

The DOT: Discussions on Tuberculosis

Winter Edition | December 2019

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SUBMISSIONS
 If you would like to suggest a topic or submit an event, article, or picture to feature in a future newsletter, please email Charlie Rhea at:
charles.rhea@ky.gov

Find the Super "T" Bug

The Super "T" Bug is the official mascot of the Kentucky TB Program, and he's hidden within this newsletter! (*Not including the image pictured below*). Once you've found the Super "T" Bug, email Charlie Rhea (email listed above) and tell him where the Super "T" Bug's location. If you have the correct answer, you will be entered into a drawing for a prize. One winner per newsletter will be announced and awarded the prize.



Controller's Message

'Tis the season for peace and hope...



The Kentucky TB Program faced many challenges throughout 2019: from turnovers in program staff and national TB testing serum shortages, to our recent office relocation due to flooding in the Public Health Services building. However, with every cloud we have found a silver lining. As public health servants we are trained to meet each adversity tenaciously. We have gained new staff with strong leadership skills and innovative ideas. The shortage of TB testing serum only emphasized the importance of TB testing, and our fortunate temporary work space has only enhanced cross-divisional program collaboration and sense of unity.



As each of us look towards the beginning of a new decade, let's take time to reflect upon the good work from people who paved the way in establishing public health standards. Their hard work and dedication has enabled us to respond to each new challenge with readiness and expertise. We thank you for your partnership and service.

Peace and joy in 2020,

Emily Anderson, RN, BSN
 TB Controller/Program Manager
EmilyA.Anderson@ky.gov



Nurse Consultant Column

A Discussion on Updated Healthcare Worker Guidelines for Tuberculosis Testing

Over the past few months, we have received questions from many of you related to the release of the Centers for Disease Control and Prevention's (CDC) and National Tuberculosis Controller's Association (NTCA) updated guidelines for tuberculosis (TB) testing among healthcare workers (HCW)¹. We would like to clarify our healthcare worker's regulation and provide answers to some of our most frequently asked questions.

In 2016 our program collaborated with the CDC/NTCA workgroup and submitted Kentucky's healthcare worker regulation for TB testing for review. Based on discussions and feedback from this workgroup, our regulation ([902 KAR 20:205](#)) was updated in 2016 to reflect these upcoming guidelines.

This spring, upon the release of the updated guidelines, we reviewed [902 KAR 20:205](#). We have determined that there would be no changes to our existing regulation, as we had already made provisions for healthcare agencies to identify employees of highest risk for transmission of TB in Section 2 as follows:

- Section 2(4), "A TB infection control plan shall include a listing of the job series of healthcare workers or another standardized method to describe which healthcare workers shall be included in the facility TB screening program."
- Section 2(5)(a-e) provides detailed guidance for healthcare settings in determining those employees at greatest risk.

Additionally, Sections 4 & 5 detail guidance for *initial* and/or *annual* screening (individual risk assessment with symptoms screen) and testing (TST or BAMT) of newly hired and/or established employees.

Since 2016, we are proud that our regulation and awareness campaign (i.e. implementation toolkit) have been shared nationally to serve as a model towards implementing the workgroup's recommendations in other states across the country.



Remember!

When testing *anyone* for tuberculosis, a risk assessment should be conducted in addition to the test itself.



Nurse Consultant Column

Frequently Asked Questions

Q: Is the TST interpretation for a HCW always 10mm?

A: No, their individual medical risk factor (i.e. HIV infection, diabetes, hepatitis, or an exposure to an active case of TB) may indicate an interpretation of 5mm.

Q: Can I declare my facility a 'low risk facility' and only test on hire and exposure?

A: No — in Kentucky, no facility can declare themselves low risk and only test on hire and exposure. All healthcare facilities have to test new hires with a two-step TST or one BAMT along with a risk assessment; then follow any high-risk HCW's annually with a TST or BAMT and a risk assessment.

- Examples of those to included in the high-risk group are referenced in the 2005 CDC guidelines², which include, but are not limited to intensive care units, emergency rooms, bronchoscopy suites, respiratory staff, and some lab and radiology staff, among others. Only those who provide direct care to patients. Staff in housekeeping, engineering, data transcription, insurance and other ancillary areas do not need annual testing.

Q: Are all healthcare workers exempt from annual TB testing?

A: No — refer to [902 KAR 20:205](#). Section 2 provides for guidance on identification of those who should be included in your facility TB screening program, while Section 5 details the annual requirement for TB screening and testing for those individuals identified.

If you, or any healthcare facility in your jurisdiction, has any addition questions, please to not hesitate to contact our program! Happy Holidays!

