



Center for
Tuberculosis

Public Health Nursing and TB Prevention and Control

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Accreditation Statement



Accreditation Statement

In support of improving patient care, Mayo Clinic College of Medicine and Science 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.

Credit Statement(s):

AMA

Mayo Clinic College of Medicine and Science designates this live activity for a maximum of 18.25 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.



ACPE

Mayo Clinic College of Medicine and Science designates this educational activity for a maximum of 18.25 ACPE Knowledge-based contact hours. Participants should claim only the credit commensurate with the extent of their participation in the activity.

UAN Number: UAN JA0000238-0000-26-089-L99-P.

ANCC

Mayo Clinic College of Medicine and Science designates this activity for a maximum of 18.25 ANCC contact hours. Nurses should claim only the credit commensurate with the extent of their participation in the activity.



IPCE CREDIT™

This activity was planned by and for the healthcare team, and learners will receive 18.25 Interprofessional Continuing Education (IPCE) credit for learning and change.

Other Healthcare Professionals:

A record of attendance will be provided to all registrants for requesting credits in accordance with state nursing boards, specialty societies or other professional associations.

For disclosure information regarding Mayo Clinic School of Continuous Professional Development accreditation review committee member(s) and staff, please go here to the course accreditation page.

Available Credit

- 18.25 ACPE,
- 18.25 *AMA PRA Category 1 Credit™*
- 18.25 ANCC
- 18.25 Attendance
- 18.25 IPCE

Disclosure:

No relevant financial disclosures to report and no mention of off-label use of any medications or products.

Learning Objectives

The learner will be able to:

1. Understand the role of the local and state public health programs in the prevention and control of TB.
2. Understand the role of the public health nurse in the case management of the person with TB disease and TB infection.

THINK....

Why Do We Need
To Know All This?

Take a minute to:

- **Imagine the United States without public health.**
 - Who would oversee the patient's care?
 - Who would assure the patient got their medicines?
 - Who would assure the patient took their medicines correctly?
 - Who would assure the patient received appropriate care?
 - Who would assure the patient completed their prescribed doses of medications?

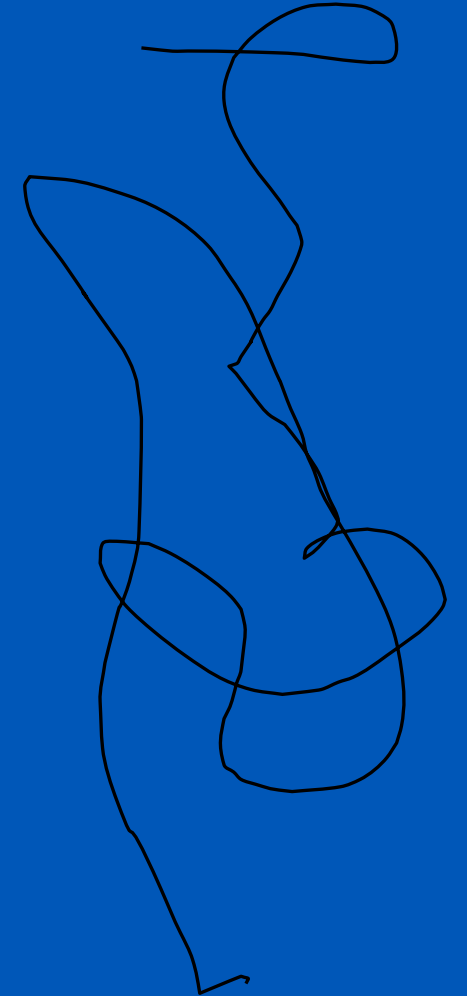
Imagine...

- Who would count cases?
- Who would maintain a registry of cases?
- Who would conduct contact investigations?
- Who would assure contacts were screened and received treatment?
- Who would assist the patient to complete their prescribed medication regimen?
- Who would assure TB patients keep appointments, get labwork and get radiology done when requested?



Without Public Health.....

- How would you know that TB statistics were accurate?
- How would you know when an outbreak occurs?
- Who would respond to an outbreak?
- Who would screen new immigrants and refugees?
- Would you expect individual physicians to identify TB patients and conduct contact investigations?
- Who is in charge of your state to make policy decisions related to TB?
- Who would take legal actions for nonadherent patients?
- What resources would be available to your state for any of these activities?



What would happen?

