# **The DOT:** Discussions on Tuberculosis

The Kentucky Tuberculosis Prevention and Control Program's Newsletter

#### Summer Edition | June 2021

### In this Issue

Controller's Message	P.1
Nurse Consultant Column	P. 2
Epidemiology Editorial	P.4
The Laboratory Report	P. 6
New TB Staff/Super T Award	P. 8
Regulation Update/World TB Day	P. 10
Goodbyes to TB Champions	P. 12
Upcoming Training Opportunities	P. 14

#### **SUBMISSIONS**

If you would like to suggest a topic or submit an event, article, or picture to feature in an upcoming edition of this newsletter, please email Charlie Rhea at: <u>charles.rhea@ky.gov</u>.

### 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 below, or on the "Contact Us" page [p.12]*). Once you've found

him, email Charlie Rhea (charles.rhea@ky.gov) with 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 selected and awarded the prize.



### **Controller's Message**

Spring brings growth and new opportunities! In this issue, we are exited to share news of how our state program has grown this spring with new initiatives and staffing.



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



#### Ask the Nurse Consultant: Interpreting the QFT-Gold Plus Test Results

**Background:** The Quantiferon Gold Plus (QFT-Plus) is a laboratory test that examines if a patient is infected with *M. tuberculosis* (TB). A unique aspect to this test is that it evaluates the patient's CD4 cells (the immune system's "helper cells") and CD8 (the immune system's "killer cells") response after TB antigen exposure to determine if a patient's infection is recent or old. See table below for interpretation of QFT-Plus results:

Nil	TB1 minus Nil (IU/ml)	TB2 minus Nil (IU/ml)	Mitogen minus Nil (IU/ml)	QFT-Plus result	Report/Interpretation
< 8.0	≥0.35 and ≥25% of Nil	Any	Any	Positive	M. tuberculosis infection likely
	Any	<0.35 or ≥0.35 and <25% of Nil			
	<0.35 OR			Negative	M. tuberculosis infection NOT likely
	≥0.35 and <25%	of Nil	<0.5	Indeterminate	Likelihood of M.
≥8.0	Any		Å2. 8		tuberculosis infection cannot be determined

**Question from the Field:** "Given that the QFT-Plus not only informs us if a patient is infected with TB, but also whether or not that infection is recent or old, how can these results be used and interpreted within the context of a contact investigation (CI)?"

Answer from the Nurse Consultant: The QFT-Plus can assist in a CI as it can be used to identify a contact that has been newly exposed to TB. Prior to the QFT-Plus, we were only able to detect a "positive" or "negative" result without knowing if the response result was recent or old. In the QFT-Plus, the TB-1 simply looks for a "positive" or "negative" result, while the TB-2 indicates if a positive result is due to a recent exposure to an individual with active TB disease. This TB-2 result can assist you in identifying newly exposed TB contacts within a CI, versus those who have been exposed in the past to an unrelated case.

\***Remember**\* that <u>any</u> positive result should be followed-up with a clinical evaluation in order to rule out active TB disease. Once active TB disease has been ruled out, consider latent TB infection treatment.

Sources:

https://chfs.ky.gov/agencies/dph/dehp/idb/Documents/902KAR20205sum.pdf http://ph.lacounty.gov/tb/docs/QFT%20FAQ.pdf http://www.quantiferon.com/wp-content/uploads/2017/04/English\_QFTPlus\_ELISA\_R04\_022016.pdf https://www.quantiferon.com/wp-content/uploads/2017/10/PROM-11178-001\_1107769\_BRO-QFT-TB-Gold-Plus-FAQ-HCPs-0717-US.pdf https://www.quantiferon.com/us/products/quantiferon-tb-gold-plus-us/package-inserts https://www.cdc.gov/lb/publications/factsheets/testing/IGRA.pdf

Do you have questions about the QFT-Plus test? Contact:

#### Maria Lasley, TB Nurse Consultant

Maria.Lasley@ky.gov or

(502) 564-4276 ext. 4292

### **Nurse Consultant Column**

#### Ask the Nurse Consultant: When to Use Chest Films when Evaluating for TB

**Question from the Field:** "Is there any situation in which a chest film is able to be used in place of tuberculosis (TB) testing? For example, can just a chest film be used when onboarding new employees into a new healthcare facility? Or can just a chest film be used as the method of screening for healthcare workers annual testing requirements? Or if prior TB testing records cannot be located?"

