

PERFORMANCE
GUIDELINES
FOR CONTACT
INVESTIGATION:

THE TB INTERVIEW

A SUPERVISOR'S GUIDE FOR THE DEVELOPMENT
AND ASSESSMENT OF INTERVIEWING SKILLS



NEW JERSEY
MEDICAL SCHOOL

GLOBAL
TUBERCULOSIS
INSTITUTE

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This supervisory resource is the first in a series of TB program performance guidelines. Included in this series are guidelines for the "TB Interview" for contact investigation, "Field Investigations," and "Initiating Legal Interventions."

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PREFACE

The Centers for Disease Control and Prevention (CDC) estimates that 9 contacts are identified for every verified pulmonary and laryngeal tuberculosis (TB) case in the United States. Of those contacts:

- 25-30% are infected with TB
- 1% of infected contacts have already progressed to disease
- 10% of newly infected contacts will develop TB disease – 5% within 2 years and the remaining 5% at some point during their lives
- Contacts coinfecting with HIV have a 7-10% chance per year over a lifetime for developing TB disease¹

The incidence of TB disease among close contacts is estimated to be 700/100,000 (approximately 100 times higher than the general population).² For every 1000 contacts identified and evaluated, 7-8 cases are diagnosed. Consequently, the identification and medical evaluation of contacts is a high priority. As indicated by a recent study of 1080 pulmonary, smear positive TB patients, interviewers failed to identify:

- Contacts for 8% of TB patients
- Non-household contacts for 1/3 of TB patients
- Work contacts for 89% of employed TB patients
- An average of only 2 contacts for homeless patients, compared with 6 contacts for non-homeless patients³

Another study conducted among 73 TB cases linked to one strain of *M. tuberculosis* revealed that 40 (55%) developed TB because of inadequate TB interviewing and contact identification.⁴

These findings suggest the need for improved skills among interviewers in order to elicit a higher proportion of all close contacts to reported TB suspects and cases. This manual discusses the TB interview for contact investigation, an important step in the prevention of future cases of TB.

1 Centers for Disease Control and Prevention. Core Curriculum on Tuberculosis: What the Clinician Should Know. Centers for Disease Control and Prevention: Atlanta, GA; 2000.

2 Institute of Medicine. Ending Neglect: The Elimination of Tuberculosis in the United States. Washington, DC: National Academy Press, 2000:101.

3 Marks SM, Taylor Z, Qualls NL, Shrestha-Kuwahara RJ, Wilce MA, Nguyen CH. Outcome of contact investigations of infectious tuberculosis patients. *Am J Respir Crit Care Med* 2000;162:2033-38.

4 Chin D, Crane C, Diul MY, Sun SJ, Agraz R, Taylor S, Desmond E, Wise F. Spread of *Mycobacterium tuberculosis* in a community implementing elements of tuberculosis control. *JAMA* 2000;283:2968-74.

INTRODUCTION

Contact investigation, a core activity in TB control, is crucial to an effective program. The TB interview is the initial step in the contact investigation process. It is particularly challenging because it occurs during a patient's illness and includes a discussion of how (s)he may have infected others. Because of the sensitive nature of this discussion, developing trust, building rapport, and providing education are key to achieving the primary goal of the interview which is contact identification. The quality of interview skills will have a direct impact on the outcome of the contact investigation. Therefore, it is essential that all designated TB staff members are trained in the skills of interviewing.

All **quality assurance** practices, including the evaluation of TB control activities, entail a continuous analysis of outcomes and the processes leading to these outcomes. The TB interview is no exception. As a management tool for quality assurance for contact and source case investigation, this manual has been created for the supervisor to effectively develop and assess staff's interviewing skills. Specifically it will enable supervisors to:

- Educate and train TB healthcare workers on the methods of effective interviewing
- Evaluate, develop, and improve the skills of both experienced and inexperienced TB interviewers
- Monitor the overall effectiveness of the interview process

In addition to laying a foundation for initial education and training, the methods and tools in this manual provide a structured approach to the evaluation of the TB interview process. These resources bring a measure of objectivity and consistency to an otherwise subjective assessment. The supervisor can then use these evaluation results to target ongoing training in those areas where improvement is needed.