- Would drug resistance would increase?
- Would cases relapse because they did not follow directions?
- Would patients stop taking medications when side effects occur?
- Would patients stop taking medications when they felt better?
- Would patients remain infectious longer?
- Would infectious TB patients run around your community and spread TB?
- Would it be **CHAOS**?

History of Public Health in TB

- In the Early 1900's, the local Ladies Benevolent Society took care of persons with TB. There were no medications, only supportive services in the community.
- Slowly, sanatoriums were established and persons with TB could be there for years, receiving rest, good nutrition and fresh air.
- July 1, 1946, a federal agency, the Communicable Disease Center (CDC) was established in Atlanta, Georgia.
- In 1953, CDC began counting cases of tuberculosis across the US. There were 84,304 cases of tuberculosis in the US. In 2025, there were 10,260 cases.
- In 1980, the name was changed to Center for Disease Control.
- The focus of the agency was on research and the establishment of guidelines and recommendations for the care and treatment of the person with tuberculosis.

Essential Components of a Tuberculosis Prevention and Control Program

Fundamental role of the health department in TB control

Overall planning and policy development for the TB program

Surveillance and reporting of person with suspected or confirmed TB disease

Data management, analysis and use

Program evaluation and quality improvement

Laboratory and other TB-related testing

Essential Components....

- Identification, management and treatment of persons with TB infection
- Identification, management and treatment of persons with TB disease
- Epidemiological investigation
- Training and education
- Partnerships and collaboration
- Research

ACET/NTCA/CDC. Essential Components of a Public Health Tuberculosis Prevention, Control and Elimination Program: Recommendations of the Advisory Council for the Elimination of Tuberculosis and the National Tuberculosis Controllers Association. MMWR. July 31, 2020. 69(7).

Essential Components Grant Funded State Programs

Prepare and maintain an overall plan and policy for TB control

Maintain a surveillance system

Collect and analyze data to assemble local, state and national statistics and reports for stakeholders

Participate in program evaluation and research to advance local, national and international knowledge of the best ways to identify, treat and prevent TB

Prioritize TB control effort, especially in resource limited areas

Grant Funded Programs Must....

- Ensure access to laboratory and radiology tests
- Identify, manage, and treat contacts or other persons at high-risk for TB infection
- Manage persons who have TB disease or who are being evaluated for TB disease
- Provide training and education for TB program staff, other health departments, clinicians, patients and their families, community groups and the general public
- Collaborate with medical, community and academic partners

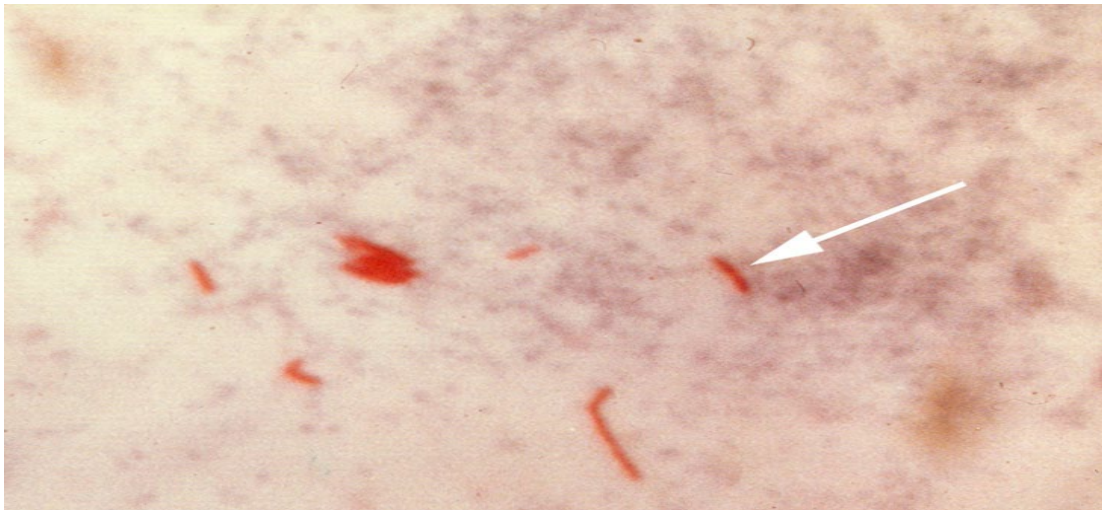
Grant Funded Programs Must....

