



# Philadelphia TB Newsletter

Volume 6, Issue 1

**WORLD TB DAY EDITION**

Spring 2012

**Tuberculosis Control Program**  
500 S. Broad Street, 2nd Floor  
Philadelphia, PA 19146

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*The Philadelphia TB Newsletter is a quarterly publication that is intended to be a resource for clinicians, infection control personnel, and laboratories who diagnose, treat, and/or report tuberculosis (TB) in Philadelphia. It provides treatment updates and recommendations, reviews local and national TB epidemiology, and presents case studies.*

Contributing to this issue:

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## World TB Day 2012

Christina Dogbey, MPH  
Epidemiologist

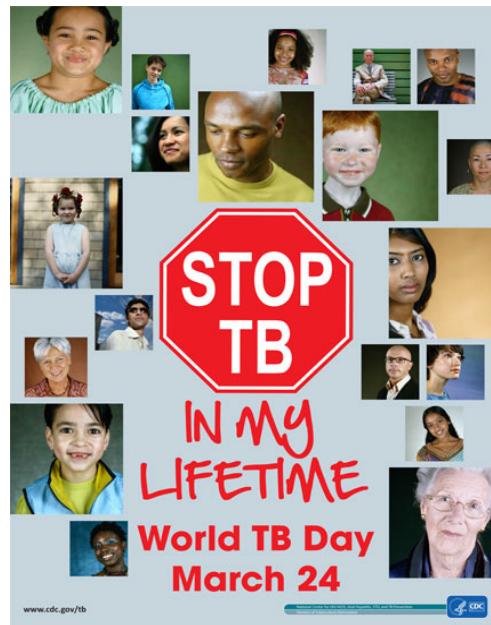
World TB Day is held annually on March 24th in order to raise awareness about the threat of TB and the measures needed to control the disease.

**To commemorate World TB Day 2012, on Wednesday March 21st, the Tuberculosis Control Program is hosting the 2012 Philadelphia Tuberculosis Update.** It is a half- day course starting at

9:00 AM (registration begins at 8:30 AM) and concluding at 1:00 PM. The event is CME/CNE certified and is sponsored in conjunction with the Charles P. Felton National TB Center, The New Jersey Medical School Global TB Institute, the University of Medicine and Dentistry of New Jersey and the PA Public Health Training Institute at Drexel University School of Public Health. The update will be held at the Friends Center in Philadelphia.

**For more information on the course and registration instructions, please turn to Page 3 of this newsletter.**

World TB Day commemorates the discovery of the TB bacillus by Dr. Robert Koch in March 1882. At that time, TB killed one in seven people in the United States and Europe. Although this disease can be cured and controlled, TB still remains the second leading cause of death among infectious



diseases in the world. According to the World Health Organization (WHO), the global healthcare community continues to make significant progress toward eliminating tuberculosis as a public health threat. Yet, despite these efforts, each year TB continues to cause nine million new cases worldwide. In 2008, there were an estimated 8.8 million new cases of TB, 1.3 million deaths from TB among HIV-negative people and an additional 350,000 TB deaths among HIV-positive people (WHO, 2011). These alarming rates are partially attributed to the emergence of drug-resistant strains of *M. tuberculosis*. World TB Day provides an opportunity to communicate TB-related problems and solutions and to support local TB control efforts. The Philadelphia Department of

*(Continued on page 2)*

## Focus on the

### Stop TB Partnership

- Founded in 2001, the Partnership's mission is to serve every person who is vulnerable to TB and ensure that high-quality treatment is available to all who need it
- Our vision is a TB-free world. Our children will see TB eliminated in their lifetime.
- The Partnership is recognized as a unique international body with the power to align actors all over the world in the fight against TB.
- Targets: By 2015: the global burden of TB disease (deaths and prevalence) will be reduced by 50% relative to 1990 levels.
- By 2050: The global incidence of TB disease will be less than 1 per million population. (Elimination of TB as a global public health problem.)
- Stop TB Partnership has active partnerships in 25 countries, including Afghanistan, Ghana, Egypt, Mexico, Philippines, Thailand Vietnam and the United States
- For more information about Stop TB Partnership visit their website : <http://www.stoptb.org/>

