

NTCA/NTNC Workgroups for Public Health Workforce Development in TB Programs: Model Duty Statement and Core Competencies

Overview of Communicable Disease Investigator Workgroup Process

Acknowledgement

The Communicable Disease Investigator Model Duty Statement and Core Competencies have been adapted, with some modification from the documents developed by the California Department of Health Services Tuberculosis (TB) Control Branch in collaboration with the Francis J. Curry National TB Center and the California Communicable Disease Investigator (CDI) Advisory Group. We greatly appreciate their outstanding efforts in developing an excellent and comprehensive document. Members of the CDI Core Competency Workgroup of the NTCA/NTNCC have adapted and modified this document for presentation at the national level, with an expectation that local jurisdictions will modify it to reflect their specific program needs.

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MODEL DUTY STATEMENT & CORE COMPETENCIES FOR TUBERCULOSIS CONTROL

Communicable Disease Investigator

Scope

Under general supervision and within the structure of a tuberculosis (TB) Control team, incumbents carry out duties related to the prevention and control of TB that are within the scope of non-licensed staff. These duties may include: interviewing infected TB patients, cases, and/or suspects to identify contacts and settings of potential transmission; conducting field investigations; reviewing and analyzing TB investigations; supporting patient treatment adherence; coordinating with private physicians and laboratories to enlist and maintain their cooperation; making informational/educational presentations to the public; and preparing statistical records and reports.

Job Duties

The communicable disease investigator (CDI) is a public health professional who has the responsibility to:

1. Interview and re-interview TB patients and other key persons to elicit information needed to control and prevent TB.
2. Conduct and manage field investigations to locate and refer identified TB patients for appropriate services.
3. Perform critical analysis of TB cases and field investigations.
4. Monitor TB patients' diagnostic workup and adherence to treatment and intervene appropriately (within the scope of non-licensed practice).
5. Interact with health care and other community providers and laboratory staff to support TB control efforts.
6. Conduct health education presentations to the public.
7. Complete appropriate documentation.

Job Titles

- Communicable Disease Investigator
- Disease Intervention Specialist
- Disease Investigator
- Field Representative
- Health Services Representative
- Public Health Advisor
- Public Health Representative
- Disease Control Investigator
- Public Health Investigator

Competency Goals

- To identify TB program functions that describe or correspond to the communicable disease investigator's patient and disease control responsibilities
- To identify the essential knowledge, skills, abilities and attributes of the communicable disease investigator
- To facilitate development and training of disease investigators

Minimum Qualifications

The qualifications outlined below demonstrate a step-wise progression from an entry level CDI to a journey level CDI. These levels are based on the understanding that most CDI candidates will not have had prior CDI experience and that demonstration of some level of academic rigor is needed to perform CDI tasks such as critical thinking and analysis. This represents a minimum and should be customized to meet the needs of local jurisdictions.

Entry level CDI qualifications include:

- AA degree or coursework in progress
AND
- 1 year public health experience
OR
- College graduate

Journey level qualifications include:

- Qualifications stated above
AND
- Demonstrated mastery of CDI duties

Knowledge and Abilities

- Knowledge of:
 - Techniques of effective communication
 - General communicable disease control and related public health programs
 - Modes of transmission, diagnosis, treatment, and control procedures for communicable diseases
 - Organization and functions of government and public health
- Ability to:
 - Prepare and maintain confidential records and reports
 - Maintain patient confidentiality during investigations
 - Conduct interviews of a highly personal nature

- Exercise initiative, persistence, and tact in tracing contacts and arranging for follow-up medical examination and treatment
- Gain confidence and establish rapport with difficult-to-reach individuals and people of varied cultures, races/ethnicities, languages, socioeconomic status, sexual orientations, religious beliefs, migration status, and abilities.
- Critically analyze public health disease control process
- Work as a member of a team
- Establish and maintain effective, ethical, and cooperative relationships with medical and laboratory personnel, public officials, and community groups
- Creatively solve problems in the field and in-house settings
- Prepare and make educational presentations to varied groups of people
- Work with diverse populations

Important Attributes

- Professionalism
- Persistence
- Nonjudgmental attitude
- Assertiveness
- Creativity
- Resourcefulness
- Cultural Competence

GENERAL CORE COMPETENCIES

1. Communication

- a) Demonstrate effective oral and written communication skills
- b) Use communication strategies that build trust and rapport
- c) Demonstrate an unbiased and non-judgmental manner, in actions and communications with others

2. Cultural Competency

- a) Recognize the role of economic, cultural, social, behavioral, and historical factors while performing interviewing and field investigation activities
- b) Develop and adapt approaches that take into account cultural differences

3. Community Dimensions of Practice

- a) Establish and maintain linkages with appropriate persons in a variety of settings to elicit patient information and access special populations

