In this issue

Staff Highlight p. 1
TB on the Move p. 2
Super T Award p. 2
Training and Events p. 3
TB and Student Health p. 4
Hot Topic: LTBI p. 5-7
LTBI Resources p. 7
World TB Day p. 8
Contact Us p. 9

WELCOME
TB Program New Staff

Hollie R. Sands, MPH
Epidemiologist III

Hollie R. Sands has been with the KY Department for Public Health since 2009. She has worked as an epidemiologist in Vital Statistics, the Immunization Program and has been with the TB Program since January 2017. Her responsibilities include surveillance and data analysis, ensuring the TB Program submits 100% of RVCT variables, assessing genotype cluster contacts, and reconciling confirmed and suspect case counts and rates. She serves as the TB Program Website editor and assists other members of the team where appropriate.

Ruth Willard, MSN, MBA
Nurse Educator

The Kentucky TB program welcomed Ruth Willard as the new TB Educator in April 2017. Ruth has over 23 years of experience in a variety of nursing roles. She has a Master of Science of Nursing (Education) and a Master of Business Administration (Global Healthcare). Her responsibilities include the planning, development and facilitation of TB Program training, educational and awareness opportunities, and the management and administration of the TB Incentives and Enablers Program. Her various career roles and experience in nursing leadership, healthcare management, and clinical education supports the KY TB Program mission.
The Kentucky TB Prevention and Control Program announced the 2017 Super “T” Award at the KY TB Update for Physicians and Clinicians on May 11, 2017. The award recognized an individual or group who made significant contributions to improve public health through their work in TB Prevention and Control. This year’s recipient was Wendy Keown from the Lincoln Trail District for her Superior Understanding, Performance Excellence and outstanding Representation of Kentucky’s efforts to combat TB. CONGRATULATIONS WENDY!!!!!

The 2017 National TB Conference, sponsored by the National Tuberculosis Controllers Association in collaboration with the Association of Public Health Laboratories, was held in Atlanta, April 18-21. The conference highlighted innovative work in TB prevention, management, and care across the country. Presentations were heard from Dr. Philip LoBue’s State of TB Elimination in the U.S., Dr. Kelly Holland’s personal experience recounting his diagnosis and treatment of TB, and breakout sessions of LTBI prevention strategies and reporting, eDOT and much more. TB staff from both Lexington Fayette County Health Department and Louisville Metro Department of Public Health and Wellness presented posters.

On May 11th the KY TB Program and SNTC presented the 2017 KY TB Update for Physicians and Clinicians at the UK Albert B. Chandler Hospital, Lexington, KY. Agenda topics of TB and LTBI diagnosis and treatment were presented through case presentations by Dr. Connie Haley (SNTC), Dr. Derek Forster (UKHC), Dr. Malkanthie McCormick (UKHC), and Megan Ninneman (SNTC). Approximately 126 clinicians attended from across the state.

CHFS Celebrates Women’s Health Week 2017
National Women’s Health Week is an observance led by the Office of Women’s Health, U.S. Department of Health and Human Services starting on Mother’s Day annually. The goal is to empower women to make their health a priority. TB Educator, Ruth Willard, highlighted screening considerations unique to women and shared resources to assess risk of TB exposure and other general TB information to over 200 women (and men) during the health fair in the CHFS building on May 17th. More information regarding Women’s Health
https://www.womenshealth.gov/nwhw

http://chfs.ky.gov/dph/epi/tb.htm
## 2017 TRAININGS AND EVENTS

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Event Description</th>
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<tr>
<td>July 11</td>
<td>TBD</td>
<td>SNCTC-2017 Webinar Counseling Skills &amp; Assessment for Dependence</td>
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<td><a href="https://sntc.medicine.ufl.edu/Training">https://sntc.medicine.ufl.edu/Training</a></td>
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<td>Third in a series that updates providers regarding the link between tobacco and TB.</td>
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<td>August 22</td>
<td>TBD</td>
<td>SNCTC-2017 Webinar Pharmacotherapy for Tobacco Cessation</td>
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<td>August 22-24</td>
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<td>SNTC Arresting TB: Contact Investigation and Release Planning</td>
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<td>Correctional setting focus</td>
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<td>August 25</td>
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<td>SNTC Enhanced Skills for Public Health Corrections Liaisons</td>
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<td>September 5</td>
<td>TBD</td>
<td>SNCTC-2017 Webinar Treating Tobacco Dependence in Special Populations</td>
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<td>September 18-22</td>
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<td>SNTC Comprehensive TB Course</td>
<td><a href="https://sntc.medicine.ufl.edu/Training">https://sntc.medicine.ufl.edu/Training</a></td>
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<td>Straughn IFAS Extension Professional Development Center, Gainesville, FL</td>
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<td>Lecture and interactive 5-day course with interdisciplinary approach to all aspects of TB clinical care.</td>
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<tr>
<td>September 20-21</td>
<td>8:00 AM-</td>
<td>TB 101 Orientation, CHFS, Frankfort, KY</td>
<td><a href="https://ky.train.org/">https://ky.train.org/</a> Course ID: 1069581</td>
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<td>4:30 PM EST</td>
<td>2-day course for new LHD personnel. Prerequisites.</td>
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<td>September 26-29</td>
<td>TBD</td>
<td>Save the Date- Kentucky Infection Prevention Boot Camp</td>
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<td>November 13-17</td>
<td>8:00 AM-</td>
<td>SNTC Comprehensive TB Course</td>
<td><a href="https://sntc.medicine.ufl.edu/Training">https://sntc.medicine.ufl.edu/Training</a></td>
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Please contact Ruth Willard at 502-564-4272 ext. 4296 or [Ruth.Willard@ky.gov](mailto:Ruth.Willard@ky.gov) for education and training questions.
Over a half of million international students are enrolled in U.S. colleges and universities and over 100,000 U.S. students study abroad each year. With over sixty post-secondary colleges and universities, Kentucky has an annual enrollment of greater than 200,000 international students (www.iie.org/opendoor). This student population presents its own unique opportunities and challenges for student health professionals. Student health professionals may have questions regarding tuberculosis control activities, prevention and treatment. To assist higher education health professionals, The American College of Health Association (ACHA) updated the *Tuberculosis Screening and Targeted Testing of College and University Students* (May 2017) with added information for Directly Observed Therapy (DOT), World Health Organization (WHO) high-incidence data and risk assessment/screening requirements.