1. https://www.cdc.gov/mmwr/volumes/68/wr/mm6819a3.htm?s_cid=mm6819a3_w
3. https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5417a1.htm?s_cid=rr5417a1_e



Maria Lasley, RN, BSN, MA, MBA
TB Nurse Consultant
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Epidemiology Editorial

Program Evaluation: Progress from the Past, Focus on the Future

As we move into the year 2020, the Kentucky TB Program will begin a new five-year Cooperative Agreement (CoAg) cycle. This means it is time to review the progress made on our Program Evaluation Plan (PEP) and evaluate for a new plan during the next five years (2020-2025).

Currently, our PEP focuses on evaluating completion of latent TB infection (LTBI) treatment among contacts to active TB cases. While it is important for all cases of LTBI to complete treatment, those we find as the result of a contact investigation are a top priority because the highest risk of conversion to active TB occurs within the first two years after infection.¹

This area was selected as our PEP focus because Kentucky has historically not met the corresponding National Tuberculosis Indicators Project (NTIP) indicator. This indicator – proportion of contacts completing LTBI treatment – has a 2020 National Target of 81% and a 2020 Kentucky-specific Target of 80%.^{*} During the previous grant cycle (2010-2014), Kentucky had an average of 69.2% of contacts completing their LTBI treatment (range 65%-74%) – all below the national and Kentucky-specific targets of 81% and 80%, respectively (Figure 1). The most common reasons why LTBI treatment is not completed include patients being lost to follow-up, patient chose to stop medications, provider chose to stop medication, and adverse effect to medication.

In order to address this completion deficit, our PEP decided to focus on three strategies to increase the proportion of contacts completing LTBI treatment.

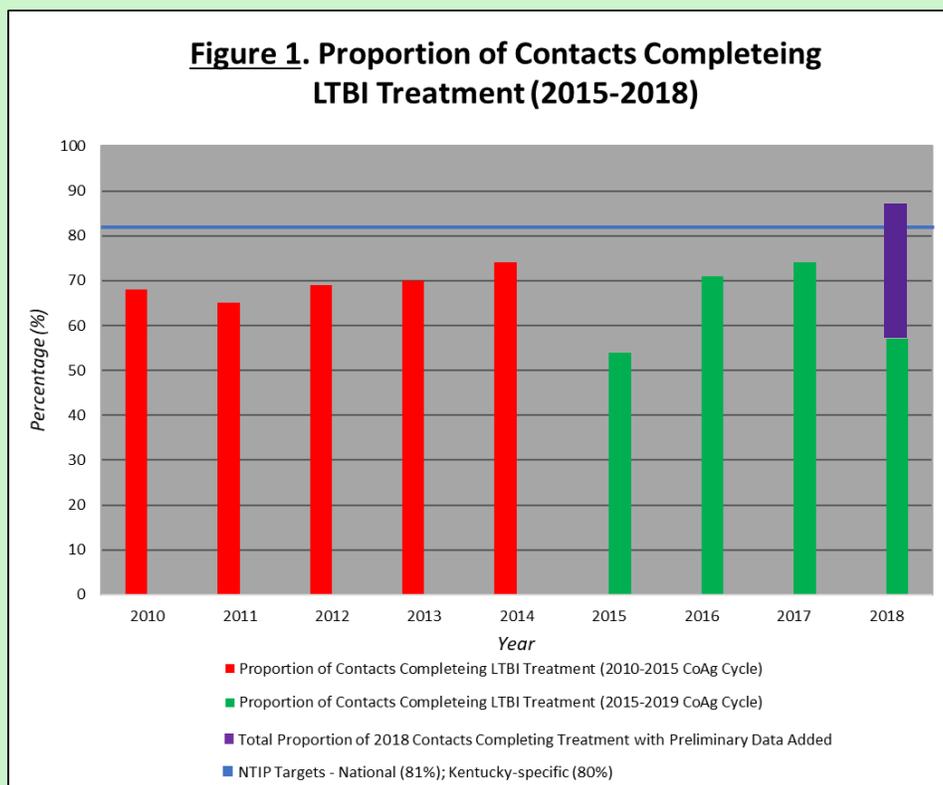
1. *Encouraging short-term LTBI therapy (i.e. 12 week 3HP, or 4 week rifampin).*
2. *Utilization of incentives and enablers, when appropriate.*
3. *Promoting the PEP through educational presentations and program correspondence to make local programs aware of these efforts.*

Through the Aggregate Report for Program Evaluation (ARPE), we are able to monitor Kentucky's progress toward increasing the proportion of contacts completing LTBI treatment and progress toward meeting the NTIP targets.

Upon compiling and reviewing ARPE data, we are excited to share the significant improvements made within our PEP. From 2015-2017 the proportion of contacts completing LTBI treatment increased from 54% to 74% with preliminary data from the 2018 ARPE show a current completion rate of 57%. The 2018 ARPE includes many individuals who were still on treatment from contact investigations completed later in the year; while the final 2018 ARPE will not be completed until March 2020, the preliminary data suggests that the proportion of contacts completing LTBI treatment could be as high as 87%.