# New Course from CDC: "TB 101 for Health Care Workers"

Dan Dohony, MPH  
CDC Senior Public Health Advisor

The Centers for Disease Control and Prevention (CDC), Division of Tuberculosis Elimination (DTBE), is pleased to announce the release of the interactive online course, TB 101 for Health Care Workers. The course was developed as a collaborative effort between DTBE and the four TB Regional Training and Medical Consultation Centers (RTMCCs).

TB 101 is designed to educate health care workers about basic concepts related to TB prevention and control in the United States. The target audience for the course includes newly hired TB program staff and health care workers in areas related to TB, such as individuals who work with at-risk populations (persons who are HIV-positive, foreign-born, homeless, abuse drugs, etc.) or in places that increase risk for exposure (correctional facilities, long-term care settings,

HIV/AIDS clinics, etc.).

There are six lessons in the course:

- Lesson 1: Introduction
- Lesson 2: TB Transmission and the Development of TB Disease
- Lesson 3: Testing for TB Infection
- Lesson 4: Diagnosis of TB Disease
- Lesson 5: Treatment of Latent TB Infection
- Lesson 6: Treatment of TB Disease

TB 101 is available at

[www.cdc.gov/tb/webcourses/tb101/default.htm](http://www.cdc.gov/tb/webcourses/tb101/default.htm).

Continuing education (CE) units for this course are offered free of charge for various professions. More information about the CE units is available at

[www.cdc.gov/tb/education/CE/tb101.htm](http://www.cdc.gov/tb/education/CE/tb101.htm).

## World TB Day (cont'd)

*(Continued from page 1)*

Public Health and our partners are committed to controlling TB by identifying active TB cases in the city and assuring that these persons complete a course of curative treatment, evaluating persons in close contact to those with active TB to assure they are not infected and, if infected, offering preventive treatment, and screening those at increased risk for exposure to TB. In the United States, the theme for World TB Day 2012 is **"Stop TB In My Lifetime."**

In addition to the World TB Day Update Course, the Philadelphia TB Control Program

has issued this annual World TB Day edition of the Philadelphia TB Control Newsletter. Included in this issue are surveillance updates on TB in Philadelphia, information on the new latent tuberculosis treatment regimen, and more. For more information on the Philadelphia TB Control Program, please visit our website at: <http://www.phila.gov/health/DiseaseControl/TB.html>. For more information about World TB Day, please visit the Centers for Disease Control Division of TB Elimination's World TB Day website at <http://www.cdc.gov/tb/events/WorldTBDay/default.htm> or the World Health Organization at: [www.worldtbd.org](http://www.worldtbd.org).



SCHOOL OF PUBLIC HEALTH

University of Pittsburgh | Drexel University



# WORLD TB DAY UPDATE

Wednesday, March 21, 2012

8:00AM - 1:00PM

CME/CNE CERTIFIED ACTIVITY

Course Location

The Friends Center, Rufus Jones Room

1501 Cherry Street, 1<sup>st</sup> Floor, Philadelphia, PA

Jointly Sponsored By

The City of Philadelphia Department of Public Health Tuberculosis Control Program, Charles P. Felton National TB Center, New Jersey Medical School Global Tuberculosis Institute, and UMDNJ-Center for Continuing and Outreach Education

in collaboration with

Drexel University School of Public Health

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## COURSE DESCRIPTION AND OVERALL GOAL

The purpose of this half-day course is to provide TB program leaders, clinicians, and field workers with updated information that they can apply in their daily work for the prevention and control of TB. Topics will include current trends in Philadelphia, new diagnostics and treatment regimens, policies and protocols for pediatric TB, working with foreign-born patients, contact investigations, and program coordination and service integration (PCSI). The format includes lectures, panel discussion, and questions and answers following each speaker.

