

- Nearly one-third of the world’s population is infected with TB, which kills almost 3 million people per year.
Why Is TB Increasing?

Multiple contributing factors:

• Homelessness
• Intravenous drug use
• Overcrowding in institutional settings
• HIV infection
• Drug-resistant strains of TB
• Reduced TB control and treatment resources
• Immigration from high TB prevalence areas
Where Is TB Found in the Workplace?

- Healthcare Facilities
- Correctional Institutions
- Homeless Shelters
- Long-term Care Facilities for the Elderly
- Drug Treatment Centers
OSHA’s TB Policy

- Employers must comply with the provisions of the following requirements whenever an employee may be occupationally exposed to TB:
  - Section 5 (a)(1) - General Duty Clause and Executive Order 12196, Section 1-201(a) for federal facilities;
  - 29 CFR 1910.134 - Respiratory Protection;
OSHA TB Policy (Continued)

- 29 CFR 1910.145 - Accident Prevention Signs and Tags;
- 29 CFR 1910.1020 - Access to Employee Exposure and Medical Records; and
- 29 CFR 1904 - Recording and Reporting Occupational Injuries and Illnesses.
General Duty Clause

Section 5 (a)(1) of the OSH Act states:

“Each employer shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees.”
General Duty Clause (Continued)

Citations shall be issued to employers with employees working in one of the workplaces where the CDC has identified workers as having a higher incident of TB infection than the general population, when the employees are not provided appropriate protection and who have TB exposure.
Feasible and Useful TB Abatement Methods

- Protocol for the early identification of individuals with active tuberculosis
- Medical surveillance
- Case management of infected employees
- Worker training and education
- Engineering controls
TB and Respiratory Protection

- The primary means to control occupational diseases caused by breathing contaminated air is through the use of feasible engineering controls such as enclosures, confinement of operations, ventilation or substitution of less toxic materials.
- When these controls are not feasible, or while they are being instituted, appropriate respirators shall be used.
 Covered establishments must comply with 29 CFR 1910.134 when using respirators for protection from TB.
TB and Respiratory Protection (Continued)

• Respirator Program Elements
  – Selection
  – Medical evaluation
  – Fit testing
  – Use
  – Maintenance and care
  – Breathing air quality and use
  – Training
  – Program evaluation
• NIOSH certifies three categories of non-powered air purifying respirators based on filtering efficiency. All three categories are acceptable for use against TB:
  – Type 100 (99.97% efficient)
  – Type 99 (99% efficient)
  – Type 95 (95% efficient)
TB and Respiratory Protection (Continued)

- The 1994 CDC Guidelines specify the following criteria for respirators for exposure to TB:
  - Ability to filter 1 micron in size in the unloaded state with a filter efficiency greater than 95%.
  - Ability to be qualitatively or quantitatively fit tested in a reliable way to obtain face-seal leakage of less than 10%.
• CDC Guidelines (continued):
  – The ability to fit the different facial sizes and characteristics of health care workers which can usually be met by making the respirators available in at least three sizes.
  – The ability to check for face piece fit in accordance with OSHA standards and good industrial hygiene practice, by health care workers each time they put on their respirator.
TB and Respiratory Protection (Continued)

• Employees must wear NIOSH certified respirators in the following circumstances:
  
  – When workers enter rooms housing individuals with suspected or confirmed TB disease;
  – When workers perform high hazard procedures on persons who have suspected or confirmed TB disease; and
  – When emergency response employees or others must transport in a closed vehicle, an individual with suspected or confirmed TB disease.
Access to Employee Medical and Exposure Records

- A record concerning employee exposure to TB is an employee exposure within the meaning of 29 CFR 1910.1020.
- A record of TB skin test results and medical evaluations and treatments are employee medical records within the meaning of 29 CFR 1910.1020.
- These records shall be handled according to 29 CFR 1913.10 in order for the CSHO to determine compliance with 29 CFR 1910.1020.
Accident Prevention
Signs and Tags

In accordance with 1910.145 (f)(8), a warning shall be posted outside the respiratory isolation or treatment room or a message referring one to the nursing station for instruction may be posted.

1910.145 (f)(4) requires that a signal word or biological hazard symbol may be presented as well as a major message.
Employers are also required to use biological hazard tags on air transport components which identify TB hazards to employees associated with working on air systems that transport contaminated air.
OSHA 300 Log

• For OSHA 300 recordkeeping purposes, both TB infections (positive TB skin tests) and TB disease are recordable in the workplace.

• If the employee’s TB infection which was entered on the OSHA 300 log progresses to TB disease during the 5 year maintenance period, the original entry for the infection must be updated to reflect new information.

• A positive TB skin test provided within two weeks of employment does not have to be recorded on the OSHA 300 form.
Additional TB Information