

TBeat

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Heartland Happenings

As you may have heard, the Centers for Disease Control and Prevention (CDC) has notified the Center's of Excellence (COE's) that we are *no longer* able to offer in-person training for the remainder of the year due to the ongoing COVID-19 pandemic. The Heartland team is, and will remain, dedicated to providing excellent medical consultation and developing innovative online training as well as new and revised products. **We are here for all your needs!**

Heartland's Training and Education team has been hard at work designing and developing a case-based online training session for public health nurses with the first session expected to launch later this fall. Training and Education also completed work on a series of pre-recorded presentations, *Tuberculosis-101 for the Family Nurse Practitioner*, to fulfill a special request from UT Health San Antonio School of Nursing.

The Heartland team has been busy with product development, review and pilot testing for *Tips for Treating Latent TB Infection in Children*, *Multi-Drug Resistant Tuberculosis: Tools for the Public Health Nurse*, *Tuberculosis in the Community* flipchart and *The Spectrum of Tuberculosis from Infection to Disease - TB at a Glance: Third Edition*. Please visit our website at <https://www.heartlandntbc.org> for the latest updates!

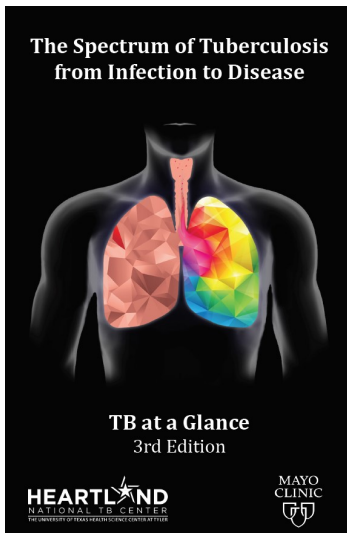
Needs Assessment — In line with our continuous effort to improve our services and meet the needs of our region, we invite you to participate in a short survey. We greatly appreciate your feedback which will be used to guide the development of future products and trainings. Please contact Delphina Sanchez at delphina.sanchez@uthct.edu with any questions you may have.

Survey Link—<https://www.surveymonkey.com/r/2020-2021NA>

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TB.BIT



The Spectrum of Tuberculosis from Infection to Disease—TB at a Glance, 3rd Edition

The Spectrum of Tuberculosis from Infection to Disease—TB at a Glance, 3rd edition is a collaborative effort between the Mayo Clinic and Heartland National TB Center (HNTC). This handbook is designed to provide both health providers and public health officials facilitated access to fundamental principles of tuberculosis (TB) management. There are two delivery strategies for this 3rd edition: Hardcopy book (available in July, look for an announcement), and electronic e-book with live links available now on the Heartland National TB Center website products page.

This manual incorporates the writings of 24 authors spanning 13 chapters. Chapters include Testing for TB Infection, Diagnosis of TB Disease, Treatment of Latent TB Infection, Treatment of TB Disease, Principles of Drug Resistance, TB and HIV, TB in Children, Radiographic Findings of Pulmonary TB, Extra-pulmonary TB, Drug Therapy for TB, Clinical Monitoring and Toxicity Management, TB in Special Populations, and Hospitalization, Isolation, Public Health Case Management.

Link to Book— https://www.heartlandntbc.org/assets/products/The_Spectrum_of_TB.pdf

COE Training Update

Dear Colleagues,

As we continue into the summer and fall with COVID-19, we wanted to provide you with some important information regarding the [TB Centers of Excellence \(COEs\)](#) 2020 trainings. In order to protect the health of both participants and faculty, the COEs will no longer provide any in-person trainings for the remainder of 2020. All trainings will be conducted virtually. The term “virtual trainings” applies to trainings such as:

Webinars—live webcast seminar

Self-paced online courses—user completes on their own; e.g., [TB 101](#)

Facilitator-led online course—cohort of learners take course together, there is a facilitator directing the course, may be a combo of live and recorded events (some parts of this course may be self-paced); e.g., COE’s online nurse case management trainings

The COEs will work with their regions to develop content and courses to meet regional needs. Wherever possible, the COEs are encouraged to make virtual trainings available nationally so that participants from any region may register.