Answer from the Nurse Consultant: No, screening through the use of a chest film alone cannot, and should not ever replace TB testing requirements. The guidelines for testing among healthcare workers (<u>902 KAR</u>

<u>20:205</u>) and within long-term care facilities (<u>902 KAR 20:200</u>) state that screening for active TB disease should be conducted by either placing a tuberculin skin test (TST) or drawing a Blood Assay for *Mycobacterium Tuberculosis* (BAMT) (i.e. Quantiferon or TSPOT). Simply obtaining a chest film cannot replace testing requirements through a TST or BMAT.

In the event that old records cannot be located, TB testing must be performed. The chest film, as per guidelines from the Centers for Disease Control and Prevention, should be completed only as a follow-up if an individual's TB test is interpreted as reactive or positive in order to assist in ruling out active TB disease in conjunction with their clinical evaluation. A chest film should also completed as a follow-up in a the risk assessment for someone who is a past previous positive and reports new environmental or social risks, or signs and symptoms are indicative of active TB disease.



#### **Remember!**

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



If you have further questions related to this topic please do not hesitate to contact Maria Lasley, TB Nurse Consultant for the Kentucky TB Program.

> Maria Lasley, RN, BSN, MA, MBA TB Nurse Consultant maria.lasley@ky.gov



# **Epidemiology Editorial**

#### A Preview of Kentucky's 2020 Preliminary Tuberculosis Case Data

Despite navigating an unprecedented global pandemic, Kentucky's tuberculosis (TB) rates were in line for what would be expected based on recent trends. In 2020, Kentucky counted 67 confirmed cases of TB<sup>1</sup>, 199 "suspected", but never confirmed cases of TB, and 397 reported cases of latent TB infection<sup>2</sup>.

At 67 confirmed cases of TB, Kentucky's estimated incidence rate is 1.5 cases per 100,000 population.<sup>3</sup> This case count and incidence rate are within the range that we would expect when looking at data from the most recent 10-year period (2011-2020). During this time period, the average case count is 70 per year, with an average incidence rate of 1.5 per 100,000. Figure 1 shows Kentucky's confirmed TB case count and incidence rate by year between 2011-2020. Here, an all-time state low can be seen in 2013 with 59 confirmed cases for an incidence rate of 1.3 per 100,000, while 2016 saw a 10-year high of 91 confirmed cases for an incidence rate of 2.1 per 100,000.

Looking at the geographic distribution of cases, Figure 2 shows the number of confirmed cases of TB by county, while Figure 3 shows the breakdown of confirmed cases and "suspected", but never confirmed cases of TB by county. As is typically seen in Kentucky, these cases are asymmetrically distributed across the



state with concentrations of cases seen in counties with large cities and populations and more diverse populations. These areas include Jefferson County, Fayette County, Warren County, Hardin County, Daviess County, and the Northern Kentucky District—specifically Boone, Kenton, and Campbell counties. Asymmetric distribution of TB cases is a trend seen throughout most of the United States, even at a national level as states that have larger populations, or sprawling cities with diverse populations will have a higher burden of active TB cases and TB "suspects".



# **Epidemiology Editorial**

When evaluating descriptive statistics from Kentucky's 2020 TB case data, Figure 4 shows the proportion TB cases by age group, the greatest of which is those who are 35-54 years of age (30%). 2020 cases had an age range of 1-102 years, an average age of 44.9 years, and a median age of 45 years. Figure 5 shows the incidence rate of TB cases by race/ ethnicity. Although the highest proportion of cases identified as non-Hispanic white, non-Hispanic Asians see the highest incidence rate (22.4 per 100,000), followed by those who identify as non-Hispanic and two races (14.6 per 100,000), then those who identify as Hispanic only (5.3 per 100,000). Next, Figure 6 breaks down the proportion of co-morbidities of interest to TB. Diabetes Mellitus and SARS-CoV-2 (COVID-19)





were highest (13%), with COPD and HIV following at (11% and 7.5% respectively). Finally, Figure 7 shows risk factors of interest to TB and show the most common are being non-U.S. born (52%), being a known contact to an active case (22%), substance abuse  $^{4}$  (8%), tobacco abuse (6%), and incomplete LTBI therapy (6%).

