Tuberculosis (TB) and Occupational Health

On March 24 every year, we celebrate World TB Day. This is an effort to raise public awareness and the goal of working towards the elimination of this bacterial disease worldwide. It was over 130 years ago when Dr. Robert Koch identified the cause of tuberculosis which at that time was the cause of death for one every seven deaths across Europe and the Americas. As recently as 2018 over 10 million people contracted TB, and 1.5 million people worldwide died from TB primarily in third world countries where vaccinations may not be available.

In the United States, TB affects approximately three people in every 100,000 according to 2018 statistics, down from seven per 100,000 in 2000. The population hit hardest is those over age 65, and it is definitely more prevalent in the male population across the board (blue in graph below). Those sub-groups that are affected further are those who have a compromised immune system, particularly those who are of a HIV status due to an inability to fight infections as adequately.

Prevention

Here in the United States TB prevention is a universally accepted procedure. As part of what we call medical surveillance. We should all remember getting a TB test as a child or periodically through life to determine our status of immunity to TB. This is particularly important when applying for certain jobs that can involve working with individuals or being exposed to TB potential. This includes the healthcare fields, (particularly nursing facilities) law enforcement officers, firefighters, and schoolteachers. Because TB is a contagious airborne disease and is spread via droplets typically from a person who has active TB coughing, it is critically important to know a potential employees TB status when hiring them. For those workers who will also be working around the physically frail, old, or in some foreign
Services Provided

Physical Examinations:
- Department of Transportation (DOT)
- Explosive handlers physical
- Fitness for duty/return to work
- Merchant mariner exams
- Respirator clearance exams
- Periodic surveillance exams
- Firefighter annual exams

Injury Care Treatment:
- Workers’ compensation initial visit
- Workers’ compensation follow-up
- Blood borne pathogen exposure

Substance Screening and Tests:
- Blood alcohol and breath alcohol
- Hair sample collection
- Urine drug screens 5 and 10 panel instant and send out
- Saliva testing
- Random selection drug screening programs
- Medical review officer services

OSHA Required Surveillance:
- Silica respirator exams
- Audiograms/hearing conservation
- Asbestos, benzene, cadmium, lead, mercury, pesticides

Nursing Services:
- Back fitness assessment
- Electrocardiogram (EKG)
- Pulmonary function testing (PFT)
- Respirator fit testing, quantitative and qualitative
- Vision screenings
- Lift test/physical agility test
- Blood draws and titers
- Routine immunizations
- Travel immunizations
- Tuberculosis testing PPD and QuantiFERON® Gold

environments, TB status is critical to know as a preventative measure.

Testing:

Most commonly, a clinician performs a Mantoux TB Test. The Mantoux TB test is a one-step TB procedure in an effort to determine the patient’s status. This test is the method whereby the clinician injects a small amount of tuberculin under the skin, and the resulting reaction or induration is read 48-72 hours later. A medical provider will send those individuals who have a past positive for a chest x-ray instead of receiving the tuberculin. This is also true for individuals who received the BCG vaccination as a child (prevalent more so in European countries) as this can cause a “false-positive reaction”. For those individuals who do test positive, a simple blood test can be done to determine if the TB is latent or active.

The most common blood test is the QuantiFERON Gold blood test. It can be drawn by a lab and analyzed. Based on this lab result, an accurate treatment plan can be initiated by the physician.

TB Treatment

Treatment for TB is readily available here in the United States with at least 10 approved medications to treat TB. Individuals with latent or inactive TB will be prescribed medications such as isoniazid or rifampin, or a combination of these drugs or others for at least 3 months. For active TB it is necessary to take a combination of medications for 6-9 months. It is very important that the medications be taken exactly as prescribed and to finish all of the medicine, as well as have periodic lab testing to make sure the medications are not causing any problems. If the medication is not taken correctly, it could lead to a more resistant form of TB that is much harder to treat. Most often TB can be cured if the medications are taken as prescribed.

For more information on medical surveillance for TB or any of our services, you can go to our website located at BaptistMedicalGroup.org, or contact:

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Easter Holiday Hours

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- Walk-Ins Welcome
- Most Insurances Accepted
- Online Scheduling Available

**Baptist Urgent Care – Airport**
Open on Easter Sunday, April 12
7 a.m. to 9 p.m.

**Baptist Urgent Care – Nine Mile**
Closed on Easter Sunday, April 12