While Kentucky is currently below the national and state-specific NTIP targets, the significant increase observed in the proportion of contacts completing LTBI therapy is considered a success. Utilizing the strategies mentioned previously, we expect to see the proportion of contacts completing LTBI treatment continue to increase. ARPE data will continue to be evaluated in order to monitor Kentucky's progress towards meeting these NTIP targets.

Epidemiology Editorial



The success of this PEP is due to the dedication of our local health departments and their TB coordinators and nursing staff. Credit goes to them on their efforts on educating contacts on the importance of initiating and completing LTBI treatment. Additionally, short-course LTBI treatment regimens and the utilization of incentives and enablers has allowed many of these individuals to complete LTBI treatment when they might have been unable, or unwilling, to do so otherwise.

Due to the success seen in this PEP, we have decided to continue to informally monitor our progress towards increasing the proportion of contacts completing LTBI treatment and develop a new PEP beginning in 2020. Stay tuned to a future edition of *The DOT* to learn more.

*The NTIP targets serve as a goal to reach by states by the year 2020. National targets are set by the Centers for Disease Control and Prevention, while state-specific targets are set by the states themselves— this allows the state to take to evaluate data and procedures to set more accurate, attainable goals for themselves.

1. <https://www.cdc.gov/tb/publications/factsheets/general/ltbiandactivetb.htm>



Charles H. Rhea, MPH
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Local Health Department Year-End TB Reporting

With 2019 coming to a close, it can only mean one thing—it is time for local health departments (LHDs) to submit their TB data and reports! An official memorandum (pictured below) was sent to all Local TB Coordinators on December 9, 2019 containing instructions on how to submit all data and reports due to the Kentucky TB Program.

We wanted to take an opportunity to review these items and their due dates:

1. Complete Report of Verified Case of Tuberculosis (RVCT) for all *confirmed* cases of TB

- All confirmed cases of TB must have a completed RVCT in the NEDSS based-system. Please be sure all variables have been entered with no “*unknown*” selections made.

2. Report any outstanding “*suspected*” cases of TB

- Please report any “*suspected*” cases of TB from your local health department to the Kentucky TB program—please be sure to report those via phone and enter the patient information into NEDSS.

3. Submit any outstanding latent TB infection (LTBI) reporting forms (TB-1 form)

- Please submit any outstanding TB-1 forms for any cases of LTBI treatment by your local health department. Please also be sure to re-submit the completed form once these cases have completed treatment.

**CABINET FOR HEALTH AND FAMILY SERVICES
DEPARTMENT FOR PUBLIC HEALTH**

Matthew G. Bevin
Governor

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Adam M. Meier
Secretary

Angela T. Dearing, MD
Commissioner

MEMORANDUM

TO: TB Coordinators

FROM: Charles Rhea, MPH
TB Epidemiologist I
Kentucky TB Prevention and Control Program

DATE: December 9, 2019

SUBJECT: 2019 End-of-Year TB Reporting

Please find attached a timeline for submitting yearend TB data and reports. Completed RVCTs for all **confirmed TB cases** diagnosed and started on treatment in the calendar year 2019 should be entered into NEDSS as soon as possible. Additionally, any **'suspected' cases of TB** that have not reported should be reported by phone to the Kentucky TB Program **and** entered into NEDSS as soon as possible. The deadline for submission of these data to the TB Program is **January 15th, 2020**.

Also attached are instructions for completing the Aggregate Reports for TB Program Evaluation (ARPE). Two yearend ARPE reports are due: The **Final** report for calendar year 2018 and the **Preliminary** report for calendar year 2019. In order to assist in completing these forms, you will be receiving a separate follow-up email which will detail your 2017 and/or 2018 case totals as well as the correct column that these cases should be included in your ARPE form. **Note:** If you **did not** have any confirmed cases of TB in 2018 or 2019, you will not receive a follow-up email. Blank copies of the ARPE forms have also been attached; both ARPE reports are due on **February 3rd, 2020**. It is imperative that your ARPEs are submitted by this date as Kentucky's data is due to CDC by the end of March 2020.

If you have any questions or need assistance, please call us at (502) 564-4276, and we will be more than happy to help. Please fax your completed ARPE reports to (502) 564-3772 or mail them to my attention at:

Kentucky TB Prevention and Control Program
275 East Main Street HS2E-B
Frankfort, KY 40621

As always, your conscientiousness and dedication to TB reporting is most appreciated.

Happy Holidays!

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All the data requirements detailed above are due by close of business on



January 15, 2020



Please do not hesitate to contact us if you have any questions or need any assistance completing these data reporting requirements. Please feel free to reach out to Charlie Rhea, TB Epidemiologist for assistance.

Tuberculin Skin Test Serum Shortage UPDATE

On June 21, 2019, the Centers for Disease Control and Prevention (CDC) released a Morbidity and Mortality Weekly Report (MMWR) detailing a nationwide shortage of tuberculin skin testing serum Aplisol.