Terence Chorba, MD, DSc, LLM, MPH, MPA, FACP, FIDSA

Chief, Field Services Branch

Division of Tuberculosis Elimination

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention

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Public Health Response to Tuberculosis Outbreak Among Persons Experiencing Homelessness, Minneapolis, Minnesota, USA, 2017-2018

Kelzee K. Tibbetts, Randy A. Ottoson, and **Dean T. Tsukayama**

Tuberculosis (TB) is a greater risk for populations experiencing homelessness. When a TB exposure occurs in a homeless shelter, evaluation of contacts is both urgent and challenging. In 2017, local public health workers initiated a response to a TB outbreak in homeless shelters in Minneapolis, Minnesota, USA. In this contact investigation, we incorporated multiple techniques to identify, evaluate, and manage patients, including the concentric circle method to characterize amount of contact, identifying the most frequent sites of sporadic medical care, using electronic medical records, and engaging with medical providers treating this population. Of 298 contacts evaluated, 41 (14%) had latent TB infection and 2 had active TB disease. Our analysis indicated a significant relationship between duration of exposure and positive TB test result ($p = 0.001$). We encourage local public health departments to expand beyond traditional contact tracing techniques by leveraging partnerships and existing systems to reach contacts exposed in shelters.

For more information—<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7045824/pdf/19-0643.pdf>

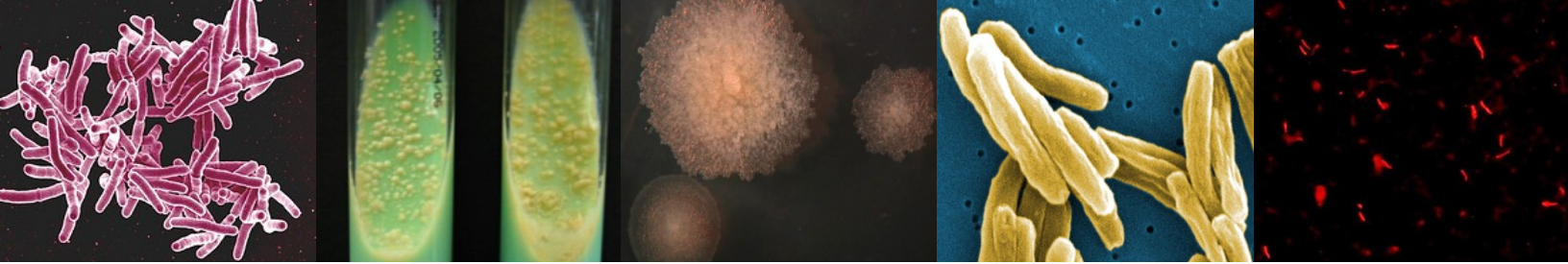
MDR/XDR-TB Management of Patients and Contacts: Challenges Facing the New Decade. The 2020 Clinical Update by the Global Tuberculosis Network

Giovanni Battista Migliori, Simon Tiberi, Alimuddin Zumla, Eskild Petersen, Jeremiah Muhwa Chakaya, Christian Wejse, Marcela Muñoz Torrico, Raquel Duarte, Jan Willem Alffenaar, H Simon Schaaf, Ben J Marais, Daniela Maria Cirillo, Riccardo Alagna, Adrian Rendon, Emanuele Pontali, Alberto Piubello, José Figueroa, Gabriella Ferlazzo, Alberto García-Basteiro, Rosella Centis, Dina Visca, Lia D'Ambrosio, Giovanni Sotgiu, **members of the Global Tuberculosis Network (including Barbara J. Seaworth)**

