

## Online Global Health Course 5: Bacterial, Mycobacterial, and Fungal Infections

### About this course:

This course is provided by the Department of Medicine, Global Medicine as an online course in Canvas. This course prepares physicians and other health care providers to diagnose and treat people with bacterial, TB, and fungal infections. If you have questions or need support during the course contact [globalhealth@umn.edu](mailto:globalhealth@umn.edu).

Once enrolled in the course, complete all elements of the Canvas course including: the pre-test, modules, supplemental bonus material (optional, not required for completion of the course) and post-test. Be sure to complete the course evaluation form; this is required to receive the available CE credit and/or a Certificate of Completion.

Upon submission of your evaluation, you will have an opportunity to print a copy of your Certificate when it appears on your screen. The Office of Continuing Professional Development (OCPD) will also record your completion in [CE Portal](#). You will use your email address to access your account in CE Portal. Allow one month for your transcript in CE Portal to be updated; contact [cme@umn.edu](mailto:cme@umn.edu) if you have questions or need assistance accessing CE Portal. *CE Portal is not connected to any other University or MHealth Fairview systems and if you have not previously accessed your CE Portal account, select Forgot Your Password on the Sign In screen to set your password.*

**Estimated time to complete:** 30.5 hours

**Original Release Date:** 3/15/2011

**Recent Content Review:** March 2025

**Content Valid Through:** 6/30/2026

### Objectives

At the conclusion of this course, learners should be able to:

1. Analyze the epidemiology of tropical bacterial, mycobacterial and fungal diseases, highlighting neglected tropical diseases.
2. Describe the pathophysiology and clinical presentation of these diseases, including tuberculosis.
3. Apply the diagnosis and treatment of these diseases at the clinical level.
4. Identify social determinants of health that impact tropical bacterial, mycobacterial and fungal diseases in neglected populations.

### Accreditation

In support of improving patient care, University of Minnesota, Interprofessional Continuing Education is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC) to provide continuing education for the healthcare team.



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### **Credit Designation Statements**

#### **American Medical Association (AMA)**

The University of Minnesota, Interprofessional Continuing Education designates this enduring material for a maximum of 30.5 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

#### **Other Healthcare Professionals**

Other healthcare professionals who participate in this CE activity may submit their statement of participation to their appropriate accrediting organizations or state boards for consideration of credit. The participant is responsible for determining whether this activity meets the requirements for acceptable continuing education.

### **Additional Information**

#### **Cancellation Policy**

Registration of this asynchronous course is final with no refunds after the course has been started. If there are circumstances requiring administrative review, organizers may be contacted directly at [gblhlth@umn.edu](mailto:gblhlth@umn.edu) for individual review.

### **Disclosure Summary**

<b>Module A: Tuberculosis</b>			
Tuberculosis Pathogenesis	Faculty	Bryan Rock, MD	Nothing to disclose
Management and Treatment of Active Pulmonary Tuberculosis	Faculty	Bryan Rock, MD	Nothing to disclose
Extrapulmonary Tuberculosis	Faculty	Bryan Rock, MD	Nothing to disclose
Pediatric TB	Faculty	Dr. Kristen Bastug	Nothing to disclose
	Faculty	Dr. Jessica Hane	Nothing to disclose
Latent TB	Faculty	Dr. Megan Shaughnessy	Nothing to disclose
Multi-Drug Resistant Tuberculosis	Faculty	Dr. German Henestroza	Nothing to disclose
TB in MN	Faculty	Dr. Malini DeSilva	Nothing to disclose
Diagnosis of TB in Low Income Settings	Faculty	Dr. Lillian Tugume	Nothing to disclose
<b>Module B: Bacterial Infections I</b>			
A Difficult Diagnosis (Typhoid)	Faculty	Dr. Megan Shaughnessy	Nothing to disclose
Rickettsial Diseases Part I	Faculty	Dr. Lucas Blanton	Nothing to disclose
Rickettsial Diseases Part II	Faculty	Dr. Lucas Blanton	Nothing to disclose
Leprosy	Faculty	Dr. Pedro Legua	Nothing to disclose
Diphtheria	Faculty	Dr. Jon Hallberg	Nothing to disclose