We hope this preliminary data summary and analysis is of interest and useful to your program. Note that all annual TB data is not finalized for two years. Stay turned for more upcoming statewide and local data reports and analysis result from our 2020 TB case data coming soon.



Per 2009 CSTE case definition Tuberculosis (TB)—https://wwwn.cdc.gov/nndss/conditions/tuberculosis/case-definition/2009/ Per 2018 CSTE case definition for Latent TB Infection-https://wwwn.cdc.gov/nndss/conditions/latenttb/case-definition/2018/

2019 Kentucky state population used to calculate the estimated incidence rate as 2020 population estimates are not currently a "Substance Abuse" is defined as a case using injection or non-injection drugs, or using alcohol excessively within the previous ye

Charles H. Rhea, MPH Epidemiologist I charles.rhea@ky.gov



## **The Laboratory Report**

#### Friendly Reminders from the Tuberculosis Lab at the Division of Laboratory Services

The Division of Laboratory Services (DLS) Tuberculosis (TB) lab wanted to send everyone some friendly reminders regarding sputum collection, handling, and shipping, and online test ordering within the Outreach system. See the Collection and Packaging of Sputum Specimens flyer (below), or <u>click here</u> to view on the DLS website, for a detailed step-by-step process of sputum collection and submission to DLS.

DLS would like to draw your attention to a few key reminders:

- Please ensure that there are **two (2) patient** identifiers on all sputum collection tubes.
- Ensure that sputum collection tube caps are on straight and tight to prevent leakage within the package. This could make the specimen unsalvageable once it arrives at DLS, delaying diagnostic testing for your patient.
- Be sure to ship all specimens as soon as possible, do not wait and batch ship multiple specimens together.

Please use Outreach for order requisitions on all laboratory tests. If you need access to the Outreach system, please contact Rachel Zinner (at <u>Rachel.Zinner@ky.gov</u>)



Days back: 7	Search criteria:	All Fields 🗸		Or	lered:					Bearch
						Concernation of the	1			_
PENDING	Name History	<u>Req Num</u>	<u>Case</u> <u>C</u>	ollection Date	<u>ReceivedDate</u>	Patient#	DOB	<u>SSN</u>	Submitter	- -
Select All Batch	h							Or	rders Log	▶ Out

### **The Laboratory Report**



# **Coming Soon!**

This spring, Division of the Laboratory Services (DLS) will begin performing identification of mycobacterial isolates using the MALDI-TOF MS new Bruker Biotyper system (see picture left). This system's assay will be able to be performed faster and more cost effective than the current methods of mycobacterial isolate identification. The DLS TB laboratory is excited about this addition and implementing this new technology as it will:

- Improve mycobacterial isolate identification turnaround time.
- Contribute to improved individual patient care and treatment plans.
- Enhancing TB control activates.

With the ability to quickly identify these isolates, drug susceptibility testing and genotyping can be expedited, which benefits case management efforts.

If you have any questions for the TB lab, please contact: **Katelyn Cox, Laboratory Scientist II** (502) 782-7205 | <u>Katelyn.Cox@ky.gov</u>

Melissa Peterson, Laboratory Scientist II (502) 782-7739 | MelissaH.Peterson@ky.gov

Rhonda Lucas, *Bacteriology Supervisor* (502) 782-7731 | <u>Rhonda.Lucas@ky.gov</u>

Rachel Zinner, *Microbiology Branch Manager* (502) 782-7754 | <u>Rachel.Zinner@ky.gov</u>

# Welcome New Staff to the TB Program

#### Kentucky TB Program Welcomes New Nursing Staff

The Kentucky TB Program is thrilled to welcome two new staff members to our state program. These two nurses bring a wealth of time and experience to our program, and we wanted to take an opportunity to introduce them:

#### Michelle Stephens, RN—TB Education and Outreach Nurse



Michelle has been a registered nurse since 2011 and has previous experiences within Stoke ICU and Neurosurgery ICU at the University of Kentucky and bedside ICU at Frankfort Regional Medical Center. Most recently, she transitioned into public health in May of 2020 with the Immunization Branch at the Kentucky Department for Public Health as the Adult Immunization Coordinator. Through her work with the Immunization Branch during the COVID-19 response, she has seen first hand the importance of the public health system and is looking forward to continuing her work within the TB program. Michelle is also a lifelong Anderson County resident where she lives with her husband, Chris, and her children, Seth and Paige. She also enjoys travelling, biking, gardening, and tending to their family's many animals.