Ideally, the supervisor should be experienced in TB interviewing and contact investigation in order to identify areas of interviewing strengths and weaknesses as demonstrated by the healthcare worker. Coupled with the supervisor's personal experience, this manual provides practical guidance and assessment instruments for effective interviewer training and quality assurance. On-the-job training, which incorporates practice, supervisory guidance, and the opportunity to apply what is learned, is the most effective way of bringing quality to the interviewing process.

EDUCATION AND TRAINING OF THE TB INTERVIEWER

Since quality assurance is a continuous process, the education, training, and evaluation of interviewing techniques can be applied in the inexperienced interviewer's orientation phase and in the ongoing development of experienced workers. The proper use of a well-developed assessment tool will improve individual interviewing skills and assist in the process of staff development.

Prior to conducting an interview, the **inexperienced interviewer** should complete education on the fundamentals of TB. Following this education, training in interviewing techniques, including observing an interview, should take place. Therefore, the education and training requirements for the inexperienced worker consist of the following which are detailed in this manual:

- Basic knowledge
 - Reading and comprehension of the *Self-Study Modules on Tuberculosis* on the fundamentals of TB and contact investigation
 - Attending a training course on effective communication and interviewing skills
- Bridging the gap between education and application
 - Shadowing an experienced interviewer
 - Observing a modeled interview
 - Role-playing a simulated TB interview
 - Team/dual interviewing with an experienced interviewer

For the **experienced interviewer**, supervisory evaluation will help determine where to focus education and training based on the current level and quality of the interviewer's skills. This will be described in the section entitled "Process and Skills Evaluation" on page 10.

BASIC KNOWLEDGE

If the healthcare worker is completely new to a TB program, (s)he must first learn the fundamentals of TB. The CDC's publication *Self Study Modules on Tuberculosis* contains nine modules on the basic concepts of TB. This resource provides an excellent foundation for both the new and experienced worker. Module six is designed specifically for contact investigation which, for the purpose of the TB interview, emphasizes the importance of:

- Building trust and rapport
- Educating the patient
- Determining the risk of transmission
- Assessing the patient's infectiousness
- Establishing an infectious period
- Identifying close contacts
- Applying the principles of expansion of contact identification
- Understanding the CDC/local health department's recommendations for initiating TB interviews and contact investigation

Upon completion of the reading of each of the nine *Self-Study Modules on Tuberculosis*, the questions and case studies located throughout the modules should be completed by the worker and reviewed with the supervisor. This will enable the supervisor to address topics that require clarification during the training process. Once these areas are identified, the supervisor can provide explanations and suggest additional reading, as well as have the interviewer watch the accompanying *Self-Study Modules on Tuberculosis* video tapes available from the CDC.

In addition to reading the Modules, the healthcare worker will benefit from participating in courses on effective communication and interviewing skills. Such courses and their teaching materials are available from the New Jersey Medical School National Tuberculosis Center and the Francis J. Curry National Tuberculosis Center and by inquiring with individual state health departments.⁵

BRIDGING THE GAP BETWEEN EDUCATION AND APPLICATION

The supervisor should not only clarify the TB fundamentals, but explain specific procedures in the TB interviewing process. Equally important to the learning process is the demonstration of TB interviewing skills. These areas are not only important for an effective interview, but will be used to evaluate the new healthcare worker's interviewing skills. These areas include:

- **Interviewing tasks and objectives** such as medical record review, developing an infectious period, planning an interview strategy, confirming the patient's personal information, providing TB education identifying contacts, and collecting information about the contacts
- **Basics of effective communication** such as promoting a dialogue with the patient, being cognizant of body language, and providing encouragement
- **Problem-solving** such as identifying verbal and nonverbal problem indicators, working with patient's concerns, determining the patient's potential level of adherence, addressing barriers to adherence, and being flexible throughout the interview process
- **Analytical skills** such as refining the infectious period, distinguishing between a close and casual contact, and developing an investigation plan and strategies based on available information

The new interviewer also needs to become familiar with the appropriate policies and/or practices regarding:

- Patients to be interviewed
- Time-frame for completion of interviews
- Documentation required during interviews and contact investigation process

The new interviewer will have an opportunity to observe the above practices through shadowing and modeling and to apply them through role-playing and team/dual interviewing. After each stage, the supervisor should debrief the new interviewer by providing feedback, while offering an opportunity for discussion, addressing concerns, and answering questions.

⁵ See Appendix A for resource ordering information.

