

World Tuberculosis (TB) Day 2013

Los Angeles County

When will we be able to celebrate World TB Day? In truth, we don't really celebrate – we commemorate. But that day will come when TB will have finally been eradicated from the world, in much the same way that Smallpox has been eliminated. All across the globe people remain optimistic that they will see the end of this disease. Therefore, we herald in 2013 with the World Health Organization's theme for World TB Day: "Stop TB in My Lifetime".

World TB Day (March 24th) was originally created in 1982 by the International Union Against TB and Lung Disease (IUATLD) to acknowledge the 100 year anniversary of the discovery of the TB bacillus (the organism that causes tuberculosis) by German scientist Dr. Robert Koch, who, in 1882 presented his findings to the Berlin Physiological Society. At the time of Koch's announcement, TB was raging throughout Europe and the Americas, causing the death of one out of every seven people worldwide. World TB Day, again, is a day of commemoration, not yet a day of celebration.

In fact, you can be forgiven if you are tired of hearing of commemorative days, commemorative weeks, or commemorative months. There are so many worthwhile causes and campaigns that compete for media attention, funding, and political and popular support, that often these events come and go without much public notice. It's unfortunate that many of these events are buried from public consciousness but in the rush of daily life we still desperately need to be reminded annually about tuberculosis (TB).

Why do we still need to be reminded about a disease that, for all intents and purposes, is a scourge of the past? The reasons are many, starting with the biggest one of all

- TB is **NOT** a disease of the past – it is ever-present in today's world where it kills nearly 1.4 million people each year
- One third of the world's population is infected with the TB bacillus and have latent TB infection (LTBI). This represents an enormous reservoir of individuals who are potentially capable of progressing on toward active, contagious, TB disease.

- We need to be reminded that in so many areas of the world, including the United States, TB is a disease that attacks the poorest and most disenfranchised citizens of the world – the homeless, people without access to medical care, health insurance or money to buy medicine, immigrants and refugees, people with HIV and AIDS, and others with weakened or compromised immune systems.
- Apathy. Because so many people are not concerned about the plight of those less fortunate than themselves, they perpetuate a climate in which TB is allowed to be ignored. Out of sight, and out of mind.
- Myths and ignorance. In addition to believing that TB no longer exists, many people are misinformed regarding the way tuberculosis spreads, the symptoms that accompany the disease, how it is treated, and the fact that it is both preventable and curable. Much education still needs to be done.
- In many places, there is an inability to muster the moral outrage and political will to fund research and treatment programs that could, one day, develop new and more effective anti-TB drugs and eventually bring a TB vaccine to the world. All around the world we are confronted by inefficient bureaucracies and misplaced priorities that have hampered the fight against TB.
- Finally, we need to be reminded of TB because it can be combatted relatively easily and cheaply with drugs that are available to the industrialized nations of the world but which fail to get into the hands of clinicians in developing countries where they are needed the most and where they can prevent the most number of deaths.

The United States is making great progress toward the control and elimination of tuberculosis but we do not live in a world where we have the luxury of isolating ourselves from other nations and pretending that this disease does not ravage our population, as it does in many other nations. We live in a global community and this disease must be fought on a global scale.

In this regard, Los Angeles County (LAC) represents a microcosm of this global community. It has a very diverse population, with several groups at risk for TB infection and disease. These groups are comprised of 1) those born in TB-endemic countries, 2) non-Caucasian ethnic/racial groups, 3) those with compromised or weakened immune systems, 4) HIV-infected individuals, 5) injection drug users, and 6) those in congregate living situations, such as homeless shelters, correctional facilities, and nursing homes, among others.

While TB cases in LAC have decreased from a high of 2,198 at the peak of the TB resurgence in 1992 to 625 cases in 2012, TB disproportionately afflicts the above at-risk groups. As an example, approximately 80% of TB cases in LAC occur among the foreign-born. Also, TB rates in 2011 remained disproportionately elevated among the non-white ethnic/racial groups compared with whites: compared with non-Hispanic whites, the TB rate among Asians was 25 times greater, and rates among Blacks and Hispanics were 7-8 times greater.

Fortunately, due to a heightened appreciation of the severity of the TB problem, both in the U.S. as well as globally, there have been recent discoveries that have added to the armamentarium of TB diagnostics and treatments. An example of this advancement in diagnostics are the TB Interferon Gamma Release Assays (IGRA). These are blood tests that can replace the older, less accurate, and more cumbersome TB skin test. The IGRAs, such as Quantiferon Gold TB and the T-Spot tests, do not produce false positive reactions in BCG-vaccinated individuals, which is a major shortcoming of the TB skin test. This allows the doctor to detect those patients who are truly infected with TB bacteria from those that are not. In terms of treatment, there is now an exciting, new treatment regimen for LTBI in which the length of treatment will be reduced from a daily dose of isoniazid (INH) for 9 months to a once-weekly dose of INH and rifapentine for only 3 months. It is anticipated that this new treatment regimen will lead to a significantly higher rate of completion, and thus prevent future cases of TB disease. Finally, due to intensified research efforts, there are now several promising, new TB drugs in development that are expected to combat the rising tide of multidrug-resistant TB and to shorten the length of treatment, contributing to a higher rate of completion of TB treatment, thereby leading to successful outcomes. The statistics described earlier should cause us to be awakened from our collective apathy and to find the political will to diminish and ultimately eradicate this scourge from the world.

To acknowledge World TB Day 2013, the Los Angeles County Department of Public Health TB Control Program will be:

- Receiving a proclamation from the County Board of Supervisors. The proclamation will recognize the impact that TB has had on populations both globally and locally, will highlight intervention strategies such as newer drug regimens and diagnostic screening tools, and will provide a brief background on the history of World TB Day. Support for the proclamation has been provided by several community partners including Bienestar, Friends Research Institute, Community Assessment Service Center, El Centro del Pueblo, and the Los Angeles Homeless Shelter Authority.

- Sponsoring a two-hour education conference on March 25th that will address TB among high risk population groups in Los Angeles County (e.g. HIV infected individuals, substance abusers, individuals with other types of immune-compromising co-morbidities, homeless individuals, and TB in the foreign-born population). The conference will be held at TB Control Program headquarters located at 2615 South Grand Avenue, #507, Los Angeles 90007 from 2:30 p.m. – 4:30 p.m. Community based organizations (CBOs) who serve these populations will be invited to attend. For further information regarding this conference or to learn more about what is being done to control and eradicate TB, please visit the Los Angeles County TB Control Program's website at : www.publichealth.lacounty.gov/tb

The TB Control Program website also contains links to international, national, and regional websites where further information about TB is available.