CDC Issues Recommendations for Shorter Treatment Regimen for Latent TB Infection

Treatment for latent tuberculosis (TB) infection is easier than ever before following the Centers for Disease Control and Prevention's (CDC) release of guidelines for the use of a shorter regimen with fewer doses. The recommendations were published on December 9, 2011 in CDC’s Morbidity and Mortality Weekly Report.

This new regimen for the treatment of latent TB infection, called the 12-dose regimen, reduces treatment from 270 daily doses over 9 months to 12 once-weekly doses given over 3 months. This is considered one of the biggest breakthroughs in treatment for latent TB infection since the 1960s.

The 12-dose regimen comes after a large randomized control trial found a combination of isoniazid (INH) and rifapentine (RPT) administered in 12 once-weekly doses as directly observed therapy (DOT) was as effective in preventing TB as the 270-dose INH regimen, which is usually self-administered by patients daily over nine months. Two other smaller studies have also found the 12-dose INH and RPT regimen to be as effective as other regimens. The 12-dose regimen also had greater rates of completion than the U.S. standard regimen of nine months of INH daily.

Treating latent TB infection so it does not progress to TB disease is a cornerstone of the U.S. strategy for TB elimination. An estimated 300,000 to 400,000 people begin treatment for latent TB infection each year; however, many do not complete the lengthy treatment. Public health officials hope the 12-dose regimen will improve patient adherence.

“The 12-dose regimen provides a simpler way to treat latent TB infection, allowing more people to successfully complete their treatment while also preventing the development of TB disease,” explains Dr. Kevin Fenton, Director of the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention at CDC.

The 12-dose regimen should be administered under DOT to ensure the completion of all doses. Patients also need to undergo monthly clinical monitoring that includes inquiries about side effects and a physical assessment for signs of adverse events. DOT workers should be trained on how to educate patients about adverse effects and how to inquire about symptoms.

The 12-dose regimen does not replace existing treatment options for latent TB infection, but is another option for treatment in otherwise healthy people, 12 years of age and
older, who were recently in contact with someone who has TB, or who tested positive for TB infection.

According to CDC, additional studies are needed to confirm efficacy and safety before this new treatment can be recommended in certain groups of people, including young children and people infected with HIV who are taking antiretroviral therapy. These people should be treated with other existing treatment regimens.

More than 11 million people living in the United States have latent TB infection. People with latent TB infection have TB bacteria in their body but do not feel sick, do not have symptoms, and cannot spread TB bacteria to others. However, about 5 to 10 percent (550,000 to 1.1 million) of those infected with TB in the United States will develop TB disease if not treated. Some people with weakened immune systems, like those with HIV and people with diabetes are more likely to develop TB disease after infection.

“Achieving CDC’s goal of TB elimination in the United States means not only treating people who already have TB disease, but also successfully treating people with latent TB infection who are at high risk for developing TB disease and potentially transmitting it to others,” says Dr. Kenneth Castro, Director of the Division of Tuberculosis Elimination at CDC.

While TB cases in the United States have been declining since 1993, TB remains one the world’s deadliest diseases. One-third of the world’s population is infected with the bacteria that cause TB, and each year, nearly 9 million people around the world become sick with TB disease.

For more information about TB, visit www.cdc.gov/tb.