- Coordinate care with other health care providers, facilities and community agencies/organizations
- Identify and/or utilize alternative approaches to TB Control
- Target screening and prevention programs to high-risk populations
- Follow the most current recommendations for treatment of TB

Public Health Laboratory

The laboratory is an essential part of the diagnosis, treatment, prevention and control of TB. There are 6 essential functions:

- Immunologic-based test methods: TST, IGRA
- Sputum smears



IOM Report. Ending Neglect: The Elimination of Tuberculosis in the United States. 2000.

Public Health Laboratory

- Nucleic acid amplification test (NAAT) on sputum specimens
- Sputum Culture
- Drug Susceptibility tests for all first-line drugs
- Consultation on and referral sources for other tests (therapeutic drug levels; whole genome sequencing, susceptibility for 2nd line drugs)

Public Health Surveillance

Conducted within the framework of state laws:

- Reporting of active disease cases
- Reporting (if required in your state) of TB infection
- Time frames for reporting to the health department
- Who has to report the cases/infection to the state

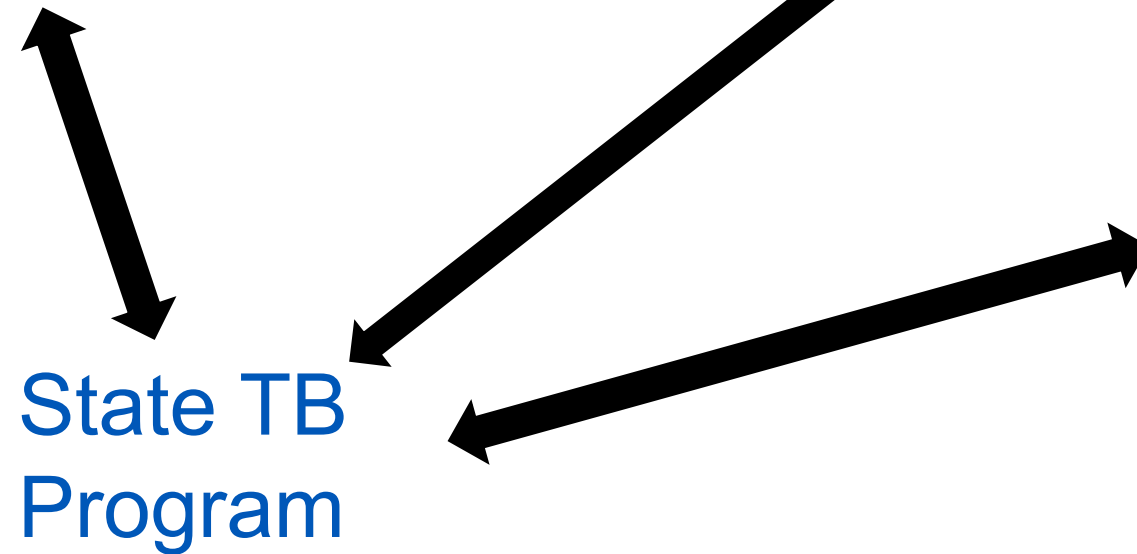
Public Health Surveillance

Ongoing, systematic collection, analysis and interpretation of health data is essential to the planning, implementation and evaluation of public health practice, especially when it is integrated with timely dissemination of that data to those responsible for and others who have an interest in TB prevention and control.

TB Reporting

Labs
Health Care
Providers
Others

Local, County
Health Department



CDC Center for Disease Control

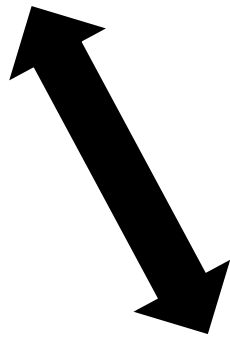
Provider

Diagnosis
Reporting
Treatment

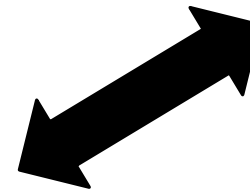


Public Health

Surveillance
Laboratory Support
Case Management
(DOT, Contact
Investigation,
Isolation & Legal)