### Timothy Kreimer, MSN, MBA, RN-CEN—TB Nurse Consultant

Tim is currently a Nurse Education Specialist with St. Elizabeth's Physicians. In this position, he works with various teams including: Population Health, Virtual Health, Ambulatory Pharmacy, and the value-based incentive team. While Tim is new to KDPH, he is not new to TB as he previously worked as the TB Coordinator with the Northern Kentucky Independent District Health Department. Now, as a part-time TB Nurse Consultant with the Kentucky TB Program, he will be primarily working on training and educational efforts, specifically focusing on the new virtual Nurse Case Management Cohort program for new local health department TB staff. Tim enjoys public health as it provides a way for him to serve his community. He is a Boone County resident were he lives with his wide, Cathy, and two children, Blake and Anna.



# 2021 Super "T" Award

The Kentucky Tuberculosis Program's Super "T" Award is presented annually and recognizes an individual who makes a significant contribution toward improving public health through their work in TB prevention and control. This award is intended to highlight a local health department TB staff member who has done exemplary work and gone above and beyond to support efforts to combat TB.

The Kentucky Tuberculosis Program is proud and honored to award to 2021 Super "T" Award to:



### Laura Collins, RN TB Coordinator, Lexington-Fayette County Health Department

Laura has served as the Lexington-Fayette County Health Department's TB Coordinator for 8 years. She was nominated by her co-workers and peers throughout the state of Kentucky. Congratulations to Laura and thank you for all you do!

Previous Super "T" Awards Recipients: 2020 = Susan Delph Louisville-Metro Dept. for Public Health & Wellness 2019 = Anita Johnson Franklin County Health Department 2018 = Kathy Gifford Graves County Health Department 2017 = Wendy Keown Lincoln Trail District Health Department



# **Reportable Disease Regulation Update**

Kentucky's infectious disease reporting regulation—<u>902 KAR 2:020 Reportable Disease Surveillance</u> was recently updated and approved earlier this year. The update impacted several infectious disease programs in Kentucky, including tuberculosis (TB). Our program was able to add a new section to the regulation, **902 KAR 2:020**, **Section 4**. *Laboratory Testing and Submission of Specimens to the Division of Laboratory Services (DLS) for the Identification of M. tuberculosis*. This section was added to assure:

- Any lab must conduct a smear and initiate testing for culture on all specimens regardless of rapid molecular testing (i.e. GeneXpert or PCR) results.
- 2. Details when to perform rapid molecular testing:
  - When any diagnostics specimen has a positive AFB smear result, or
  - On any specimen that originates from an individual with clinical or epidemiological evidence suggesting active tuberculosis.
- 3. Details what to do when rapid molecular testing cannot be performed:
  - The diagnostics specimen shall be sent to DLS.
- 4. Details on when to send the remainder of a specimen to the DLS:
  - Whenever a medical or national reference laboratory has a diagnostics specimen test positive for TB by rapid molecular testing, the remainder of that specimen should be sent to DLS.



5. Specimens found to be positive for M. tuberculosis by rapid molecular testing or culture testing shall be reported within one (1) business day to the local health department where the patient resides, or the Kentucky TB Program.

Please feel free to reach out our program if you have any questions regarding the TB-related updates to this regulation.

Did you know that the Kentucky TB Program has a regulations webpage?

### We do! <u>Click here</u> for our TB Regulation Webpage.

Listed on this link is information on the following:

TB Testing Toolkits for long-term care facilities and healthcare workers, and to regulations regarding TB prevention, control, and reporting regulations.

# World TB Day 2021

Each year, March 24th is recognized as World TB Day in commemoration of the date in 1882 when Dr. Robert Koch announced his discovery of Mycobacterium tuberculosis, the bacillus that causes tuberculosis (TB). Although World TB Day 2021 occurred during the continuing efforts of the COVID-19 response, our program still promoted awareness by sharing an informational flyer that was submitted to our public health and healthcare partners in order to share some of the new educational and promotional resources.

If you have not already had an opportunity to look at the World TB Day resources available through our partners, it's not too late! Although World TB Day has already past, use of promotional information and educational materials is encouraged throughout the year.