## WHO SHOULD ATTEND

This course is designed for clinicians, infection control practitioners, managers, and front line staff who are dealing with TB in Philadelphia and surrounding counties.

## OBJECTIVES

Upon completion of this course participants will be able to:

- Outline current trends and changing demographics of TB in Philadelphia, and how these relate to national trends
- Incorporate new diagnostics and treatment regimens into TB practice, and avoid common errors in TB treatment
- Recognize the clinical spectrum of TB in childhood
- Describe current recommendations for diagnosis of TB and LTBI in children
- Discuss implications of research findings on working with foreign-born persons
- Incorporate new guidelines for contact investigations into TB practice
- Identify common risk factors, target populations, and opportunities for program collaboration and service integration (PCSI)

## REGISTRATION INFORMATION AND FEE

REGISTER!!

Please apply online by March 9<sup>th</sup>, 2012, using the following link to *EventBrite* <http://worldtbupdate2012.eventbrite.com>

Space is limited so please apply early. Priority will be given to applicants from the Greater Philadelphia Area. Notification of acceptance and additional course information will be sent via email.

There is no fee for this course. However, we ask that if you are unable to attend, that you inform us as soon as possible so that others may be accommodated.

For more information about the course and the registration link, please visit PDPH's Health Information Portal (HIP) website at <https://hip.phila.gov/xv/> and click on the last link inside the red box.

# Tuberculosis Treatment: A new regimen for treating latent tuberculosis infection

David Schlossberg, MD

Medical Director, Tuberculosis Control Program

A recent large trial studied the effectiveness of a new regimen for the treatment of latent tuberculosis infection (LTBI). This regimen consisted of isoniazid (INH) plus rifapentine (RPT), a long-acting rifamycin, given once per week for twelve weeks by directly observed therapy (DOT). The INH/RPT regimen was found to be comparable in efficacy to the standard regimen of nine months of INH. Thus, the Centers for Disease Control (CDC) will now approve four regimens for the treatment of LTBI:

- Daily INH for nine months (INH9)
- Daily INH for six months (INH6) with the understanding that nine months of INH is preferable to 6 months INH for children, those infected with HIV and patients with x-ray evidence of prior TB.
- Daily rifampin (RIF) for four months (RIF4)
- The new regimen of weekly INH plus RPT for twelve weekly doses (INH/RPT). This regimen should NOT be used in:
  - a) Patients younger than age twelve
  - b) HIV-positive patients receiving anti-retroviral therapy (ART)
  - c) Pregnant patients
  - d) Patients in whom resistance to INH or rifampin is suspected or proven

CDC recommends INH/RPT as an alternative to INH9 in patients who are likely to have LTBI progress to TB disease e.g. HIV-positive patients not on ART, recent converters, contacts and patients with healed TB on a chest radiograph. The INH/RPT regimen can also be considered for additional patients who are unlikely to complete INH9.

Concerns about INH/RPT include the following:

1. **Drug Resistance:** In Philadelphia, our foreign-born patients with TB disease have an INH resistance rate of 15-18%. This would limit the effectiveness of the INH/RPT regimen for this population
2. **Toxicity:** In the recently published trial, there were more permanent drug discontinuations resulting from drug toxicity or allergy with INH/RPT than with INH given alone
3. **Compliance:** The INH/RPT regimen is much shorter than nine months of INH and therefore is likely to have greater compliance. However, four months of rifampin (RIF4), which is used extensively in Philadelphia and elsewhere, is nearly as brief as INH/RPT.
4. **Cost:** The INH/RPT regimen is relatively expensive compared to our current regimens. As of this year, our pharmacy cost for the approved regimens is as follows:

|              |       |
|--------------|-------|
| INH9.....    | \$95  |
| INH6.....    | \$63  |
| RIF4.....    | \$84  |
| INH/RFP..... | \$179 |

The new regimen offers an alternative to the regimens currently available to treat LTBI. In our local population, it is potentially beneficial to incarcerated populations or patients in shelters. However, given our INH resistance rate, the cost of INH/RPT, and the increased likelihood of significant adverse events/allergy with INH/RPT, at this time the Philadelphia Tuberculosis Control Program will continue to treat most of our patients with RIF4.