The continuous flow of new research articles on MDR-TB diagnosis, treatment, prevention and rehabilitation requires frequent update of existing guidelines. This review is aimed at providing clinicians and public health staff with an updated and easy-to-consult document arising from consensus of Global Tuberculosis Network (GTN) experts. The core published documents and guidelines have been reviewed, including the recently published MDR-TB WHO rapid advice and ATS/CDC/ERS/IDSA guidelines. After a rapid review of epidemiology and risk factors, the clinical priorities on MDR-TB diagnosis (including whole genome sequencing and drug-susceptibility testing interpretations) and treatment (treatment design and management, TB in children) are discussed. Furthermore, the review comprehensively describes the latest information on contact tracing and LTBI management in MDR-TB contacts, while providing guidance on post-treatment functional evaluation and rehabilitation of TB sequelae, infection control and other public health priorities.

For more information—<https://www.sciencedirect.com/science/article/pii/S120197122030045X?via%3Dihub>

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Reply to: “ATS/CDC/ERS/IDSA Clinical Practice Guidelines for Treatment of Drug-resistant TB: A Two-edged Sword?”

Giovanni Sotgiu, MD, PhD, Giovanni Battista Migliori, MD, Dick Menzies, MD, MSc, Sundari Mase, MD, MPH, Terence Chorba, MD, DSc, Barbara Seaworth, MD, Payam Nahid, MD, MPH

We appreciate the letter by Drs. Chang K-C and Yew W-W commenting on the Official Guidelines of the American Thoracic Society (ATS)/Centers for Diseases Control and Prevention (CDC)/European Respiratory Society (ERS)/Infectious Disease Society of America (IDSA) on the treatment of multidrug-resistant tuberculosis (MDR-TB)(1). Three issues are raised in the letter: first, on the certainty of the evidence on the use of linezolid and bedaquiline in the management of fluoroquinolone-sensitive and -resistant MDR-TB; second, the risk of resistance to these two drugs with generalized use, suggesting focused use of these drugs in selected patients might limit this hazard and minimize acquisition of resistance and serious adverse events; and third, that with broadening availability of rapid drug susceptibility testing (DST), optimized longer and existing standardized shorter-course regimens still have value.

For more information—<https://www.atsjournals.org/doi/pdf/10.1164/rccm.202003-0698LE>

Dear Colleague Letter Regarding Rifapentine Impurity

Dear Colleague,

Rifapentine (supplied as Priftin® 150 mg film-coated tablets manufactured by Sanofi) is part of a 3-month regimen with isoniazid (3HP) for treating latent tuberculosis infection (LTBI) and preventing TB disease. It has also been used in several recent and ongoing CDC-funded clinical trials. Priftin® is the only rifapentine product approved by the U.S. Food and Drug Administration (FDA). In June 2020 Sanofi alerted the Division of Tuberculosis Elimination, other health agencies, and stakeholders worldwide about a newly detected impurity in Priftin®. The impurity, 1-cyclopentyl-4-nitrosopiperazine, is a nitrosamine and a potential carcinogen. It was detected through testing based upon recently adopted regulatory standards to assay all medications for nitrosamines. (1,2) Low levels of the impurity have been detected in some rifapentine drug substance and in some market-ready Priftin® drug product batches at production facilities in Italy. The company is investigating the source of this impurity and any safety implications, and has communicated with FDA. A follow-up submission of the results of Sanofi’s investigation for discussion with FDA (including a benefit-risk evaluation) is anticipated in July. More background information about nitrosamine impurities in drug products is available on the FDA website. (3)

As a precautionary measure, Sanofi has paused the release of Priftin® from its production sites. This is expected to affect availability of the drug in the United States. This pause is in addition to the ongoing shortage that has affected the U.S. supplies of Priftin® since late 2019, and which was attributed to increased global demand.

For the remainder of the letter, please see <https://heartlandntbc.org/temp/RifapentineImpurity.pdf>

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TB Elimination Champions - Heartland Region

Breathe Easy South Texas (B.E.S.T.) - Breathe Easy South Texas is a collaboration of governmental and private agencies specifically dedicated to performing targeted testing and treatment of latent TB infection. The program has been successful in extending the capacity and function of local public health agencies to address critical gaps in TB prevention. Recent studies and analysis of operational data as well as a Costs and Savings Report have demonstrated there have been positive economic, social, and health benefit returns.