At this time, **our program has not received any reports of shortages in Kentucky's largest healthcare facilities.**

If agencies are impacted by the shortage, CDC recommends the following:

- Substitute interferon-gamma release assay (IGRA) blood tests for tuberculin skin tests (TSTs); both types are used to detect *Mycobacterium tuberculosis* infection, however the criteria for test interpretation of IGRA blood tests are different from those of TSTs.
- As similar results have been observed with Tubersol (tuberculin PDD, Mantoux; Sanofi Pasteur), another FDA-approved PPD tuberculin antigen, it may be used as a substitute for skin testing.
- Prioritize allocations of TSTs, in consultation with state and local public health authorities. The CDC recommends only testing those who are at risk of TB (i.e., recent contacts exposed to persons with TB disease; born in or frequently travel to countries where TB is prevalent; individuals living in large group settings [i.e., homeless shelters, correctional facilities], immunocompromised individuals, children [especially those <5 years old] if they are in one of the risk groups).
- In settings where the likelihood of TB exposure is low, deferment of routine serial testing should be considered; annual testing of healthcare personnel is not recommended unless there is a known exposure or ongoing transmission. (See updated healthcare worker guidelines—pages 2-3)

Morbidity and Mortality Weekly Report

Nationwide Shortage of Tuberculin Skin Test Antigens: CDC Recommendations for Patient Care and Public Health Practice

CDC is expecting a 3–10 month nationwide shortage of Aplisol, a product of Par Pharmaceuticals, and one of two purified-protein derivative (PPD) tuberculin antigens licensed by the Food and Drug Administration (FDA) for use in performing tuberculin skin tests. This time frame is the manufacturer's current estimate and is subject to change. The manufacturer notified CDC that they anticipate an interruption of supply of Aplisol 5 mL (50 multidose vials) beginning in June 2019, followed by an interruption of the supply of Aplisol 1 mL (10 multidose vials) in November 2019. The expected shortage of Aplisol 1 mL could occur before November 2019 if demand increases before then. Information on the status of this supply interruption will be updated at FDA's Center for Biologics Evaluation and Research-Regulated Products: Current Shortages website (<https://www.fda.gov/vaccines-blood-biologics/safety-availability-biologics/cber-regulated-products-current-shortages>). This report includes CDC recommendations for mitigating a reduction in tuberculin (TB) testing capability resulting from the anticipated Aplisol shortage (1).

Two types of immunological methods (tuberculin skin tests [TSTs] and interferon-gamma release assay [IGRA] blood tests) are used for detecting *Mycobacterium tuberculosis* infection. TSTs and IGRAs are used for the diagnosis of latent TB infection and can aid in the diagnosis of TB disease, but additional evaluation and testing is necessary to distinguish between latent TB infection and TB disease to determine the appropriate treatment (2). When findings such as chest radiography and mycobacterial cultures are sufficient for confirming or excluding a TB diagnosis, the results from a TST or an IGRA blood test might not be needed (2). However, most TB cases in the United States are diagnosed through a combination of findings, including results from one of these tests. When TB disease is strongly suspected, specific treatment should be initiated, regardless of results from TST or an IGRA blood test (3,4).

Two FDA-approved PPD tuberculin antigen products are available in the United States for use in performing TSTs: Tubersol (Sanofi-Pasteur) and Aplisol. In controlled studies, the concordance between the two products is high (5).

Recommendations

CDC recommends the following three general approaches to mitigate a reduction in TB testing capability resulting from the expected shortage of Aplisol:

- Substitute IGRA blood tests for TSTs. Clinicians who use the IGRA blood tests should be aware that the criteria for test interpretation are different from the criteria for interpreting TSTs (3).
- Substitute Tubersol for Aplisol for skin testing. In studies, the two skin test products give similar results for most patients (5).
- Prioritize allocation of TSTs, in consultation with state and local public health authorities. Prioritization might require the deferment of testing some persons. CDC recommends testing only for persons who are at risk for TB (6–8). Groups at high risk for TB infection include 1) persons who are recent contacts exposed to persons with TB disease; 2) those born in or who frequently travel to countries where TB disease is common; 3) those who currently or previously lived in large group settings (such as homeless shelters or correctional facilities); 4) persons with compromised immune systems, including those with health conditions or taking medications that might alter immunity; and 5) children, especially those aged <5 years, if they are in one of the risk groups noted above.

Although overall test concordance is high, switching between PPD skin test products or TSTs and blood tests in serial testing might result in apparent conversions from negative to positive or reversions from positive to negative that might be attributable to inherent interproduct or intermethod discordance rather than change in *M. tuberculosis* infection status (3,9). Clinicians should assess test results based on the person's likelihood of infection and risk for progression to TB disease, if infected (2).