http://www.acha.org/documents/resources/guidelines/ACHA_Tuberculosis_Screening.pdf

In addition to the ACHA’s guideline, the *Model Tuberculosis Prevention Program for College Campuses* is available from the Heartland National Tuberculosis Center, a regional training center for the Centers for Disease Control and Prevention, helping student health professionals with the basics of tuberculosis, risk identification, and screening and testing policies that can lower the chances of tuberculosis spreading on campus and in the community.


Key points to remember are a tuberculosis risk screening should be completed on all students with targeted TB testing for those at-risk for tuberculosis.

Student health professionals practicing in Kentucky should adhere to the Kentucky Tuberculosis (TB) Laws and Regulations. Notification and reporting standards are located on the Kentucky Legislature Website http://www.lrc.ky.gov/kar/902/002/020.htm or on the Kentucky TB Prevention and Control Website http://chfs.ky.gov/dph/epi/tb.htm

Any questions or for more information, please contact your KY TB Program.

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http://chfs.ky.gov/dph/epi/tb.htm
Hot Topic...... Latent TB Infection

High Rate of Treatment Completion in Program Settings with 12-Dose Weekly Isoniazid and Rifapentine (3HP) for Latent *Mycobacterium tuberculosis* Infection.


BACKGROUND:
RCTs demonstrated the newest LTBI regimen, 12 weekly doses of directly observed isoniazid and rifapentine (3HP), as efficacious as 9 months of isoniazid (9H) with a greater completion rate (82% versus 69%); however, 3HP has not been assessed in routine health care settings.

METHODS:
Observational cohort of LTBI patients receiving 3HP through 16 US programs was used to assess treatment completion, adverse drug reactions (ADRs), and factors associated with treatment discontinuation.

RESULTS:
Of 3288 patients eligible to complete 3HP, 2867 (87.2%) completed treatment. Children 2-17 years had the highest completion rate, 94.5% (155/164). Patients reporting homelessness had a completion rate of 81.2% (147/181). In univariable analyses, discontinuation was lowest among children (relative risk [RR], 0.44 [95% CI, 0.23-0.85]; P = .014), and highest in persons ≥65 years (RR, 1.72 [95% CI, 1.25-2.35] P = .001). In multivariable analyses, discontinuation was lowest among contacts of patients with TB disease (adjusted relative risk [ARR], 0.68 [95% CI, 0.52-0.89]; P = .005), and students (ARR, 0.45 [95% CI, 0.21-0.98]; P = .044); highest with incarceration (ARR, 1.43 [95% CI, 1.08-1.89]; P=.013) and homelessness (ARR, 1.72 [95% CI, 1.25-2.39]; P = .001). ADRs were reported by 1174 (35.7%) patients, of whom 891 (76.0%) completed treatment.

CONCLUSIONS:
Completion of 3HP in routine health care settings was greater overall than rates reported from clinical trials, and greater than historically observed using other regimens among reportedly nonadherent populations. Widespread use of 3HP for LTBI treatment could accelerate elimination of TB disease in the United States.

**Improved latent tuberculosis therapy completion rates in refugee patients through use of a clinical pharmacist.**
Carter KL, Gabrellas AD, Shah S, Garland JM.

**SETTING:**
Primary care clinic for refugees, Philadelphia, Pennsylvania, USA.

**OBJECTIVE:**
To assess the effect of a clinical pharmacist-run clinic for latent tuberculous infection (LTBI) on LTBI treatment completion rates in refugee patients.

**DESIGN:**
In 2012, a pharmacist-run LTBI clinic was established to improve adherence and completion rates among refugees. Before 2012, LTBI treatment completion rates were less than 30%. A structured model was developed to efficiently track patients and ensure completion within specified time ranges. Interventions made by the pharmacist were recorded. Completion reports were forwarded to the Philadelphia Department of Health for tracking and statistical purposes.