SHADOWING

During the course of training, the healthcare worker should observe or **shadow** experienced interviewers who demonstrate quality interview skills. The new worker should accompany an experienced interviewer from initiation to conclusion of the TB interview process to observe:

- Preinterview activities
- Initial and all follow-up interviews
- Postinterview decision analysis
- Completion of relevant documentation

During the interview, the new interviewer should be introduced to the index patient as a member of the interviewing team. The new interviewer should be instructed not to ask questions during the interview process, but rather to carefully observe the strategies and methods utilized. (S)he should note questions that can be addressed later. Upon completion of the interview, the experienced interviewer should allow time to discuss the dynamics of the interviewing process. This should include discussing problems that arose and how they were resolved and addressing questions and concerns.

MODELING AND ROLE-PLAYING

Following the shadowing process, the new interviewer should observe a modeled interview.

Modeling provides a simulation of an entire interview or portions of an interview. It includes an experienced interviewer interacting with an index patient who is portrayed by another healthcare worker. Modeling is an effective method of demonstrating various interviewing techniques in a controlled environment. The interviewer can display both strong and weak skills and provide different strategies for dealing with a variety of patient situations. The index patient's portrayal is based on reactions to the interviewer's interactive style. The new healthcare worker can learn from observing a simulated interview and asking questions to the participants for learning.

After modeling, the new healthcare worker should engage in role-playing. **Role-playing** is a means of practicing interviewing skills and tasks in a simulated atmosphere. It is an effective way of training, by providing realistic scenarios without jeopardizing the results of an actual interview. Role-playing involves one person playing the role of an index patient requiring a TB interview, while another person plays the role of the interviewer.

The ideal role-playing design involves use of an individual with acting experience to play the role of an index patient, while the inexperienced worker plays the role of the interviewer. If using an actor is not feasible, a healthcare worker who is unfamiliar with both the TB interview process and with the worker can be used. This may preclude the 'index patient' from "helping" the new interviewer and creates a realistic learning activity. If none of the options above are available, a colleague or supervisor can be used to play the role of an index patient. The resource, *Simulated Cases for TB Contact Interviewing*, is available from the New Jersey Medical School National Tuberculosis Center and contains instructions, cases, and checklists for role-playing and use of simulated index patients.⁶

⁶ See Appendix A for ordering information.

Subsequent to both modeling and role-playing, the supervisor and/or experienced interviewer should be available for feedback and answering questions about the participatory experiences. The discussion should focus on how the training activities may or may not have reflected real interview situations.

TEAM/DUAL INTERVIEWING

Pairing a supervisor or experienced, quality interviewer with the inexperienced worker can be an effective training technique. The two interviewers should introduce themselves to the index patient as an interviewing team, with no reference made to the differences in their skill levels. The inexperienced healthcare worker should be prepared to conduct a substantial portion of the interview without assistance. Ground rules for the interview should be established ahead of time to address circumstances when the new interviewer may require assistance during the interview process. If there is uncertainty on how to respond to or pursue a line of questioning, the new interviewer can refer to the experienced interviewer for assistance. The new interviewer should be encouraged to read and become thoroughly familiar with the "Tuberculosis Interview Outline" (Appendix B) prior to the interview and use the "TB Interview Checklist"⁷ during the interview. Although the new interviewer is expected to complete as much of the interview as possible, the supervisor/experienced interviewer must intervene if the worker does any of the following:

- Loses his/her train-of-thought or becomes distracted
- Loses focus of the purpose of the interview
- Becomes intimidated by the index patient and/or interview process
- Omits significant portions of the interview and/or neglects to address crucial points
- Exhibits poor interpersonal skills
- Provides misinformation or incomplete information

The intervention of the supervisor/experienced interviewer should be as natural as possible, without appearing intrusive or detracting from the legitimacy of the inexperienced interviewer. When intervening, the supervisor/experienced interviewer should be tactful when adding to or rewording what the inexperienced interviewer has already stated, and should also encourage the inexperienced interviewer to return to being the primary interviewer. The new interviewer should be reminded that team/dual interviewing is a learning process and the experienced interviewer's intervention should not be regarded negatively, but simply as part of the training process. Upon completion of the interview, the experienced interviewer should allow time to constructively appraise the new interviewer's performance.

⁷ See Appendix A for ordering information.