In settings with a low likelihood of TB exposure, the deferment of routine serial testing should be considered in consultation with public health and occupational health authorities. Annual TB testing of health care personnel is not recommended unless there is a known exposure or ongoing transmission (9).

552 MMWR / June 21, 2019 / Vol. 68 / No. 24 US Department of Health and Human Services/Centers for Disease Control and Prevention

Click [here](#) to read the CDC MMWR *Nationwide Shortage of Tuberculin Skin Test Antigens: CDC Recommendations for Patient Care and Public Health Practice*.



If your facility is experiencing a shortage or if you have any further questions, please contact:

Maria Lasley, TB Nurse Consultant

maria.lasley@ky.gov or
(502) 564-4276 ext. 4292



The Laboratory “Report”

NEW!

UPDATES!

Changes Coming to Shipping Sputum Specimens to the State Lab

Say a fond farewell to the cans! Beginning in 2020, the Division of Laboratory Services (DLS) will begin using a new collection kit for sputum specimens. We will no longer be using the aluminum and outer cardboard cans with the blue inner tube. The new packaging will consist of a 50mL tube that is 95kPA pressure rated with orange cap, inner bag, and a small outer cardboard box. The outer boxes will still have the usual bright orange label for delivery by the United States Postal Service (USPS). Specimens may also be shipped by FedEx, with boxes placed in a UN3373 Pak bag (see infographic on **page 9**). In addition, if you are shipping a specimen to DLS for the rapid GeneXpert test, we are asking all submitters to please use the DLS FedEx account (see more information below) or a courier. We would like to have these specimens as quickly as possible.

We are continuing to provide a DLS funded FedEx account to alleviate the cost of shipping expenses. To gain access to the DLS FedEx account please contact **Leigh Ann Bates** at (502) 782-7703.

To request collection kits, visit the DLS [website](#) for the lab kits requisition form. You can also contact Leigh Ann Bates at (502) 782-7703.

New TB Laboratory Staff

We would like to introduce **Melissa Peterson** as the newest staff member of the Mycobacteriology (TB) Laboratory. Melissa is a graduate of Transylvania University and now lives in Versailles with her husband and four children. She joined the State Public Health Laboratory in 2007 and spent the first decade of her career with our Newborn Screening Lab. In 2018, she made the decision to switch to the Microbiology side and fill the recently vacated scientist position in the TB Lab. We are thrilled to have her, and she is enjoying the chance to learn new testing methods.

If you have any questions for the TB lab, please contact:

Katelyn Cox—(502) 782-7205

Melissa Peterson—(502) 782-7739

Rhonda Lucas—(502) 782-7731

Rachel Zinner —(502) 782-7754

The Laboratory "Report"

Collection and Packaging of Sputum Specimens



Kentucky Public Health
Prevent. Promote. Protect.

Supplies Needed for Sputum Collection



Sputum Tube
Speci-Gard Bag
Outer UN3373 Box

- 1) Make sure two identifiers are on the specimen label.
- 2) Fill out Outreach form completely. Write the collection date on the Outreach form.

When You First Get Up; Before You Eat Anything!

- 1) Remove cap, and be careful not to place your mouth on the rim of the sputum tube.
- 2) Take three good, deep breaths.
- 3) Cough deeply enough to bring up secretions (NOT saliva) from your chest.
- 4) Spit secretions into tube up to 5 ml. (1 tsp.).
- 5) Place the cap straight and tight on the sputum tube (Do not place in a crooked position).



Packaging and Shipping

- 1) Place sputum tube into bag with absorbent and remove plastic strip to expose adhesive. Seal bag together by pressing adhesive to bag.
- 2) Place bag with sputum tube inside of UN3373 box.
- 3) Place Outreach form on top of specimen bag.
- 3) The specimen must be mailed to the state laboratory or taken to the local health department on the day of collection. Sputum that cannot be mailed or taken to the health department on the day of collection must be refrigerated (NOT frozen).

Shipping by US Postal Service - label is provided on box.

Shipping via FedEx - Place box(es) inside UN3373 Pak and place FedEx label on outer Pak.



Refer to 49CFR 173.199 for current regulations on packaging and shipping of Category B infectious substances
Note: Orange cap primary container meets the 95kPa specification - Do not put blue cap tube from cannister kit in this kit.

Infographic of new collection kit for sputum specimen. This graphic details specimen collection, packaging, and shipping procedures.

Upcoming Trainings and Events

April 15-16, 2020

Spring TB 101 Orientation – Frankfort, KY

The Kentucky TB Program presents a 2-day course for new local health department personnel. Pre-requisites required. Please contact the Kentucky TB Program for more information.

May 26-29, 2020

NTCA Conference—Minneapolis, MN

The National Tuberculosis Controller’s Association will be hosting their National Conference this May in Minneapolis, Minnesota. With tracks for clinicians, nurses, and epidemiologists, it is the premier event to learn more about TB.