Click here to view resources from the Stop TB Partnership, and click here for resources from the Centers for Disease Control and Prevention.

### **Remember**—**#TheClockIsTicking to #EndTB!**

Program



World TB day is a day to educate the public about the impact of TB around the world. The Centers for Disease Control and Prevention, along with our partners and colleagues around the world, share successes in TB prevention and control and raise awareness of the challenges that hinder our progress toward the elimination of this devastating disease.





This year, the Stop TB Partnership has selected "The Clock is Ticking" at the 2021 World TB Day theme. If we want to end TB by 2030, #TheClockIsTicking to reach the TB Targets for 2022.

If your local health department would like to participate via social media use the hashtags: #TheClockIsTicking | #EndTB | #WorldTBDay



@StopTBPartnership



Please <u>click here</u> for the Stop TB Partnership's World TB Day 2021 social me dia campaign resources—including graphics, videos, photo filters, and more!

#### TB AND COVID-19 #ItsTimetoEndTB

Tuberculosis (TB) is the world's biggest killer among infectious disease, claiming more than 4,000 lives each day. The unprecedented COVID-19 pandemic is seriously impacting people with pre-existing health conditions. People who have had TB are usually more vulnerable to other infections, including the novel coronavirus due to lung damage. They are also at higher risk of developing complications from COVID-19. Click here for information from the Stop TB Partnership on TB and COVID-19.

#### Additional World TB Day Resources

Please click here for additional resources for World TB Day from the Centers for Disease Control and Prevention. These digital resources may be helpful in planning activities to inform and educate your local partners about TB-related problems and solutions and the importance of supporting worldwide TB control efforts.

#### Kentucky Tuberculosis Program Staff and Contacts:

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

Maria Lasley, RN, BSN, MA, MBA TB Nurse Consultant Maria.Lasley@ky.gov

> Charles H. Rhea, MPH TB Epidemiologist I Charles.Rhea@ky.gov





# A Heartfelt Goodbye to our TB Champions

### Dr. Kraig Humbaugh, Director Lexington-Fayette Co. Health Dept.

In December 2020, Dr. Kraig Humbaugh announced he is leaving position as Director of the Lexington-Fayette County Health Department (LFCHD) this June. In his former roles as the Kentucky Department for Public Health Commissioner and the Director for the Division of Epidemiology and Health Planning, Dr. Humbaugh has long remained a champion for TB prevention and control initiatives. Despite his current busy schedule, he still participates in our monthly TB case conference meetings with the LFCHD TB clinic team. We will miss his *infectious* laugh and wish him the best of luck as he begins this well-deserved new adventure.







# A Heartfelt Goodbye to our TB Champions

### Maria Lasley, TB Nurse Consultant

Goodbyes are always hard, and this one is especially hard for our program.

After 13 years, we are saying "so-long and good luck" to our dear co-worker, Maria Lasley, as she soon relocates to sunny Florida this autumn. Her knowledge and dedication as the Kentucky TB Program's Nurse Consultant has not only helped shape our program standards and protocols, but has also assisted in creating our nationally recognized reputation for program excellence when she won the national **Carol Pozsik Award** for "TB Nurse of the Year" in 2013.

We will miss her dearly; however, we are happy to send her to Florida with well wishes of continued success as she "*blooms*" in her new home. (She is known for her exceptional "green thumb" and spectacular backyard oasis!)













# **Upcoming Trainings and Events**

Ongoing Orientation	Nurse Case Management Orientation Course – Virtual The Kentucky TB Program presents a self-paced virtual course for new local health department personnel. Pre-requisites required. Please contact the Kentucky TB Program for more information. There will be multiple courses with rolling start dates throughout the year. Contact the program for additional information on the next cohort start dates with available seats.
June 9 <sup>th</sup> —July 23 <sup>rd</sup> , 2021	National TB Controller's Association Conference — Virtual NTCA is pleased to hold their annual conference online this June 2021. Note that continuing education (CE) opportunities through the University of New Mexico School of Medicine, Office for Professional Continuous Learning, and the Eastern New Mexico School of Nursing.
July 22 <sup>nd</sup> , 2021	Kentucky's TB Program Update — Virtual (Previously known as Update for Physicians and Clinicians) Plan to join the Kentucky TB Program and SNTC as they present a virtual update on TB for all healthcare members who provide TB services.