PROCESS AND SKILLS EVALUATION

The observation of interviewing techniques is important for healthcare worker training and development. After an inexperienced interviewer completes the training requirements, (s)he can be observed conducting an entire patient interview. However, all healthcare workers should be observed at regular intervals as part of quality assurance and staff development. This regular observation is important in the skills development phase of a healthcare worker as well as with the identification of areas needing improvement for an experienced worker.

INTERVIEW OBSERVATION

In order to guide the assessment of an interview, the supervisor should use the *Interview Process and Skills Evaluation Form* (Appendix C). Prior to the interview, the supervisor should carefully review all segments of this form. This form should also be shown to the healthcare worker before the interview to help clarify the evaluation process.

The form is divided into two sections — process elements and skills elements. The first section covers **process elements** (figure 1). These are specific tasks the healthcare worker should complete during the course of the interview pertaining to preinterview activity, introduction to the index patient, information and education exchange, contact identification, and concluding the interview. In order to complete a thorough evaluation of the interview, the supervisor must observe all aspects of the process.

FIG. 1 PROCESS ELEMENTS

Preinterview Activity

1. Reviews medical record of index patient
2. Obtains/reviews locating information of index patient
3. Establishes preliminary infectious period
4. Develops plan/strategy for interview process
5. Arranges interview appointment time and place
6. Arranges and ensures privacy

Introduction

7. Introduces self
8. Explains purposes of interview
9. Emphasizes confidentiality

Information and Education Exchange

10. Collects/confirms index patient's personal information
11. Determines index patient's level of disease comprehension
12. Provides appropriate TB education
13. Reviews symptom history
14. Discusses basis of diagnosis by providing education
15. Discusses appropriate disease intervention behaviors

Contact Identification

16. Defines close and casual exposure
17. Verbalizes a sense of urgency
18. Identifies household, workplace/school, other congregate setting, & social/recreational contacts
19. Pursues detailed contact information
20. Persists to identify all close contacts
21. Explains contact referrals

Conclusion

22. Invites index patient's questions
23. Reviews/reinforces adherence to treatment plan
24. Establishes date for reinterview
25. Closes interview

The second section of the evaluation form covers **skills elements** (figure 2). This section contains techniques that the healthcare worker should demonstrate while carrying out each process element including effective communication, problem-solving, and analysis.

FIG. 2 SKILLS ELEMENTS

Communication

26. Demonstrates professionalism
27. Establishes trust and rapport
28. Listens actively
29. Uses open-ended questions
30. Communicates at the index patient's level of comprehension
31. Gives factually correct information
32. Solicits index patient's feedback
33. Provides encouragement
34. Uses appropriate nonverbal communication
35. Motivates and encourages active participation of index patient
36. Presents nonjudgmental behavior

Problem-Solving

37. Assesses the need for identifying an appropriate proxy
38. Displays flexibility in interview process
39. Recognizes need to stop and reschedule a stalled interview
40. Identifies and addresses index patient's concerns
41. Recognizes/addresses verbal problem indicators
42. Recognizes/addresses nonverbal problem indicators
43. Maintains control of interview
44. Identifies/discusses potential barriers to adherence

Analysis

45. Refines the infectious period
46. Distinguishes between close and casual contact
47. Develops rationale for contact investigation plan

USING THE PROCESS AND SKILLS EVALUATION FORM

At the beginning of the patient interview, the supervisor and healthcare worker should introduce themselves to the index patient as team interviewers. While observing the interview, the supervisor should sit where the interview dialogue can be heard and body language observed, without appearing removed from the interview process. While the supervisor is observing the interview, the evaluation form should be accessible.

The supervisor may use the evaluation form as a checklist during the interview. However, it is essential to also document specific items from the interview to provide concrete feedback to the healthcare worker. During the interview, the supervisor should record key words to help recall the specific details for postinterview feedback. Based on notes taken during the interview, the qualitative indicators of the interview elements ("excellent", "satisfactory," and "needs improvement") can be completed for each element at the conclusion of the interview by using the following criteria:

- **Excellent** rating suggests that the worker completed the element as indicated in its definition
- **Satisfactory** rating suggests that the worker missed one or more areas stated in the element's definition, but did not lose the essence of the task at hand
- **Needs improvement** suggests that the worker missed several key areas in the element's definition and, therefore, caused a deficiency in the interview process

The supervisor should be able to give concrete examples of strengths and weaknesses leading to the above ratings.

