Communicable Disease Control: Best Practices for Tuberculosis
Council on Homelessness – Jacksonville, FL

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What is tuberculosis?

- *Mycobacteria Tuberculosis* (TB)

- Slow-growing bacteria that grow best in areas of the body that have lots of blood and oxygen

- Usually in the lungs but can also spread to other parts of the body (extrapulmonary TB)
Transmission of \textit{M. tuberculosis}

- \textit{M. tb} spread via airborne particles called droplet nuclei
- Expelled when person with infectious TB coughs, sneezes, shouts, or sings
- Transmission occurs when droplet nuclei are inhaled and reach alveoli of the lungs
Symptoms of pulmonary TB

- Prolonged cough (3 weeks or longer),
- Hemoptysis (coughing up blood)
- Chest pain
- Loss of appetite, unexplained weight loss
- Night sweats, fever
- Fatigue
Reported Tuberculosis Cases

- 2011 - 753 cases (rate = 4.0/100,000) in Florida; downward trend over past 10 years

- Duval County
  - 2011 – 71 cases (rate of 8.2)
  - 2012 -- 86 cases
Florida Department of Health TB goal

- To decrease the rate of tuberculosis in Florida to 2.0/100,000 by 2020
Problem of TB in Homeless Shelters

- High risk population
- Shelter environment, overcrowding
- Varied health issues
  - Poor nutrition
  - Substance abuse
  - Limited access to TB and HIV education and preventive
  - Poor access to healthcare
  - Poor adherence to treatment and follow-up regimens
Indications for Homeless Service Agencies

- Maintain the safety of residents, employees, and visitors
- Prompt identification of tuberculosis symptoms and referral for appropriate care
- Regulatory compliance (F.S. 392)
Jacksonville Community Tuberculosis Coalition (JCTBC)

- Mission: Collaborate to reduce and control TB as a public health threat in our community
- Goals:
  + Reduce transmission of TB among the homeless and protect clients and staff of homeless shelters and service centers
  + Increase TB education and awareness within our community
Why Guidelines?

- Homeless people are at high risk for TB
- TB, if untreated, can kill people
- Guidelines are tools to help:
  - Regularly test people we serve
  - ID and refer clients who have TB to health care
  - Ensure annual testing of staff and volunteers
  - Identify ways to minimize risk of TB in facilities
Florida Department of Health Role

- Staff, Volunteer TB Testing
- Client TB Testing, Shelter Clearance Cards
- Assure a referral process
- Shelter, Service Staff Training about TB
- Data Management System
Homeless Shelter/Service Provider Role

- Staff, Volunteer Testing and Education
- Administrative Controls
- Environmental Controls
- Respiratory/Cough Alert Procedure
- Data Management
Shelter, Service Staff, and Volunteer TB Testing

- DCHD will provide TB testing upon employment and annually
- TB testing of staff and volunteers is recommended in first 30 days of employment
- More frequent TB testing may be necessary at some sites
- TB test (TST or T-spot)
  - Positive test: CXR, Physician assessment
Methods for detecting *M. tb* infection in US

- Mantoux tuberculin skin test (TST)

- IGRAs (blood tests)
  - QuantiFERON-TB Gold In-Tube (QFT-GIT®), and
  - T-Spot.*TB®*
Administering the TST

- Inject 0.1 ml of PPD (5 tuberculin units) into forearm between skin layers
- Produce wheal (raised area) 6–10 mm in diameter
- Follow universal precautions for infection control
Reading the TST

- Trained health care worker assesses reaction 48–72 hours after injection
- Palpate (feel) injection site to find raised area
- Measure diameter of induration across forearm; only measure induration, not redness
Shelter, Service Staff, and Volunteer Education

- Education/Training:
  - TB disease basics, treatment, prevention
  - DCHD will conduct monthly classes at DCHD and annual update training at sites
  - DCHD will provide annual training update to JCTBC
  - Agencies document staff/volunteer testing and training
Client TB Testing & Shelter Clearance Cards

- DCHD will test the clients and provide Shelter Clearance Cards
- Card will have an Expiration Date
- Overnight shelters are encouraged to require shelter cards
- Shelter Cards should to be renewed prior to expiration
Referral to DCHD

- Refer anyone with:
  + Positive T-spot test/alerted in Service Point
  + Symptoms of TB
    - Cough for more than 3 weeks, coughing up blood
    - Weight loss
    - Night sweats
  + Expired Shelter Clearance Card
- Contact assigned Shelter Liaison to renew
Administrative Controls

- Assure Testing and Training
- Display TB posters
- Maintain bed maps
- Sleep “Head to Toe”
- Require Shelter Clearance Cards
- Track client card expiration in Service Point
Respiratory, Cough Alert Policy

- Alert:
  + Client coughing through the night
  + Client coughing for 3 weeks or more

- Procedure
  + Offer a mask. Masks are an important tool! (Also prevents spread of colds and flu)
  + Contact assigned shelter Liaison to refer to DCHD for evaluation
Data Management

- Clients’ demographic information must be entered into Service Point by service agencies
- DCHD will have access to Service Point
- DCHD will review regularly to locate clients in need of testing or treatment
- DCHD will place Client Alert notice in SP
- DCHD will enter Shelter Clearance Card expiration date into Service Point
Opportunities

- Lessons learned
- New leadership and vision
- Collaboration and shared resources
- Improved outcomes