Carrion's Disease	Faculty	Dr. Eloy Espinoza	Nothing to disclose
Pertussis	Faculty	Dr. Michael Taylor	Nothing to disclose
	Faculty	Dr. Kristina Krohn	Nothing to disclose
Murine and Scrub Typhus	Faculty	Dr. Wasin Matsee	Nothing to disclose
Plague	Faculty	Dr. Jonathan Sellman	Nothing to disclose
Tularemia (More than just rabbit fever)	Faculty	Victoria Hall, DVM, MS	Nothing to disclose
Q Fever	Faculty	Maria Bye	Nothing to disclose
Tetanus	Faculty	Dr. Megan Shaughnessy	Nothing to disclose
Brucellosis	Faculty	Dr. Jonathan Sellman	Nothing to disclose
Borrellia Recurrentis in Ethiopia	Faculty	Dr. Kalkidan Zenebe	Nothing to disclose
Tick Borne Diseases	Faculty	Dr. Elizabeth Schiffman	Nothing to disclose
<b>Module C: Bacterial Infections II</b>			
STI Treatment and Prevention	Faculty	Jenell Stewart, DO, MPH	Nothing to disclose
Rise of STIs Globally	Faculty	Jenell Stewart, DO, MPH	Nothing to disclose
Cholera	Faculty	Kate (Venable) Shafto, MD	Nothing to disclose
Cholera: Treatment Units	Faculty	Dr. Anst Gelin	Nothing to disclose
Campylobacter	Faculty	Kirk Smith, DVM, MS, PhD	Nothing to disclose
Salmonella	Faculty	Kirk Smith, DVM, MS, PhD	Nothing to disclose
Shigella	Faculty	Kirk Smith, DVM, MS, PhD	Nothing to disclose
E. Coli Diarrhea	Faculty	Kirk Smith, DVM, MS, PhD	Nothing to disclose
Melioidosis	Faculty	Dr. Kristina Krohn	Nothing to disclose
	Faculty	Dr. Megan Shaughnessy	Nothing to disclose
	Faculty	Dr. Wasin Matsee	Nothing to disclose
Leptospirosis	Faculty	Hannah Lee, MD	
	Faculty	Nishad Sathe, MD	
	Faculty	Bickey Chang, MD	
	Faculty	Mahsa Abassi, DO	
	Faculty	Hope Pogemiller, MD	
	Faculty	Dr. Wasin Matsee	Nothing to disclose
	Faculty	Kristina Krohn, MD	Nothing to disclose
Anthrax	Faculty	Maria Bye	Nothing to disclose
	Faculty	Kelly Schenck	Nothing to disclose

Acute Bacterial Meningitis and Epidemic Meningococcal Disease Control in Africa	Faculty	Henry Wu, MD, DTM&H	Grant: Takeda
Antibiotic Resistance A Global Threat	Faculty	Lina Hamid, PharmD	Nothing to disclose
<b>Module D: Fungal Infections</b>			
Histoplasmosis	Faculty	Dr. Tom Chiller, MD MPHTM	Nothing to disclose
Coccidiomycosis	Faculty	Dr. Tom Chiller, MD MPHTM	Nothing to disclose
Infection in an otherwise healthy person (blastomycosis)	Faculty	Dr. Malia Ireland	Nothing to disclose
	Faculty	Dr. Tom McHale	Nothing to disclose
Paracoccidioidomycosis	Faculty	Dr. Monica Rani	Nothing to disclose
Fungal NTDs	Faculty	Dr. Dallas Smith	Nothing to disclose
Drug Resistant Fungal Infections	Faculty	Jeremy Gold	Nothing to disclose
	Faculty	Dr. Dallas Smith	Nothing to disclose
Sporothrix Brasiliensis	Faculty	Dr. Tom Chiller, MD MPHTM	Nothing to disclose
<b>Module E: Clinical Case Vignettes</b>			
Hansen's Disease – Leprosy	Faculty	Dr. Alexia Knapp	Nothing to disclose
	Faculty	Dr. Ann Settgaest	Nothing to disclose
Bacterial and Fungal Dermatology Cases	Faculty	Dr. Alexia Knapp	Nothing to disclose
	Faculty	Dr. Erkia Reid	Nothing to disclose
Anthrax Case	Faculty	Dr. Megan Shaughnessy	Nothing to disclose
Atrophic Rhinitis Cases	Faculty	Dr. Mallory Yelenich-Huss	Nothing to disclose
New Onset Movement Disorders	Faculty	Dr. Steve Swanson	Nothing to disclose
Cases from Cameroon	Faculty	Dr. Brian Muthyala	Nothing to disclose
Case: 30 yo male with left-sided facial swelling	Faculty	Dr. Matt Goers	Nothing to disclose
Case – Nausea and Vomiting	Faculty	Dr. Brian Yablon	Nothing to disclose
Case – ATV Broke Down	Faculty	Dr. Brian Yablon	Nothing to disclose

<b>Planning Committee</b>
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Kristina Krohn, MD, CTrop Med	Course Director	Nothing to disclose
Megan Shaughnessy, MD, CTropMed	Co-Course Director	Nothing to disclose
Brett Hendel-Paterson, MD, CTropMed®	Planning Committee Member	Nothing to disclose
William Stauffer, MD, MPH, CTropMed®	Planning Committee Member	Nothing to disclose
Beth Scudder, MA, Course Developer	Planning Committee Member	Nothing to disclose
Sarah Sponsler, Global Medicine Pathway Coordinator	Planning Committee Member	Nothing to disclose