TBD

Kentucky’s TB Update for Physicians and Clinicians—TBA

Plan to join the Kentucky TB Program and SNTC as they present an update on TB for Kentucky’s physicians and clinicians.

October 14-15, 2020

Fall TB 101 Orientation – Frankfort, KY

The Kentucky TB Program presents a 2-day course for new local health department personnel. Pre-requisites required. Please contact the Kentucky TB Program for more information.

See the following pages for additional education opportunities and resources:

- TB Nurse Case Management: Working Through the Process
- Advanced Concepts in Pediatric TB
- Patient Fact Sheet Series—Translated TB Information
- A Clinician's Guide to the TB Laboratory
- Cultural Competency and Tuberculosis Control—Country Guides

For education and training questions, please contact

Heather Cox, Training and Outreach Coordinator



heather.cox@ky.gov or
(502) 564-4276 ext. 4294





TB Nurse Case Management: Working Through the Process



What's covered in this course?



TB NCM Basics



Managing
the Case



The Initial Report



Monitoring
Clinical Care



Interviewing
the Client



Closing
the Case

TB Nurse Case Management: Working through the Process is an online activity-based course consisting of six modules (badges) that guide the learner through the steps of managing a TB case. Each participant is paired with an expert coach to provide one-on-one guidance and support.

Questions about this course?

Contact Southeastern National Tuberculosis Center
SNTC@medicine.ufl.edu
352-273-7682

Southeastern National
Tuberculosis Center

UF UNIVERSITY of
FLORIDA



The TB Nurse Case Management course is available through the Southeastern National TB Controller's Network. Click [here](#) to contact them for more information.



Advanced Concepts in Pediatric TB

Online Courses

<http://sntc.medicine.ufl.edu/home/index#/training>

- This self-paced content is divided into three separate courses. You can take any or all of them, in any order you choose.
- Participants who complete these trainings will be able to recognize, evaluate, and manage Mycobacterium tuberculosis infections in children.
- CE credit is available for the successful completion of each course.
- Questions? Call 888-265-SNTC or email sntc@medicine.ufl.edu



Part 1 Topics

- Mycobacteriology, Pathogenesis, and Epidemiology
- Latent TB Infection
- Diagnosis - Old and New Tools & Challenges

3 CE credits



Part 2 Topics

- Clinical Disease and Evaluation
- TB and HIV

2 CE credits



Part 3 Topics

- Treatment of TB Disease
- Infection Control, Source Case and Contact Investigation
- Pharmacotherapeutics of TB Drugs

3 CE credits

Southeastern National Tuberculosis Center (SNTC) • 888-265-7682 • <http://sntc.medicine.ufl.edu>

The Advance Pediatric TB course is available through the Southeastern National TB Controller's Network. Click [here](#) to contact them for more information.

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- ሁሉንም የ TB መድሀኒትዎን በዘሊምዎ ወይም በደርሰዎ እንደተነገርዎ ይውሰዱ።
- እንደገና ሰዎች እንደገና መድሀኒቶች ከምግብ ጋር በሚወሰዱበት ወትት የመድሀኒቱን ተጽእኖ እንዲያሳይዎት ለማድረግ ይረዱ።

መድሀኒትዎን ሲወሰዱ እንደገና ምክርቶች፡

- ✓ መድሀኒትዎን በየአለቀ በተወሰነ ሰአት ላይ ይውሰዱ።
- ✓ መድሀኒትዎን በሚወሰዱበት ሰአት ላይ ማስታወሻ ይዩ። ይህንን የማንኛውም ደውል ያደርጉ።
- ✓ የክፍት ስላል ወይም ገደብ እንዲያስታወቁ ይጠይቁ።
- ✓ ፕላስቲክ ይጠቀሙ።
- ✓ በመስታወት ላይ ወይም ማትገቡት ላይ ማስታወሻ እንዲተሰጥ ያደርጉ።
- ✓ ቀኑ ላይ ምልክት ያደርጉ ይህንን የቀን መቆጣሪያ ያስተምሩ።

የተደባቀ የ TB ኢንፈክሽን መድሀኒት መርሀግብር፡

(አቅጣጫዎን፣ ትክክለኛውን መርሀ ግብር፣ ቀናት እና የኪሊሞች ቁጥር ያመልክቱ)

መድሀኒት	መርሀግብር	ቀን	አለታዊ የኪሊን ቀናት	የጊዜው ርዝመት
Isoniazid	<input type="checkbox"/> አለታዊ <input type="checkbox"/> በሰዎች ሁለት ጊዜ*	በየአለቀ		9 ወራት

ዘሊምዎ ከመድሀኒትዎ ጋር ቫይታሚን B6ን እንዲወስዱ ያደርጋል።

ማስታወሻ፡ Isoniazid በሰዎች ውስጥ ለሁለት ቀናት ሊወሰድ ያስፈልጋል። ይህም የሚሆነው በተግታ የሚታይ ህክምና (DOT)* ነው።