FEEDBACK

The value of **feedback** is to facilitate a discussion about the performance of the interview. The ensuing dialogue will enable interviewers to become more proficient, while bolstering their confidence.

After the interview, the supervisor and interviewer should meet privately to share observations and address concerns including:

- Encouraging the interviewer to freely discuss the overall experience of the interview
- Reviewing the evaluation form with the interviewer first noting strengths, then moving into the areas needing improvement, and finally ending on a positive note. In doing this, the supervisor should provide examples of each. Providing examples gives the interviewer a concrete awareness of his/her progress
- Offering specific techniques to improve certain skills or accomplish tasks more effectively
- Reaching a mutual agreement about the changes in interviewing techniques required. Together, the supervisor and interviewer can develop a specific time-framed plan of action for each skill area needing improvement
- Providing the interviewer with a copy of the evaluation form and the mutually-developed action plan

ONGOING TRAINING

If a healthcare worker requires significant improvement in interviewing process and skills the interviewer should be given the opportunity to observe more experienced and skilled interviewers. In addition, the supervisor or a designated mentor can reemphasize specific training requirements. The following interventions address interview weaknesses as reflected in the completed evaluation form:

Preinterview activity:

- Shadow experienced interviewers to observe how tasks are completed
- Review the CDC *Self-Study Modules on Tuberculosis on Contact Investigation for Tuberculosis and Tuberculosis Surveillance and Case Management in Hospitals and Institutions* regarding elements such as medical record review and establishing the infectious period

Patient education and information exchange:

- Review the CDC *Self-Study Modules on Tuberculosis on Transmission and Pathogenesis of Tuberculosis, Epidemiology of Tuberculosis, Diagnosis of Tuberculosis Infection and Disease, Treatment of Tuberculosis Infection and Disease, and Infectiousness and Infection Control* for general factual TB information

Contact identification:

- Focus on reading the CDC *Self-Study Module on Tuberculosis on Contact Investigation for Tuberculosis* which provides an overview of the importance of contact investigation
- Review the “Tuberculosis Interview Outline” (Appendix B)
- Complete the “Disease Intervention Report” (Appendix D) to further understand the processes involved in conducting a quality contact investigation

Communication and introduction:

- Review the CDC *Self-Study Modules on Tuberculosis on Confidentiality in Tuberculosis Control, Tuberculosis Surveillance and Case Management in Hospital and Institutions, and Contact Investigation for Tuberculosis* especially in the areas of confidentiality, goals of the TB interview, appropriate questioning, and patient assessment
- Role-play using the *Simulated Cases for Contact Investigation*. Role-playing addresses both verbal and nonverbal communication

Problem-solving:

- Review the CDC *Self-Study Modules on Tuberculosis on Tuberculosis Surveillance and Case Management in Hospital and Institutions and Patient Adherence to Tuberculosis Treatment*. Areas for resolution of problems include promoting adherence, educating the patient, and adjusting to various patient concerns
- Learn from past challenging cases and how issues were resolved

Analysis:

- Review the CDC *Self-Study Module on Tuberculosis on Contact Investigation for Tuberculosis* which discusses infectious period, close contacts, and the contact investigation plan
- Analyze the completed “Disease Intervention Report” (Appendix D) which provides the methodology to collect information for later review and contact investigation planning
- Utilize prepared cases from the *Effective TB Interviewing and Contact Investigation* course and *Simulated Cases for TB Contact Interviewing* to provide a format for review and analysis of specific issues through objectives for each case

After the interventions are completed, the supervisor should observe the interviewer conducting additional interviews and provide appropriate feedback.

Periodic training and review, as described, strengthens the self-assessment skills of healthcare workers, setting high standards for the interview process. The observation of the TB interview is instrumental in improving the quality of the interview process, thereby affecting the outcome of a contact investigation.

SUPERVISORY REVIEW OF THE DISEASE INTERVENTION REPORT

Equally as important as the assessment resulting from the direct observation of the TB interview is the supervisory review of the information collected by the healthcare worker during the interview. The “Disease Intervention Report (DIR)” (Appendix D) is an instrument designed to direct the interviewer through categories of essential information. As evidence of the healthcare worker’s findings, the instrument enhances the contact investigation plan.