- b) Utilize leadership, team building, communication, negotiation, and conflict resolution skills to build community partnerships
- c) Display high standards of conduct and ethics; understand the impact of violating confidentiality standards on the patient, program, self, and others
- d) Demonstrate understanding of public health's role in the community
- e) Participates in community activities concerned with health care delivery: health fairs, screenings, community board meetings, church social functions etc.
- f) Develop and maintain knowledge of public health laws and regulations
- g) Recognize the dynamic forces contributing to cultural diversity
- h) Develop a lifelong commitment to learning and rigorous critical thinking

4. Team Skills

- a) Participate productively as a team member
- b) Contribute to programmatic goals
- c) Identify limits to own knowledge/skill/authority and identify resources for referring matters that exceed these limits
- d) Demonstrate fiscal responsibility and utilize resources according to program priorities and policies

TUBERCULOSIS SPECIFIC CORE COMPETENCIES

5. Interview and re-interview tuberculosis (TB) patients¹ and other key persons to elicit information needed to control and prevent TB

Analytic/Assessment Skills

- a) Conduct interviews of TB patients and other key persons to elicit information about contacts, , places/settings of potential disease transmission, potential sources of infection and/or disease and other relevant information
- b) As part of the TB team, analyze case and contact investigation information to determine re-interview and investigative priorities and strategies
- c) Identify and address inconsistencies in information

Planning Skills

- a) Participate in developing and carrying out plans to locate and refer TB patients for appropriate services
- b) Communicate to TB patients and others information regarding the role of public health and the importance of TB control

¹ For purposes of this document, the term "TB patients" is meant to be broadly defined and may include persons with TB disease, suspected TB disease, latent TB infection, as well as persons who are TB contacts, associates, or otherwise at risk for TB.

- c) Work with community-based organizations for service delivery to targeted communities

TB Control Skills/Methods

- a) Understand and apply the concepts of TB transmission to the contact investigation process, including proper use of respiratory protection

6. Conduct and manage field investigations to locate and refer identified TB patients for appropriate services

Analytic/Assessment Skills

- a) Collect and analyze information to determine TB risk, need for evaluation, and investigative priorities
- b) Conduct field visits to assess environments where TB exposure may have occurred to determine risk of TB transmission
- c) Document all investigations and interviews, and apply data collection processes as appropriate

Planning (in conjunction with TB team)

- a) Develop a plan for monitoring and evaluating a “plan of action” for field investigations

TB Control Skills/Methods

- a) Utilize investigative tools to locate persons in need of TB follow-up
- b) Complete field investigation tasks within the pre-determined timeframes and maximize the use of available and appropriate resources
- c) Motivate TB patients to follow-up on recommendations

7. Perform critical analysis of TB cases and field investigations

Analytic/Assessment Skills

- a) Identify and access relevant and appropriate information sources
- b) Evaluate the integrity, quality, completeness, and results of information collected through contact investigations
- c) Establish investigation priorities and determine “plan of action” that takes into account the role of economic, cultural, social, and behavioral factors
- d) Utilize data as a resource when conducting investigations

Planning (in conjunction with TB team)

- a) Monitor and evaluate the effectiveness and quality of interventions
- b) Identifies organizational and infrastructure factors that may impact delivery of services or desired outcomes
- c) Collects information needed for data analysis

8. Monitor TB patients' diagnostic workup and adherence to treatment and intervene appropriately (within the scope of non-licensed practice)

Analytic/Assessment Skills (in conjunction with TB team)

- a) Monitor and assess TB patients' adherence to diagnostic work-up and treatment plan
- b) Determine an appropriate "plan of action" to facilitate adherence or address non-adherence
- c) Facilitate collaboration with locally identified health and other service providers
- d) Participate in preparing and serving legal orders

Planning Skills (in conjunction with TB team)

- a) Identify and implement interventions that support treatment adherence and overcome barriers
- b) Apply knowledge of community and public health resources to facilitate meaningful patient referrals
- c) Maintain awareness of local and community providers and share information with program management

TB Control Skills/Methods

- a) Obtain and transport specimens for laboratory examination
- b) Place and measure tuberculin skin tests (if certified and/or in accordance with local regulation or policy)
- c) Refer patients for tuberculin skin test interpretation and follow-up per local protocols
- d) Conduct directly observed therapy and monitor efficacy and side effects of treatment
- e) Perform routine phlebotomy as ordered (if certified and/or in accordance with local regulation or policy)
- f) Perform HIV pre and post-test counseling (if certified and/or in accordance with local regulation or policy)
- g) Perform HIV testing using approved tests and procedures (if certified and/or in accordance with local regulation or policy)

9. Interact with health care and other community providers and laboratory staff to support TB control efforts

TB Control Skills/Methods - Public Health Science Skills

- a) Communicate public health's role history and structure to health care and other community providers and laboratory staff
- b) Support health care and other community providers' and laboratory staffs' understanding of public health laws and regulations
- c) Act as an agent of the Health Officer while securing TB patients' personal medical information from health care providers and laboratories