መድሀኒት መውሰድ የሚረዱ እንደሆነ፡ ይህ ፊት ቀን የሚሆን እንደሆነ፣ እንዳስታወቁ፣ ወዲያው ይውሰዱት። አለቀ ያለፈ እንደሆነ፣ ያመለጠምትን መጠን ይለፉት እና የሚተግለውን መርሀግብር በመጠቀም መድሀኒት ይውሰዱ - በአንድ ጊዜ 2 ያዝ አይውሰዱ።

ማስታወሻ

የኪሊ ስም፡ _____

የክሊኒክ ስም፡ _____

የክሊኒክ ስልክ ቁጥር፡ _____



እንዘሆን ሊፈጠሩ የሚችሉ ችግሮች ይመልከቱ፡

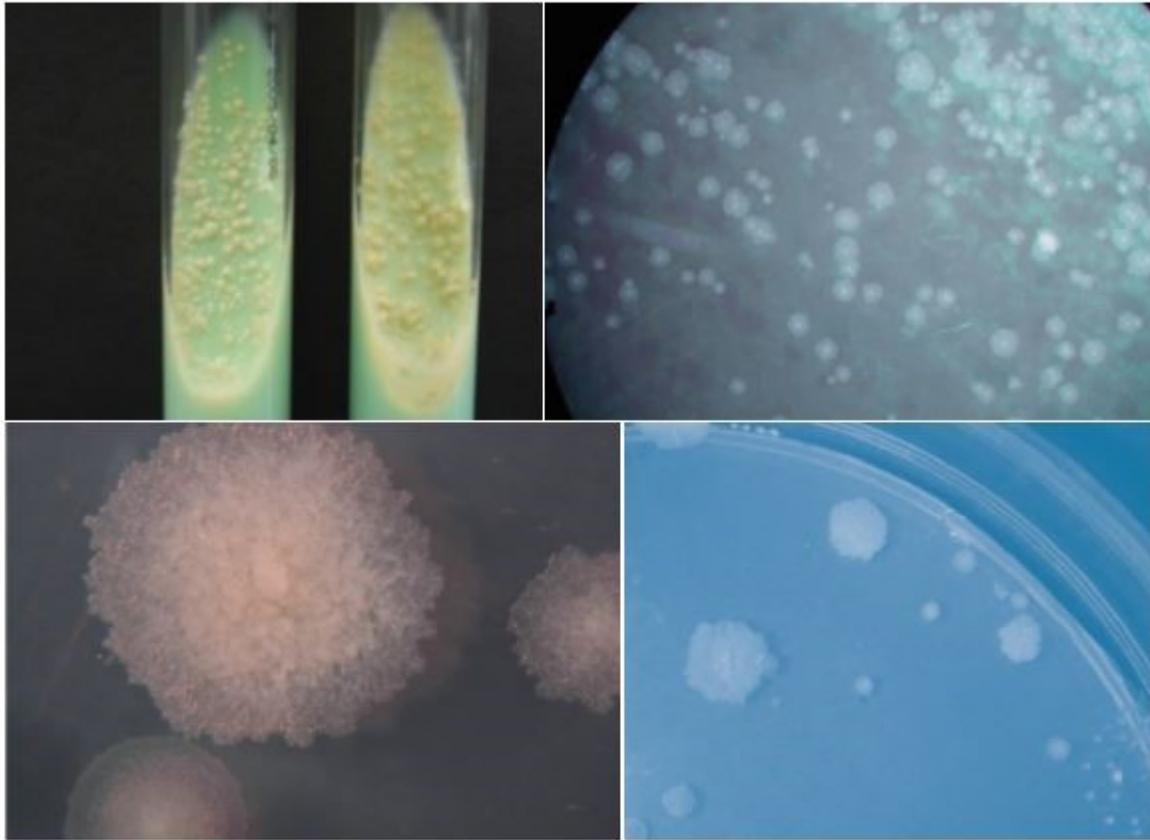
- መድሀኒትዎን ወዲያው መውሰድዎን ያቀው እና ለ TB ዘሊምዎ ወይም ነርስ በመደወል ምንም እንኳን ችግር የሚያጋጥም እንደሆነ ያሳውቁ፡
- ገዩት ሆኖ የሆነ የምግብ ፍላጎት፣ ወይ ምንም የምግብ ፍላጎት
 - የታመሙ የደ ወይም ቁርጠት
 - ማትላሽሽ ወይም ማስመሰስ
 - ገሳ-ተለም ያለው ሽንት ወይም ተለል ስቀል
 - ሽፍታ ወይም ማሳከክ
 - የቆዳ ወይም አይን ቢሚ መሆን
 - ንዝረት ወይም መደንዘዝ በእጅዎ ወይ አገርዎ ላይ ሲሰማዎ