Collaboration
Consultation
Education
Feedback

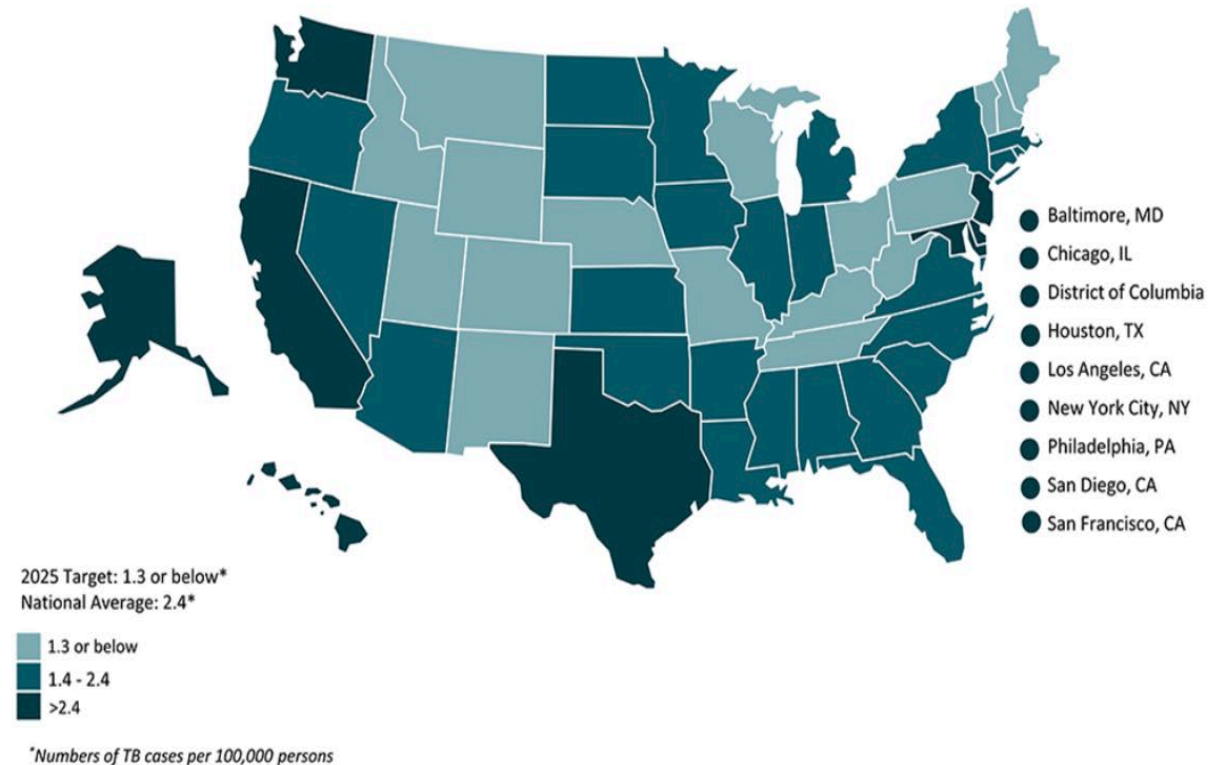


CDC Surveillance Reporting

RVCT

Provisional and
Final

Figure 1. Overall TB Incidence*, United States, 2021



Overall, TB incidence increased from 2020 to 2021; the nation has not yet achieved the 2025 national target of ≤ 1.3 TB cases per 100,000.

Training and Education

State and local health departments have the primary responsibility for preventing and controlling TB in their state by assuring a competent workforce.

They assure this by conducting and providing training and education to their staff, patients, families and the community as well as making printed materials available to their staff.

So....Who is going do this?

Responsibility for successful treatment lies with the Public Health Program or a private provider, but not with the patient.

Public Health Nurses have traditionally played a prominent role in the public health workforce in TB control in the US

Their training provides special skills needed to manage or coordinate medical and social-behavioral concerns. This training includes:

- designing contact and source case investigations
- Educating patients, contacts and families
- Identifying ineffective drug therapy regimens and drug toxicities
- Recognizing patient behaviors that might lead to poor adherence
- Developing strategies to encourage completion of therapy

ATS/CDC/IDSA. Controlling Tuberculosis in the United States. MMWR. November 4, 2005.54(RR12)

Public Health Nursing and TB Control and Prevention

- Nurse Case Management encompasses the components as outlined in the Control Statement and the Essential Components Recommendations.
- Other staff may be utilized to augment nurse case management, such as outreach workers, DOT workers, Disease Investigation Specialists, social workers, community volunteers.
- The prescribing physician **is** carrying out a public health function with responsibility not only for prescribing an appropriate regimen but also for successful completion of therapy. NCM can assist with this process
- Oversight, therefore, would be a shared responsibility.