Hope Clinic LTBI Team, Texas —The Hope Clinic and Houston Health Department staff collaborate to provide latent TB infection (LTBI) treatment in high-risk communities in Houston, TX. The Hope Clinic LTBI team are dedicated to educating and delivering the 12-dose regimen to treat LTBI through directly observed therapy to their patients onsite resulting in a completion rate above 80%. The Hope Clinic staff says “it’s time to test and treat latent TB infection” and is putting those words into action by continuing their patient enrollment and partnership with the Houston Health Department.

Saint Louis County Department of Public Health Chest Clinic, Missouri—The Chest Clinic provides expertise to our community, evaluates and treats TB disease and latent TB infection, and trains future healthcare providers to “think TB” using hands-on experiences. The Chest Clinic’s healthcare community uses the Chest Clinic to provide guidance and specialized care for their residents. In partnership with a local university, the clinic helps our future physicians to understand their role in controlling and preventing TB disease.

For more information—<https://www.cdc.gov/tb/worldtbday/2020/tbchampions.htm>

Resources

TB Education and Training Network

<http://www.cdc.gov/tb/education/Tbetn/default.htm>

National TB Controllers Association

<http://www.tbcontrollers.org>

Find TB Resources

<https://findtbresources.cdc.gov/>

Tuberculosis Epidemiologic Studies Consortium (TBESC)

<http://www.cdc.gov/tb/topic/research/TBESC/default.htm>

Centers of Excellence (COE) TB Training and Education Products

<https://sntc.medicine.ufl.edu/rtmccproducts.aspx>

Program Collaboration and Service Integration (PCSI)

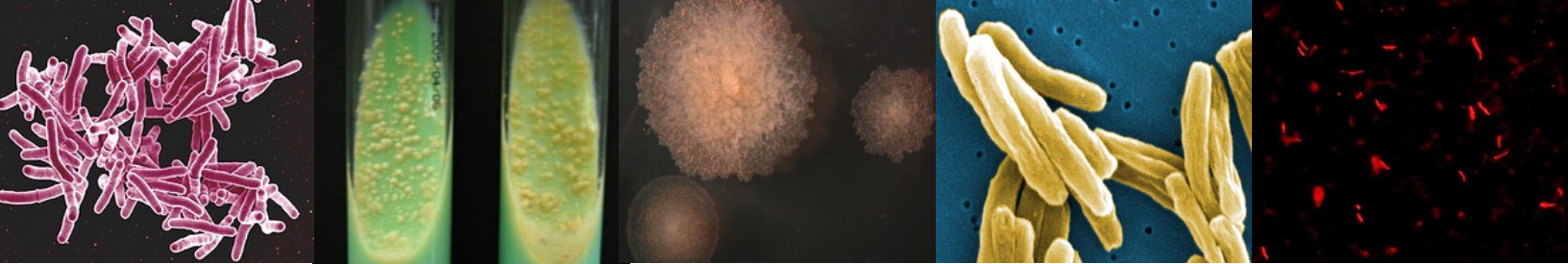
<http://www.cdc.gov/nchhstp/programintegration/Default.htm>

Centers for Disease Control and Prevention, Division of Tuberculosis Elimination

<http://cdc.gov/tb/>

If your organization has any additional links for TB resources that you would like published, please send them to Alysia.Wayne@uthct.edu

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The **MISSION** of the Heartland National TB Center is to build capacity with our partners. We will share expertise in the treatment and prevention of tuberculosis by: developing and implementing cutting-edge trainings, delivering expert medical consultation, providing technical assistance, and designing innovative educational and consultative products.

The **VISION** of Heartland National TB Center is to provide *excellence, expertise, innovation* in training, medical consultation, and product development to reduce the impact of tuberculosis in our region.

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