The supervisory review of the DIR includes:

- Confirmation of quality and accuracy of collected information
- Identification of inconsistencies in collected information
- Identification of strengths and/or deficiencies in the healthcare worker’s analytical and problem-solving skills
- Verification of the established infectious period
- Affirmation of the accuracy of contact identification based on collected lifestyle information
- Analysis of the investigation plan for appropriateness and logic based on information collected

DECISION ANALYSIS

The exchange of information between the index patient and the interviewer is the first step in a process that includes not only the collection of information, but the analysis of this information. Therefore, the time during and after the interview are critical **decision analysis** periods. Decision analysis is the process of choosing a course of action based upon a review of information collected.

ONGOING DECISION ANALYSIS

The interviewer should possess the knowledge and skill to perform decision analysis during the interview. **Ongoing decision analysis** allows the interview to remain on course and not be misguided by nonessential information. Information that the index patient provides along with verbal and nonverbal cues may influence the direction in which the interview proceeds. Examples of important ongoing decisions include the:

- **Pursuing** of contact identification based on the infectious period and lifestyle information collected
- **Persisting** in attaining accurate information based on the index patient's body language and consistency with already collected medical record information
- **Demonstrating flexibility** in interview style based on the flow of the interview

POSTINTERVIEW DECISION ANALYSIS

After the interview, the **postinterview decision analysis** gives the interviewer valuable time away from the index patient to review all collected data for accuracy, inconsistencies, and gaps in information. Examples of postinterview decisions include:

- **Developing** a strategy for contact follow-up
- **Formulating** a reinterview plan regarding additional identification of contacts and clarification of necessary information

SUPERVISORY REVIEW OF DECISION ANALYSIS

The supervisor's review of the healthcare worker's decision analysis is a part of assuring successful outcomes to the contact investigation. Whether the interview is observed or unobserved, the information collected via the DIR allows the supervisor to assess the interviewer's decision analysis. The supervisor should:

- Assess the interviewer's strategy and investigative plan both for field investigations of identified contacts and index patient reinterview
- Assist in the identification of problem indicators, which may affect successful outcomes
- Document and address strengths and deficiencies in the decision analysis process with the interviewer
- Review submitted documentation for accuracy, thoroughness, relevance, neatness, and legibility

Quality supervisory review of the entire TB interview process is crucial and represents an opportunity for sharing recommendations, guidance, and advice. This process is vital and will influence a successful contact investigation outcome.

EDUCATION AND TRAINING RESOURCES

New Jersey Medical School National Tuberculosis Center
65 Bergen Street, Suite GB-1
Newark, NJ 07107-3001
(973) 972-3270
TB Infoline: 1-800-4TB-DOCS
<http://www.umdnj.edu/ntbc>

Available from the Center are:

- *Simulated Cases for TB Contact Interviewing*
- Course materials for *Effective TB Interviewing and Contact Investigation*
- *TB Interviewing for Contact Investigation: A Practical Resource for the Healthcare Worker*

Francis J. Curry National Tuberculosis Center
3180 Eighteenth Street, Suite 101
San Francisco, CA 94110-2028
(415) 502-4600
<http://www.nationaltbcenter.org>

Available from the Center are:

- Course materials from *Effective Tuberculosis Interviews, Part II: Targeting Special Populations*
- The course *Tuberculosis Case Management and Contact Investigation*

Division of TB Elimination
Centers for Disease Control and Prevention (CDC)
1600 Clifton Road, Mail Stop E-10
Atlanta, GA 30333
(404) 639-8135
<http://www.cdc.gov/nchstp/tb/default.htm>

- Available from the CDC National Prevention Information Network is the *Tuberculosis Training and Education Resource Guide*. To order call (800) 458- 5231 or visit <http://www.cdcnpin.org/tb/pubs/tbguide.htm>
- To order copies of the *Self-Study Modules on Tuberculosis* through the CDC Voice and Fax Information System call toll-free: 1-888-232-3228, then select 2,5,1,2,2,2 and request "Self-Study Modules on Tuberculosis, Modules #1-5," order # 00-6514 and "Self-Study Modules on Tuberculosis, Modules 6-9," order # 99-6206.
- The 1995 *Satellite Primer on Tuberculosis (Self-Study Modules on Tuberculosis, 1-5)* was a five-part series. Videotape copies of this course are available from the Alabama Department of Public Health, (334) 206-5618.