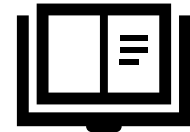
Public Health Nurse Case Management

“TB case management, carried out in a timely manner with vigilant monitoring, provides an effective framework for the public health nurse to ensure successful completion of treatment for TB disease and TB infection. Public Health nurses oversee and manage the care for a person diagnosed with TB, ensure or provide appropriate clinical care, ensure a regular, systematic evaluation of the patient’s status, and revise and implement plans to ensure progression to cure.”

NTCA/NTNC. Tuberculosis Nursing: A Comprehensive Guide to Patient Care. 2nd Edition. 2011

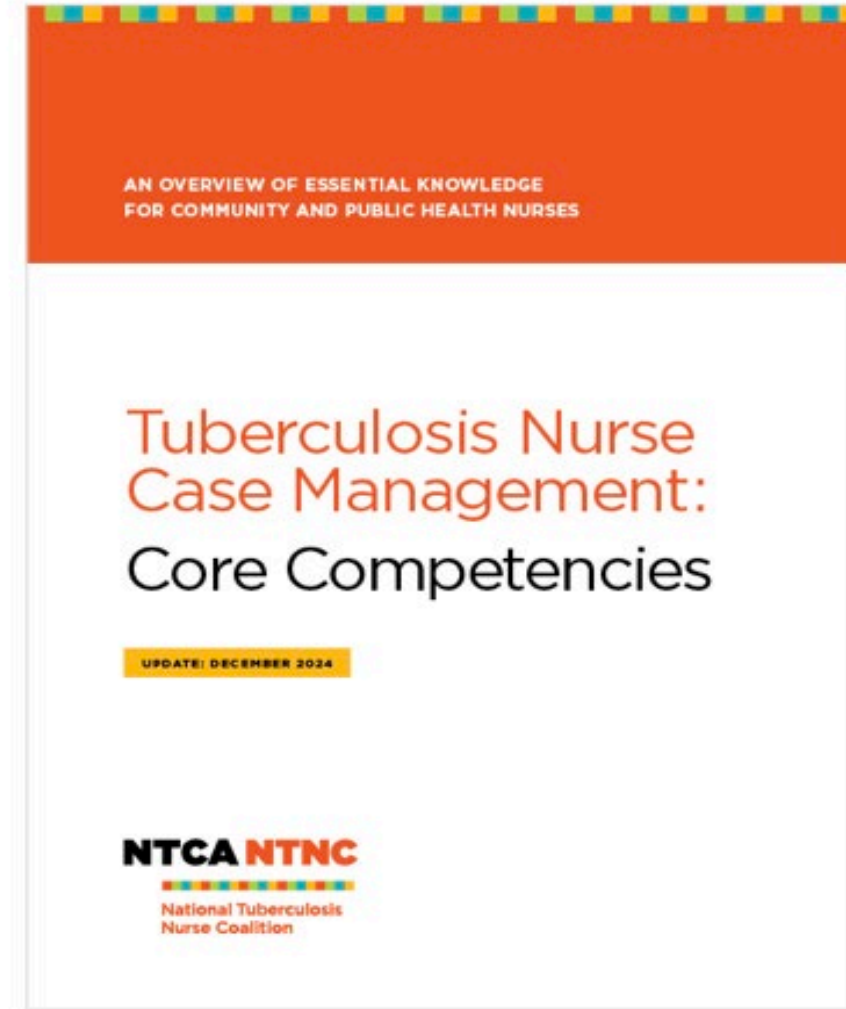
Nurse Case Management

- This is where all the information comes together
- Get the whole picture of the patient
- Responsibility is assigned to one person
- Identify what is required for the patient to get and take their medications, work through minor side effects, assist in keeping appointments for clinical services, lab work and radiology, and continue to completion of treatment.



