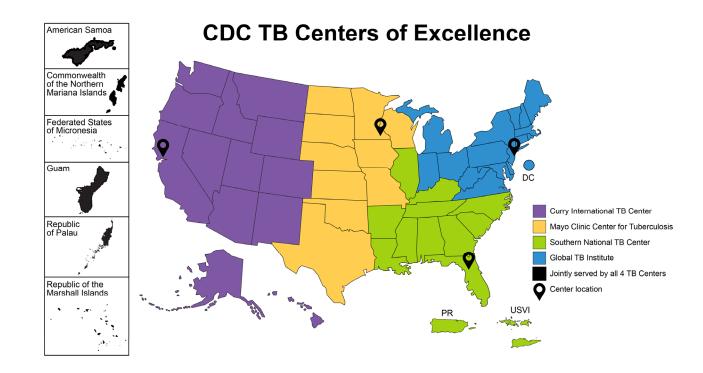


# Mayo Clinic Center of Excellence

WISCONSIN TB SUMMIT APRIL 2, 2024

- lowa
- Kansas
- Minnesota
- Missouri
- Nebraska
- North Dakota
- Oklahoma
- South Dakota
- Texas
- Wisconsin
- · City of Houston





Zelalem Temesgen, M.D. Principal Investigator



Jennifer Curran, Ed.D. Executive Director



John Wilson, M.D. Director of Medical Consultation



Tuba Chaudhry Medical Consultation Coordinator



James Gaensbauer, M.D., M.S. Medical Director Education



Rebecca Mussack, M.Ed. Sr. Education Specialist



Courtney Klapperich Director Education



Monica Schroeder Continuing Medical Education Specialist

#### **MCCT Consulting Faculty**

#### centerfortuberculosis.mayo.edu/about-us/our-team

#### **Infectious Disease**

- · Supha Arthurs, M.D. Sanford Medical Center, Bismarck, ND
- · Daniel Brailita, M.D. University of Nebraska Medical Center, Omaha, NE
- Wissam El Atrouni, M.D. University of Kansas Hospital, Kansas City, KS
- Hind Fadel, M.D., Ph.D. Mayo Clinic, Rochester, MN
- Mary J. Kasten, M.D. Mayo Clinic, Rochester, MN
- · Ryan Kubat, D.O. University of Kansas Health System, Kansas City, KS
- · Maryam Mahmood, M.B., Ch.B. Mayo Clinic, Rochester, MN
- · Elizabeth Ann Misch, M.D. University of Wisconsin, Madison, WI
- · Stacey Rizza, M.D. Mayo Clinic, Rochester, MN
- Avish Nagpal, M.D. Sanford Medical Center, Fargo, ND
- · Paschalis Vergidis, M.D. Mayo Clinic, Rochester, MN

#### **Public Health Nurse**

- · Shea Rabley, R.N. Mayo Clinic, Rochester, MN
- Philip Wegner, R.N. Mayo Clinic, Rochester, MN
- · Marisa Hynes, R.N. Olmsted County, Rochester, MN

#### **Pediatric Infectious Disease**

- William Garrett Hunt, M.D., M.P.H., DTMH, FAAP CHoSA Pediatrics, Baylor College of Medicine, San Antonio, TX
- · Lukasz Weiner, M.D. University of Iowa Health Care, Iowa City, IA

#### Laboratory

· Nancy Wengenack, Ph.D. Mayo Clinic, Rochester, MN

#### **Pharmacy**

- · Christina O'Connor, Pharm.D., R.Ph. Mayo Clinic, Rochester, MN
- · Tanner Johnson, Pharm.D., R.Ph. Mayo Clinic, Rochester, MN
- · Anthony Podany, Pharm.D., Ph.D. University of Nebraska Medical Center, Omaha, NE
- · Kimberly Scarsi, Pharm.D., M.S., FCCP, BCPS University of NE Medical Center, Omaha, NE
- · John Zeuli, Pharm.D., R.Ph. Mayo Clinic, Rochester, MN