10. Conduct health education presentations to the public

Planning Skills

- a) Communicate TB information to different target audiences
- b) Make clear and effective presentations to individuals and groups
- c) Use effective platform presentation skills supported by appropriate visual aids

11. Complete appropriate documentation

Analytic/Assessment Skills

- a) Maintain data entry records and use the TB Information Management System and/or other locally developed electronic information system for case and/or contact data management and reporting
- b) Prepare reports for program evaluation using documentation from investigations and interviews
- c) Recognize how data collection and use guides program performance and actions

TB Control Skills/Methods

- a) Record information on the client record according to accepted medical/legal documentation recommendations and guidelines

Resources and References for Disease Investigators

- Self Study Modules on Tuberculosis: Modules 1 – 5; CDC
Introduction
Module 1: Transmission and Pathogenesis of Tuberculosis
Module 2: Epidemiology of Tuberculosis
Module 3: Diagnosis of Tuberculosis Infection & Disease
Module 4: Treatment of Tuberculosis Infection & Disease
Module 5: Infectiousness & Infection Control
Glossary
- Self Study Modules on Tuberculosis: Modules 6 – 9; CDC
Introduction
Module 6: Contact Investigation for Tuberculosis
Module 7: Confidentiality in Tuberculosis Control
Module 8: Tuberculosis Surveillance and Case Management in Hospitals & Institutions
Module 9: Patient Adherence to Tuberculosis Treatment
Glossary
- Controlling Tuberculosis in the United States Recommendations from the American Thoracic Society, CDC, and the Infectious Diseases Society of America — MMWR 2005; 54 (No. RR-12)
- Guidelines for the Investigation of Contacts of Persons with Infectious TB: Recommendations from the National TB Controllers Association and CDC
- Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-Care Settings, 2005 — MMWR 2005; 54 (No. RR-17, 1-141)
- CDC. Essential components of a tuberculosis prevention and control program. MMWR. 1995, 44 (RR-11).
- Core Curriculum on Tuberculosis, 4th edition; CDC
- TB Interviewing for Contact investigation: A Practical Resource for the Healthcare Worker; New Jersey Medical School National Tuberculosis Center
- Performance Guidelines for Contact Investigation: The TB Interview; New Jersey Medical School National Tuberculosis Center
- Tuberculosis Field Investigation: A resource for the Health Care Worker; New Jersey Medical School National Tuberculosis Center
- Performance Guidelines: A Supervisor's Guide for the Development and Assessment of Field Investigation Skills
- Improving Patient Adherence to Tuberculosis Treatment; CDC
- TB Outreach: Working Effectively with Hard to Reach Patients; Francis J. Curry National Tuberculosis Center
- TB Simulated Patients, A Training Resource for the Contact Investigation Interview; New Jersey Medical School National Tuberculosis Center
- Tuberculosis Contact Investigations in Congregate Settings: New Jersey Medical School National Tuberculosis Center
- Making the Connection: An Introduction to Interpretation Skills for TB Control (video); Francis J. Curry National Tuberculosis Center
- Curriculum for Training and Certifying Unlicensed Staff as TST Technicians; Francis J. Curry National Tuberculosis Center

- Medical Management of Tuberculosis (online course); Francis J. Curry National Tuberculosis Center
- ATS/CDC. Treatment of Tuberculosis. 2003; 167.
- National TB Controllers Association / CDC Advisory Group on Tuberculosis Genotyping. Guide to the Application of Genotyping to Tuberculosis Prevention and Control. Atlanta, GA: US Department of Health and Human Services, CDC; June 2004. (Note: CDIs probably only need to understand certain aspects of genotyping but it is important they know the basics)
- Basic Epidemiology for Tuberculosis Program Staff; New Jersey Medical School National Tuberculosis Center
- Implementing Legal Interventions for the Control of Tuberculosis; New Jersey Medical School National Tuberculosis Center
- Gostin, LO. Controlling the resurgent tuberculosis epidemic. JAMA: 1993;269(2):255-61.
- Gostin LO. Public health law in an age of terrorism: rethinking individual rights and common goods. Health Aff (Millwood) 2002 Nov-Dec;21(6):79-93.
- Binken NJ, Vernon AA, Simone PM, McCray E, Miller BI, Schieffelbein CW, Castro KG. Tuberculosis prevention and control activities in the United States: an overview of the organization of tuberculosis services. International Journal of Tuberculosis & Lung Disease 1999 Aug;3(8):663-74.
- Institute of Medicine. Ending Neglect: The Elimination of Tuberculosis in the United States. Washington, DC: National Academy Press; 2000.
- CDC. CDC's Response to Ending Neglect: The Elimination of Tuberculosis in the United States. [Online document]. Accessed on 4/11/05. Available from <http://www.cdc.gov/nchstp/tb/pubs/iom/iomresponse/toc.htm>