Health Advisory Update:
TB Outbreak Returns

Tuberculosis (TB) continues to be an important and significant cause of morbidity and mortality in County residents of which healthcare providers (HCP) must be aware and help control. We previously reported a large TB outbreak in the north County in 2014 and 2015. We ask all HCP to maintain a heightened level of clinical suspicion for TB in patients with clinical or radiographic findings suggestive of active TB disease.

In 2014 and 2015, 18 County residents were reported with a genetically matching strain of TB; most live in Lodi. In response, collaboration with hospitals and HCP helped control the outbreak and resulted in fewer cases temporarily. In 2016, three residents were reported with this outbreak-related TB strain, and another five cases so far in 2017. The situation requires renewed attention and collaboration from HCP and partners.

**ACTIONS REQUESTED OF ALL CLINICIANS:**

**Think** (suspect) TB in anyone with suggestive history and symptoms. Remember that most children tend to show minimal or no symptoms when ill with TB.

**Test** for TB in adults, children and infants under suspicion with skin testing, radiographs, sputum AFB smears, cultures and PCR, as indicated.

**Treat** active TB disease and TB infection in consultation with the TB Controller staff.

**Prevent** TB with early identification and treatment of TB disease and infection and education of patients.

**Report** all TB suspects to San Joaquin County Public Health Services (PHS) TB Control program at (209) 468-3828.

Details below

The following guidelines are for your convenience:

1. Think TB
   - **Assess** your patients for any symptoms of TB, history of TB or exposure to anyone with TB. Know the risk factors for TB infection (close contact to a person with infectious TB, foreign born, congregate living, homelessness, and substance abuse) and the risk factors for progression to active TB disease (recent infection, diabetes, immunosuppression including HIV infection and use of TNF-α inhibitors, smoking, and age < 5 years).
• **Consider** TB in the differential diagnosis of patients presenting with cough for 3 weeks or longer, hemoptysis, weight loss, fever, or fatigue.

• Maintain a heightened level of clinical suspicion for TB in children. Children with active TB are typically asymptomatic or have mild respiratory complaints. If disease recognition is delayed and disseminated disease occurs, clinical findings can be more prominent including fever, night sweats, weight loss, “failure to thrive”, growth retardation, and symptoms specific to organ involvement. The bacillary load of pediatric TB is usually low and younger children are rarely infectious to others. Typical chest x-ray findings include hilar adenopathy with or without parenchymal infiltrates, which can occur in any lobe.

2. Test for TB

• **Test** for TB infection:
  
  o Place a TB skin test (TST, commonly called a PPD), unless the patient has a previous positive result documented in millimeters of induration. Ensure that a health professional measures the result two to three days after placement.

  o If patient has received BCG or might not return for a TST reading, consider drawing blood for an Interferon Gamma Release Assay (IGRA) in place of a skin test.

• **Medical** evaluation: Patients with positive IGRA or positive TST results (≥ 10 mm induration, or ≥ 5 mm induration if immunocompromised or a contact to TB disease) should be evaluated for TB, including clinical exam and appropriate radiographic studies.

• **Bacteriologic** evaluation: (if symptoms and/or chest X-ray indicate possible TB),
  
  o Collect sputum specimens on 3 separate days (minimum 8 hours apart and at least one in morning).

  o Ensure that all specimens are sent for smear, culture, and one for rapid TB DNA testing (PCR/GeneXpert). By law, at least one isolate must be sent to the public health lab.

  o Ensure that susceptibility testing is performed on all positive cultures.

3. Treat TB

• Begin standard **four-drug** treatment on all active TB disease patients (consult with our TB control staff).

• Once active TB disease is excluded, treat TB infection to prevent future cases of active disease.

4. Prevent TB

• Once a TB case has been reported, our TB Control staff will work with you to ensure that the patient completes treatment for their TB disease and that all their significant contacts are promptly identified, evaluated, and treated, if necessary.

5. **Report all** suspected and/or confirmed TB cases to San Joaquin County Public Health Services within **one working day, as required by State law.**

• **Suspected** TB cases include patients who have:
  
  o A sputum smear or preliminary culture result that is positive for acid fast bacilli,

  o Been started on anti-TB therapy for clinical suspicion of active TB.

• The TB Confidential Morbidity Report (CMR) can be found at: http://www.sjcphs.org/Disease/documents/cdph110b.pdf?2

• Fax completed CMR to (209) 468-8222.

  **For more information, call PHS TB Control Staff at 468-3828**