#### **Pulmonary**

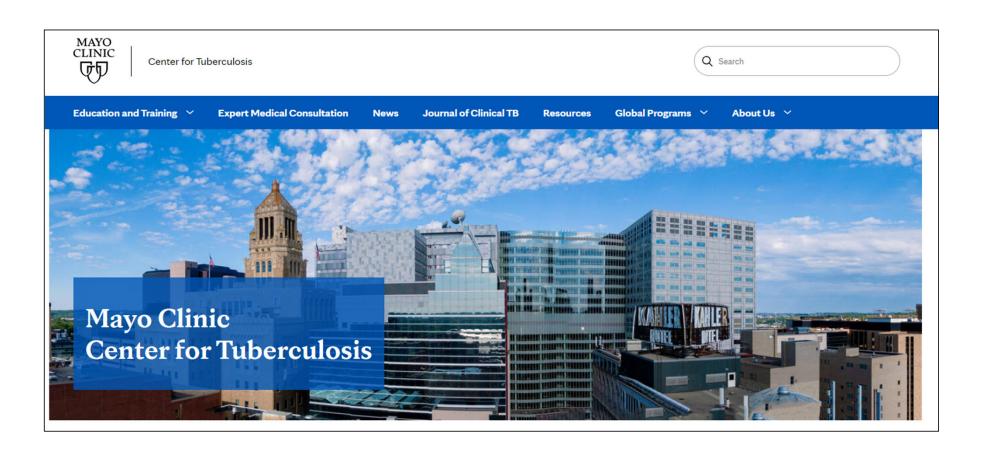
- · Timothy Aksamit, M.D. Mayo Clinic, Rochester, MN
- · Robert Blount, M.D. University of Iowa, Iowa City, IA
- Patricio Escalante, M.D., M.S. Mayo Clinic, Rochester, MN
- Douglas Hornick, M.D. University of Iowa College of Medicine, Iowa City, IA

#### **Preventive & Occupational Medicine**

· Melanie Swift, M.D., M.P.H., Civil Surgeon Mayo Clinic, Rochester, MN

#### **Ophthalmology**

· Wendy Smith, M.D. Mayo Clinic, Rochester, MN



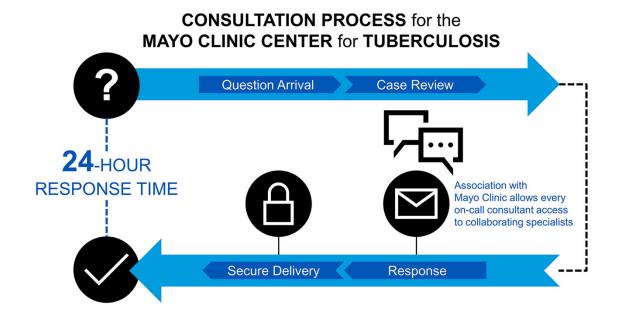
Updated Website centerfortuberculosis.mayo.edu

## Expert Medical Consultation

IDCrowd: MCCT.idcrowd.org

Email: TBCenter@mayo.edu

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## Education and Training

- In-person
- Live virtual
- Self-paced/Recorded
- Podcasts
- Mini-Fellowship
- Technical Assistance
- Products

#### **Collaborative Partnership**

- Coordinate speakers
- Learning plan
- Registration
- Event materials
- CME

#### **Current Collaborations**

- Wisconsin Virtual TB Summit
- Iowa Clinical Intensive
- Missouri Bi-State Conference

### 2024 Educational Offerings



#### Innovations in TB Webinar Series 4th Thursday of the Month

This monthly webinar series offers the latest insights in screening, diagnosis, and treatment of TB disease and LTBI. Select sessions will be recorded.

#### Civil Surgeons Webinar Series March 22, June 20, September 19, December 19

This 4-part series provides civil surgeons with knowledge on TB screening, testing, and treatment for individuals seeking a status adjustment in the US.

#### TB Lunch and Learn Virtual Series Select Thursdays each Month

The TB "Lunch and Learn" series is designed as an informal small group experience where participants can discuss real-life TB cases and TB-related challenges.



#### **Mayo Clinic Talks Tuberculosis Podcast**

Infectious disease specialist and Professor of Medicine, Zelalem Temesgen, M.D., discusses TB disease, diagnosis and management.

#### Therapeutic Drug Monitoring in Active TB

This course provides insights into effectively identifying, interpreting, and applying therapeutic drug monitoring in TB treatment.

#### **Pediatric TB: Radiologic Considerations**

This course discusses the role of radiology in pediatric tuberculosis.



#### **TB Clinical Intensive**

October 9-10 Rochester, MN

#### **Iowa TB Clinical Intensive**

October 24-25 Des Moines, Iowa



For more details, scan the QR code or go to centerfortuberculosis.mayo.edu/education-and-training

### Mini-Fellowship

#### **Application process**

- 1. Complete the MCCT Mini-fellowship application found on our website
- 2.Email an updated resume/CV to <a href="mailto:tbcenter@mayo.edu">tbcenter@mayo.edu</a>
- 3. Your application and resume/CV will be reviewed by a member of our team

- Individualized Experience
- Meet with and observe a TB clinician
- Present a clinical case
- Discuss cases with TB experts
- Visit laboratory facilities for the diagnosis of TB
- Observe TB control activities in public health offices





#### OCTOBER 2023 NEEDS ASSESSMENT

Topics identified as "highly needed"