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- The 2000 *TB Frontline – Satellite Primer Continued: Modules 6-9 Videotape Set (Self-Study Modules on Tuberculosis, #6-9)* was a 3-part series. Videotape copies of this course are available from National Technical Information Service (NTIS) at (800) 553-6847, order #AVA20848VNB3.
 - *Patient Engagement: A Skills Building Workshop for Health Care Providers Working with Tuberculosis Patients* – Available from Jane Tapia at the Emory University School of Medicine, Department of Medicine/ID, 69 Butler Street, Atlanta, GA 30303
404-616-9176 (phone) ; 404-616-7862 (fax); jtapia@mindspring.com (email)

TUBERCULOSIS INTERVIEW OUTLINE

PREINTERVIEW ACTIVITY

1. Review medical record
 - Review and document medical record information related to the diagnosis (site of disease, symptom history, bacteriologic/radiographic results, treatment, and recent/past known exposure to TB, including skin test results)
 - Review and document social history, language/cultural barriers, and other medical conditions
 - Obtain and document index patient locating information
 - Record name, address, telephone number, and additional locating information
 - Collect and record next of kin, emergency contact, employer, etc.
 - Document previous hospital admissions, history of nonadherence, substance abuse, mental illness, and/or inability/unwillingness to communicate with other healthcare staff who may have interacted with the patient
2. Establish a preliminary infectious period based on medical record review and local health department guidelines.
3. Develop a strategy for the interview process by analyzing information collected thus far.
4. If possible, arrange interview place and time that are convenient to the patient, yet satisfy the local health department time frame for the completion of interviews.
5. Arrange and assure privacy by seeking a time and place with minimum distractions and interruptions.

INTRODUCTION

1. Introduce yourself and provide business card or identification. If appropriate, shake hands with patient. Explain your role in the tuberculosis control program. Begin building trust and rapport.
2. Emphasize confidentiality yet inform patient that relevant information may need to be shared with other health department staff.
3. Explain the purposes of the interview:
 - To provide TB information
 - To identify contacts at risk of exposure and refer them for medical evaluation

INFORMATION AND EDUCATION EXCHANGE

1. Ongoing patient assessment – Throughout the interview, determine the extent of trust and rapport developed, while observing the patient and assessing responses.
2. Observe the patient's body language and speech for comfort level and comprehension of information.
 - Make note of any physical signs and/or behavior indicative of alcohol/substance abuse, nutritional status, lifestyle, and other illnesses, which may influence the patient's level of cooperation during the interview
 - Assess patient's communication skills, attitudes, concerns, and needs. As necessary, refine interview strategy
3. Personal information – Explain that it is important to obtain/confirm the following patient information:
 - Full name
 - Alias(es)/nickname(s)
 - Date of birth
 - Place of birth
 - If born in a foreign country, date arrived in USA
 - Social security number
 - Physical description (height, weight, race, other identifying characteristics)
 - Current address
 - Telephone number
 - Length of stay at current address
 - Marital status
 - Next of kin (name, address, telephone number, other locating information)
 - Emergency contact (name, address, telephone number, other locating information)
 - Employer/school (name, address, telephone number, other locating information)
4. Medical information/problem indicators
 - Explain the importance of collecting accurate medical information
 - Obtain/document the following information:
 - Known exposure to TB (who, where, when)
 - Past hospitalization(s) for TB (name, admission, discharge date[s])
 - Other medical conditions, including HIV test results if available
 - Substance abuse (frequency, type, how long)

- Medical provider for TB (private or clinic, name, address, telephone)
 - Transportation availability to/from medical provider
 - DOT plan, if known (where, when, by whom)
 - Barriers to adherence
 - Disease comprehension
 - Use open-ended questions to determine the patient's TB knowledge
 - Reinforce the patient's TB knowledge and correct any misconceptions. Explain mode of transmission and how it affects the body using language the patient can understand. Avoid using medical terms and recognize when to defer questions to appropriate personnel
 - Symptom history — Review with patient the following TB-related symptoms, including onset dates and duration:
 - Cough
 - Hemoptysis
 - Hoarseness/laryngitis
 - Weight loss
 - Night sweats
 - Chest pain
 - Loss of appetite
 - Fever
 - Chills
 - Discuss the basis of patient's current diagnosis, including:
 - Tuberculin skin test results
 - Site of disease
 - Symptom history
 - Radiographic/bacteriologic results
5. Disease intervention behaviors—Explain the importance of the following interventions and review the local/state regulations mandating adherence to the accompanying interventions (if applicable):
- Treatment regimen
 - Explain that the patient's medications kill TB germs when taken as prescribed. Reinforce the personal and public health benefits of taking the medicine
 - If trained to do so, identify and explain each prescribed drug and discuss potential side effects
 - Establish a specific schedule or reinforce existing schedule for outpatient treatment/DOT