**RESULTS:**
Between 2012 and 2016, of 436 refugee patients screened, 121 (27.8%) were diagnosed with LTBI and 103 were referred to the pharmacist-run LTBI clinic to initiate treatment. Of those referred, 94% successfully completed LTBI treatment within the designated time frame, 40% of whom required an intervention from the pharmacist to remain adherent.

**CONCLUSION:**
LTBI treatment completion rates more than tripled after the implementation of a pharmacist-run LTBI clinic. This successful model indicates that incorporating clinical pharmacists into interdisciplinary health care teams can enhance medication adherence and completion rates in refugee populations, leading to improved public health outcomes.

Latent tuberculosis infection: the final frontier of tuberculosis elimination in the USA
LoBue, Philip A., Mermin, Jonathan, H.

SUMMARY:

Since 1989, the USA has been pursuing the goal of tuberculosis elimination. After substantial progress during the past two decades, the rate of tuberculosis cases in the USA each year has now levelled off and remains well above the elimination threshold. Both epidemiological data and modelling underline the necessity of addressing latent tuberculosis infection if further progress is to be made in eliminating the disease. In this Personal View we explore next steps towards elimination. Given the estimated prevalence of latent tuberculosis infection, compared with the limited testing and treatment that currently occur, a major new effort is required. This effort should consist of a surveillance system or registry to monitor progress, scale-up of targeted testing for latent tuberculosis infection in at-risk populations, scale-up of short-course treatment regimens, engagement of affected communities and medical providers who serve those communities, and increased public health staffing for implementation and oversight. Such an effort would benefit greatly from the development of new tools, such as tests that better indicate reactivation risk, and even shorter latent tuberculosis infection treatment regimens than currently exist.

Read more http://thelancet.com/journals/laninf/article/PIIS1473-3099(17)30248-7/fulltext

Resources from CDC for Latent Tuberculosis Infection

Latent Tuberculosis Infection (LTBI) Mobile Application for Health Care Providers
https://www.cdc.gov/tb/publications/mobileltbiapp/default.html

Latent Tuberculosis Infection: A Guide for Primary Health Care Providers
https://www.cdc.gov/tb/publications/ltbi/default.htm

Management of Latent Tuberculosis Infection in Children and Adolescents, A Guide for the Primary Care Provider
http://globaltb.njms.rutgers.edu/downloads/products/PediatricGuidelines%20(Screen).pdf

12-Dose Regimen for Latent TB Infection-Patient Education Brochure
https://www.cdc.gov/tb/publications/pamphlets/12-doseregimen.htm

CDC TB Topics and Treatment Guidelines
https://www.cdc.gov/tb/topic/treatments/ltbi
WORLD Tuberculosis Day is a worldwide event that aims to raise awareness of TB and the efforts made to prevent and treat this curable disease. Annually March 24th commemorates the date in 1882 when Dr. Robert Koch announced his discovery of *Mycobacterium tuberculosis*. This year the KY TB Program launched the “Get the Bugs Before You Give the Drugs” slogan along with other awareness activities.

Pictures: 2017 TB Awareness Month Proclamation, Knox County treats with a message, and TB Program Staff

**TBits**

“Get the bugs before you give the drugs!”

Dr. Robert Brawley

The primary goal of antibiotic stewardship efforts is the optimal selection of treatment that will give the best clinical outcome. Rapid molecular testing for *Mycobacterium tuberculosis* and drug susceptibility prior to the initiation of treatment can ensure the most appropriate choice of anti-TB drugs.

TB in Art and Culture

Tuberculosis is often included in storylines of classic, and modern works of art, film and literature. Here is a sampling:

In CBC’s Madam Secretary-The Seventh Floor (Season 3, Episode 21), administrative aides relay a message to Elizabeth (Tea Leoni) that Sudan has told them that an American journalist held hostage has tuberculosis in an effort to strong-arm the U.S. into giving financial aid for his release.

In the HBO series Boardwalk Empire (2010), the main character Enoch ”Nunky” Thompson states that he lost his young wife to Consumption.

In Moulin Rouge (2001), Satine dies of tuberculosis at the end of her biggest performance.

It has been thought that the Hunchback of Notre Dame (1831) had Pott's Disease-tuberculosis of the spine.

The Sick Child (1986) by Edvard Munch was a portrait of his sister, Sophie, who died of TB.

In the film The Citadel (1938), Robert Donat's character, Dr. Andrew Manson, is dedicated to treating Welsh miners suffering from tuberculosis and later assists a TB specialist in successfully performing a pneumothorax on a girl who is dying from the disease.

Upton Sinclair's novel The Jungle (1906), portrayed tuberculosis as being common in cattle (bovine TB) in the meat-packing plants of Chicago; consumption then was a common illness for meatpackers.

Van Morrison's song "TB Sheets" (from the 1974 album of the same name) is about the narrator nursing a girl, who is dying of tuberculosis. The song is a reworking of the TB theme in American blues music.

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CDC Public Health Image Library (PHIL) at http://phil.cdc.gov/phil/quicksearch.asp  
Google images at https://images.google.com/

http://chfs.ky.gov/dph/epi/tb.htm