Category (TOTAL RESPONSES)	TOPIC	RESPONSE BY#	RESONSE BY %
LTBI (118)	Treatment adherence Strategies	58	49%
TB Diagnostic Strategies (112)	New diagnostic tools on the horizon	71	63%
	Updates on TB diagnostic strategies	70	62%
TB Treatment Strategies (108)	Updates on recommended regimens	67	62%
TB Infection Control (108)	Working with infection control practitioners (i.e. discharge planning)	52	48%
TB Case Management (106)	Coordinating care for patients with complex medical issues	66	62%
	Managing medication-related side-effects	64	60%
TB And Co-morbidities (103)	Liver disease	64	62%
Partnerships (105)	Partnership with private providers	41	39%
Specific Populations (105)	Immigrants (i.e. B1 notifications)	57	54%
	Non U.S. born individuals	57	54%
Cultural Awareness (106)	Working with diverse patient populations	46	43%

## Key informant interview Highlights

Every state discussed the need for basic TB 101 training.

Target Audience	Training Needs	Educational Materials
<ul> <li>Public Health Nurse</li> <li>ID staff</li> <li>TB Program staff</li> <li>Private clinicians</li> <li>Civil surgeons</li> </ul>	<ul> <li>Contact Investigation</li> <li>Nurse Case Management</li> <li>Basic physician training</li> <li>TB 101</li> <li>TB and Diabetes</li> </ul>	<ul> <li>Translated materials</li> <li>Congregate settings decision tree</li> <li>Interpreting x-rays to rule out TB reference</li> <li>Emergency Response Preparedness</li> <li>LTBI Book</li> </ul>

#### **Product Formats Requested**

#### **TB Provider Educational Materials**

- Online videos
- Online educational resources (PDFs)
- Interactive online training
- Fact sheets

#### **TB Patient Educational Materials**

- Fact sheets
- Brochures/pamphlets
- Printed copies
- Online videos

#### **Coming Soon!**



Center for Tuberculosis

#### Compounding Pharmacy Fact Sheet

anyone interested in learning how compounding pharmacies may support the treatment of patients with tuberculosis (TB) disease or latent tuberculosis infection



#### WHAT IS A COMPOUNDING PHARMACY?

A compounding pharmacy is a specialized pharmacy that can create a medication tailored to the unique needs of a patient and provide individualized services in the event of a medication shortage. There are two FDA compounding pharmacy designations:

- 503B outsourcing facilities manufacture large batches of medications with or without prescriptions and are held to rigorous FDA standards. Use this option if the compounded medication is available.
- 503A pharmacies compound prescriptions specific to individual patients. When a compounded medication is not offered from a 503B outsourcing facility, use this



- ATB medication is in shortage or discontinued.
- A patient is allergic to one or more inactive ingredients such as dyes or binders.
- A TB medication requires flavorings to make it more palatable. Note if this is the only accommodation needed, most traditional pharmacies can support this request.
- A patient requires a tailored dosage.
- A patient cannot ingest the commercially available dosage form.



### HOW CAN COMPOUNDING PHARMACIES HELP TREAT CHILDREN WITH TB OR LTBI? Administering medication to children can be difficult and medications may not be formulated to meet specific needs of children.

Compounding pharmacies can: Provide customized medicine in the form of flavored syrups, gummies, topicals, and lollipops which can significantly increase TB treatment adherence. Note not all compounding pharmacies offer these options readily. Prescribers should check multiple sources if seeking a specific dosage form to the flexible based on compounding pharmacy availability and medication stability.

- Address concerns related to allergies or severe side effects to inactive ingredients.
- Formulate medications to deliver appropriate pediatric dosages and concentrations not offered by cor available products.

#### OR A COMPOUNDED MEDICATION WRITTEN?

e compounding pharmacy before issuing a prescription.

ions generally include: ritten at the top of the prescription

'dves, binders

jummies, capsules, liquid, etc.)

#### SING A COMPOUNDING PHARMACY?

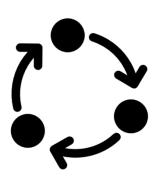
unding pharmacy is dependent on factors such as the specific unaling pratimities of insurance plan in an pharmacy pricing model: (to, the patient's insurance) and pharmacy pricing model: to individual patient requirements with disk important the overall cost the CDC, the approximate cost of a daily may improve the overall cost the CDC, the approximate cost of a daily one of rifampin is \$0.00 for cost for a provinced liquid form of rifampin is approximately \$8 acy directly for accurate pricing information.

#### WEBSITE RESOURCES

offer compounding services. Use the tools below to find a local

od option when a specialized medication is needed, but keep in mind rces and time than a standard prescription. If a prescription is not ons needed, it may take several days before the medication is read

### Summary



- Medical consultation
- Education and training
- Mini fellowship
- Collaborative partnership
- Regional input
- Upcoming course development

## CONTACT



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TBcenter@mayo.edu



507-284-0275

## Questions and Answers





## Thank you