See the following pages for additional education opportunities and resources:

٠	Nurse Case Management Course for New Local Health Dept. TB Staff	P. 15
٠	Find TB Resources	P. 16
٠	Patient Fact Sheet Series—Translated TB Information	P. 16
٠	A Clinician's Guide to the TB Laboratory	P. 17
٠	Cultural Competency and Tuberculosis Control—Country Guides	P. 17

For education and training questions, please contact

### Michelle Stephens—TB Education and Outreach Nurse

Michelle.Stephens@ky.gov or

(502) 564-4276 ext. 4294

### **Nurse Case Management Training**

#### Training Updates: Nurse Case Management Course for New Local Health Department TB Staff

This time last year, Kentucky was beginning to respond to the COVID-19 pandemic. As the response continued, more local and state public health staff were being pulled from their regular job duties to assist in the response. This lead to the postponement of programs, trainings, meetings, and other efforts scheduled for 2020. For the Kentucky TB Program, this meant the postponement of the biannual TB 101 orientation trainings. However, as we begin to assimilate back into our regular duties, we are proud to announce the reinstatement of our new virtual orientation training, **"TB Nurse Case Manager Orientation Cohort**".

The TB Nurse Case Manager Orientation Cohort is self-paced course that replaces both the traditional

two-day classroom training and the six month follow-up online training. This six-module interactive training course will provide learners with a comprehensive overview of TB nurse case management, surveillance, and reporting. Participants will be assigned to and work with a personal coach, who will be available virtually or live to provide assistance and answer questions along the way. By the end of this course, participates will gather the resources, skills, and knowledge's needed to conduct practical TB case management duties tailored to her/his specific area.



At the conclusion of this course, you will receive a certificate of completion and be awarded <u>40+</u> **nursing CEs**. But, most importantly, you will receive valuable information not only to provide successful TB nurse case management, but also have successful patient outcomes!

Are you ready to sign up and/or would like more details on our new training?

Please reach out to:

Michelle Stephens—TB Education and Outreach Nurse

Michelle.Stephens@ky.gov or

(502) 564-4276 ext. 4294

Hon	e Search Ma	terials Submit Material	s Adapting Materials	Research Tools	Additional Resources	Contact Us
Home > Se	arch Materials					
Keyword: Title: Author: Publisher:	(e.g., "skin testing proc (e.g., "TB treatment") (e.g., "National Institute (e.g., "U.S. Committee Search	s of Health")		]	narrow your se Enclose the w search for a s	ords in quotations to pecific phrase. tuation from search

The Centers for Disease Control and Prevention has developed an online search engine called "Find TB Resources". This search engine identifies resources from across the internet (based on keyword, title, author, publisher, etc.) on any TB-related topic of interest. Click <u>here</u> for their online webpage where you can explore this resource.



Translated TB patient fact sheets are now available through the Southeastern National TB Center. Click <u>here</u> for their online webpage where you can find this product.



# A Clinician's Guide to the TB Laboratory

HEARTLEND NATIONAL TB CENTER Click <u>here</u> for the *Clinician's Guide to the TB Laboratory* resource on the Heartland National TB Center website. This resource provides basic information on the use of public health and clinical laboratories in the diagnosis and monitoring of patients with TB.

EXCELLENCE · EXPERTISE · INNOVATION

Cultural Competency guides are now available through the Southeastern National TB Center. These guides support the provider-foreign-born client relationship by giving country-specific background information, epidemiological data, common misperceptions and beliefs about TB and HIV/AIDS. Click <u>here</u> for their online webpage where you can find these products.





### **Contact Us**

Currently, the team is working remotely due to COV1D-19 restrictions. As a result, please copy <u>all</u> team members on all email requests.

Emily Anderson, RN, BSN TB Controller/Program Manager (502) 564-4276 ext. 4298

EmilyA.Anderson@ky.gov

#### Charles H. Rhea, MPH

Epidemiologist I (502) 564-4276 ext. 4293 <u>charles.rhea@ky.gov</u>

#### **Michelle Stephens, RN**

Education and Outreach Nurse (502) 564-4276 ext. 4294 <u>michelle.stephens@ky.gov</u>

#### Tim Kreimer, MSN, MBA, RN-CEN

Nurse Consultant KDPH Contact Information Pending

# Get the BUGS before you give the DRUGS!