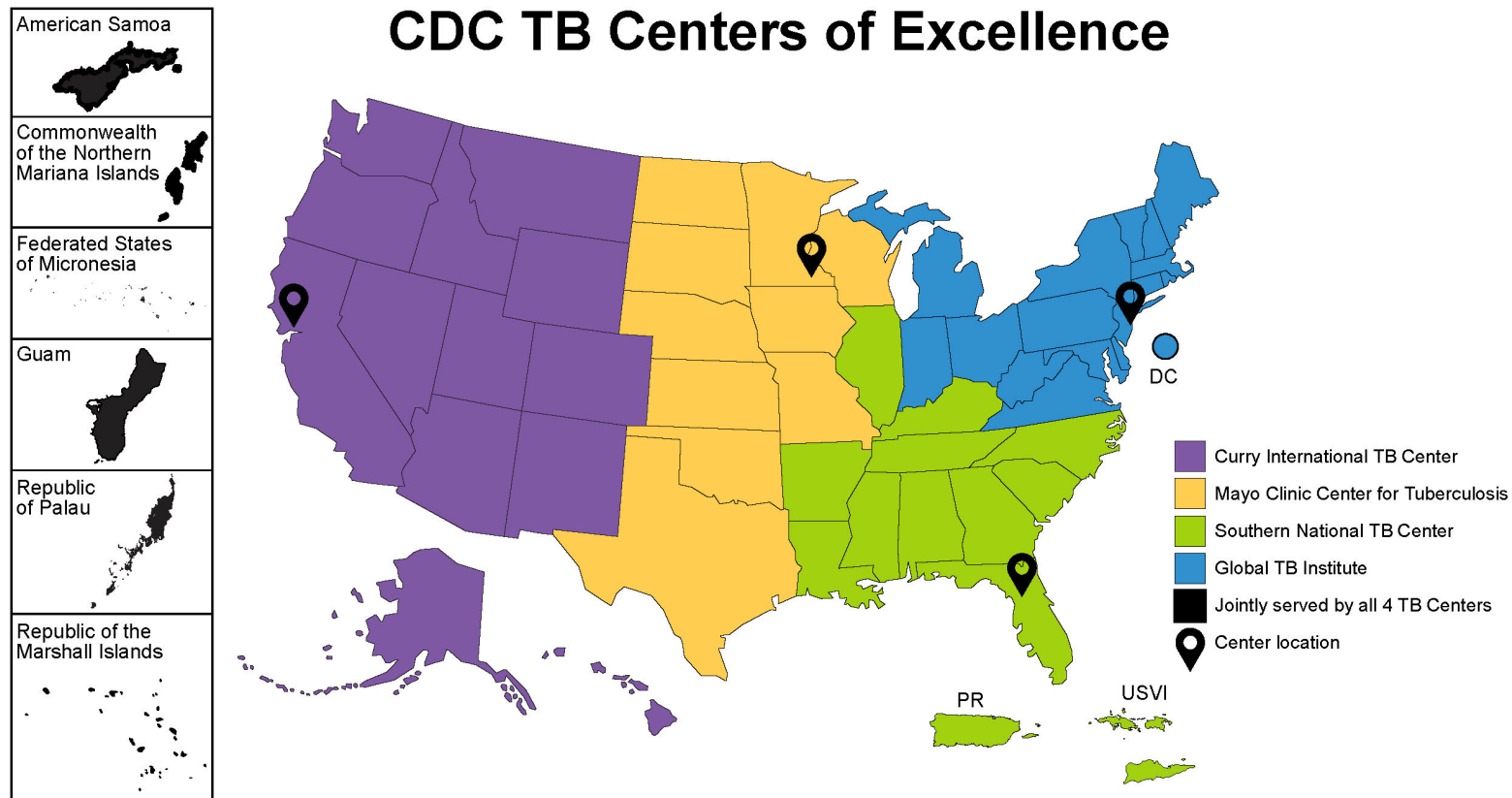
Tuberculosis Nurse Case Management : Core Competencies

Published by NTCA/NTNC



<https://nationaltbcoalition.org/tb-resources/ntca-publications-and-tools/tb-nurse-case-manager-core-competencies/>

TB Centers of Excellence: Provide Training and Educational Materials





AND.....

That is why we do
what we do!

Questions and Answers



Resources

ACET/NTCA/CDC. Essential Components of a Public Health Tuberculosis Prevention, Control and Elimination Program: Recommendations of the Advisory Council for the Elimination of Tuberculosis and the National Tuberculosis Controllers Association. MMWR. July 31, 2020. 69(7).

ATS/CDC/IDSA. Controlling Tuberculosis in the United States. MMWR. November 4, 2005.54(RR12)

IOM. Ending Neglect: The Elimination of Tuberculosis in the United States. 2000. Available at: <https://www.nationalacademies.org/publications/9837>

NTCA/NTNC. Tuberculosis Nursing: A Comprehensive Guide to Patient Care. 2nd Edition. 2011

NTCA/NTNC. Tuberculosis Nurse Case Management: Core Competencies. December 2024. Available at: <https://nationaltbcoalition.org/tb-resources/ntca-publications-and-tools/tb-nurse-case-manager-core-competencies/>



Thank you