## Philadelphia Department of Public Health

### Tuberculosis Control Program

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Phone: 215-685-6873 or 215-685-6744

Fax: 215-685-6477

## Reporting

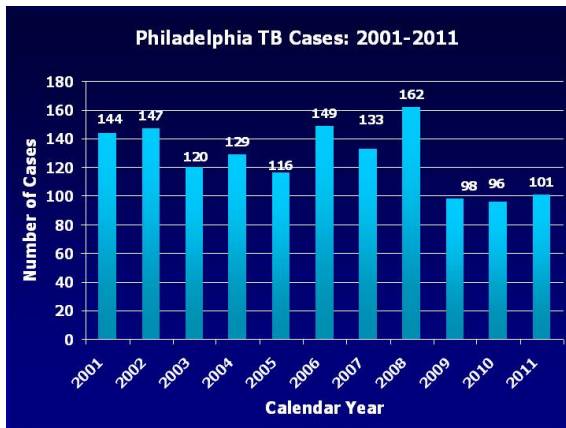
All TB cases and suspected cases must be reported to the TB Control Program within 24 hours of identification. Reporting forms are available on the Health Information Portal website at <https://hip.phila.gov/xv/>. To report a case or suspect, fax the completed report to 215-685-6477. Reports can also be submitted through the Pennsylvania National Electronic Disease Surveillance System (PA-NEDSS). To report by phone, please call 215-685-6873.

## Tuberculosis Surveillance

### Update: 2011

Christina Dogbey, MPH

Epidemiologist, Tuberculosis Control Program



In 2011, the Philadelphia TB Control Program reported 101 confirmed cases of TB. This represents a 5% increase from the previous year when 96 new cases of TB were reported. Philadelphia TB cases represent 59% (down from 79% in 2010) of the TB cases reported in the Southeast Pennsylvania Health District and 39% of the cases in the Commonwealth of Pennsylvania for the period.

The majority of cases were male (68%) and more than a third of the cases (37%) being between the ages of 25-44 years. The number of cases among children less than 5 years of age remained consistent at 2 cases (2%) in 2011.

African Americans continue to be disproportionately affected by TB and in 2011 accounted for nearly 34% percent (34/101) of the reported cases. The percent among Hispanic patients increased from 13.3% in 2010 to 18% this year. The percentage of cases among Asians increased slightly from 36% to 38% and the percentage of TB cases among White cases declined slightly from 11.5% to 9.9% this year.

More than two thirds of Philadelphia TB cases (68%) were foreign born, continuing the trend we have seen in the data on Philadelphia patients starting in 2007. This trend closely reflects the national data, in that as U.S. born cases steadily decline, foreign-born cases remain constant, but are beginning to consistently exceed the number of U.S. born cases. The sixty-nine (69) foreign-born TB cases reported in 2011 originated from 26 different countries and all 6 World Health Organization (WHO) regions. The Western Pacific Region (which includes Cambodia, China, Lao PDR, the Philippines and Vietnam) have accounted for over 36% of the foreign-born cases since 2007.

Twenty six percent of culture positive cases counted in 2011 (up from 11.5% in 2010) were resistant to at least one anti-tuberculosis agent, including two Multi Drug Resistant Tuberculosis (MDR-TB) cases, defined as resistance to both Isoniazid and Rifampin. The World Health Organization has stated that increasing drug resistance continues to be a disturbing global trend in managing and treating TB patients. Drug resistance emphasizes the need for timely reporting of cases and suspects, effective case management, treatment of latent TB infection and innovation for the development of new tuberculosis drugs in the near future.