* በተግታ የሚታይ ህክምና (DOT) ላይ ከጤና ባለሙያ ጋር በመገናኘት መድሀኒትዎን የሚወሰዱ ይሆናል። ይህም እንደ ተግታ የሚታይ ህክምና ይባላል።

DOT በተለያዩ መንገዶች እርዳታ ሊያደርግልዎ ይችላል።

- የጤና እንክብካቤ ባለሙያዎ መድሀኒትዎን መውሰድ እንዳይረዱ ማስታወሻ ይሰጥዎታል።
- እርስዎ በተቃላ ፍጥነት ይህንን ህክምና ውሰድ ይጨርሳሉ።
- የጤና እንክብካቤ ባለሙያው ምንም እንኳን ችግር እንደሚጠየቅዎትም አርገው ስለመድሀኒትዎ ያደርጉዎታል ይህም በመድሀኒት ምክንያት ማለት ነው።

Translated TB patient fact sheets are now available through the Southeastern National TB Controller's Network. Click [here](#) for their online webpage where you can find this product.



A Clinician's Guide to the TB Laboratory



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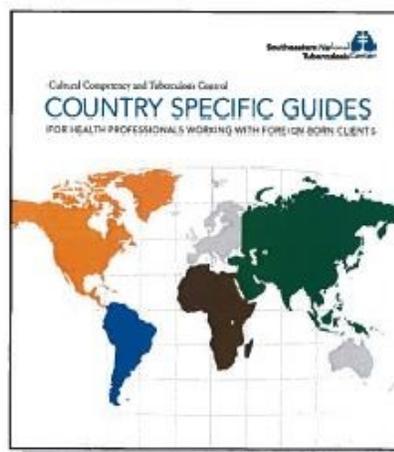
Click [here](#) for this resource on the Heartland National TB Center website.

The Southeastern National Tuberculosis Center (SNTC)
in collaboration with the
Lung Health Center at the University of Alabama at Birmingham
developed this TB-specific cultural competency resource.

***Cultural Competency and Tuberculosis Control:
Country Specific Guides for Health Professionals
Working with Foreign-Born Clients***

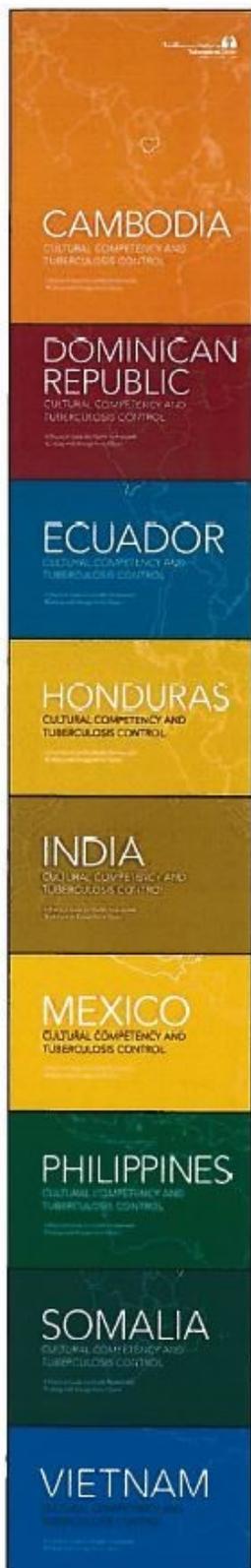
This guide is comprised of individual country-specific guides (or summaries) for the birth countries most commonly reported by foreign-born cases treated in the United States. Each country guide (or summary) provides epidemiological information for both TB and HIV in each country, nicknames for TB, common misperceptions surrounding the etiology, disease transmission, and cures for TB and HIV as well as the stigma surrounding these diseases. A portion of the guide also provides information regarding polite greetings to use when meeting a person from this country, verbal and non-verbal communication, naming customs, cultural values, and internet links to translated educational materials for your clients. This information will enable you to employ a more culturally relativistic approach to client interviews, TB contact investigations, diagnostic procedures, and patient education and counseling regarding both TB and HIV.

Currently, there are nineteen country guides available – **Cambodia, Dominican Republic, Ecuador, Honduras, India, Mexico, The Philippines, Somalia, Vietnam, Brazil, Myanmar, China, Colombia, El Salvador, Guatemala, Haiti, Nicaragua, Peru, and Korea.**



Individual copies of each Country Guide, in PDF format,
may be downloaded from the SNTC website at no cost.

The SNTC website address is <http://sntc.medicine.ufl.edu/Products.aspx>



CONTACT US

The SNTC is one of four national training and medical consultation centers within the United States, supported by the Centers for Disease Control and Prevention. The SNTC supports the education and training missions of TB programs throughout the southeast region and provides a source of expert medical consultation for healthcare providers caring for TB patients.

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Cultural Competency guides are now available through the Southeastern National TB Controller's Network. Click [here](#) for their online webpage where you can find these products.

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*You give the **DRUGS!***