- Infection control measures
 - Review with patient importance of using a mask or a tissue to cover mouth and nose if coughing. Explain proper disposal technique. Emphasize that covering the cough is an important measure that the patient can take to protect others
 - Discuss the importance of adequate ventilation to protect others
 - Identify and discuss potential adherence problems. Incorporate strategies to enhance adherence
- Maintaining medical care – Discuss the importance of:
 - Adherence to DOT/self-administered therapy while reemphasizing the significance of continuity of therapy
 - Sputum collection, chest X-rays, and physician evaluations
 - Adherence to all medical appointments and DOT, if ordered
 - Adherence enhancing strategies
- Infectious period
 - Based on the information collected thus far, refine previously established infectious period, if necessary
 - Review significance of infectious period with patient and discuss its role in contact identification

CONTACT IDENTIFICATION

1. Introduce the contact identification process by reviewing the patient's understanding of TB transmission. Stress the importance and urgency of the rapid and accurate identification of all close contacts during the infectious period.
2. Explain the difference between close and casual exposure.
3. Collect information about the patient's contacts in the household, workplace/school, other congregate settings, and social/recreational environments. Analyze all responses for conflicts in information, identify problems, confront inconsistencies, and evaluate problems, selecting appropriate solutions along the way.
 - Contact tracing information – Obtain the following information within the patient's infectious period (some information will require a field visit for confirmation):
 - Type of housing (e.g., house, apartment, shelter, nursing home, etc.)
 - Description of housing including square footage, ceiling height, number of rooms, method of ventilation, source of heating/cooling, etc.
 - Additional addresses
 - If employed: employer name, address, telephone number, full or part-time, hours per day/week, how long employed, transportation type to/from work and length of commute, occupation/type of work, indoor or outdoor work space, and enclosed or open work space

- If unemployed, source of income
- If attended school: name of school, address, telephone number, grade/year, hours per day/week, transportation type to/from school, and length of commute
- Social/recreational activities (e.g., hangouts, bars, team sports, community centers, bands, choir, places of worship, etc.) including hours per day/week, and means of transportation
- Other congregate settings (e.g., armed services, hospital, nursing home, drug treatment center, detox center, shelter, group-living home, hotel, prison/jail, etc.) including name and dates of attendance
- Contact identification
 - Household contacts – Obtain the following information within the patient’s **infectious period**. Collect appropriate information about all persons residing in the household including: name/alias(es)/nickname(s), relationship to patient, age, sex, physical description, employer/school, and other locating information. Also include hours of exposure per week and date(s) of first and last exposure
 - Workplace/school contacts – Obtain the following information within the patient’s **infectious period**. Collect appropriate locating information about all identified close contacts such as name/alias(es)/nickname(s), address, telephone number, age, sex, race, physical description, and other locating information. Also include hours of exposure per week and date(s) of first and last exposure
 - Social/recreational contacts – Obtain the following information within the patient’s **infectious period**. Collect appropriate locating information about all identified close contacts such as name/alias(es)/nickname(s), address, telephone number, age, sex, race, physical description, employer/school, and other locating information. Also include hours of exposure per week and date(s) of first and last exposure. Include in identified contacts:
 - Persons regularly socialized with at social/recreational establishments
 - Close friends
 - Steady sex partners
 - Overnight guests, visitors to patient’s residence (e.g. neighbors, friends, relatives)
 - Overnight visits to other residences (obtain address[es])
- Methods of referral
 - Inform the patient that contact investigation and referrals will be carried out immediately. If appropriate, review local/state regulations mandating contacts’ medical evaluations
 - Determine the patient’s capability to participate in contact referrals
 - Inform the patient that it may be necessary for site visits to be made to the home, workplace/school, leisure establishments, etc., to assess the shared air environment to accurately structure the contact investigation. Stress again patient confidentiality, but the necessity to share information on a need-to-know basis with appropriate site management. Discuss the importance of a medical evaluation for each contact

— Contact referral options:

HEALTH DEPARTMENT REFERRAL: While protecting the patient’s right to privacy, the healthcare worker assumes full responsibility for informing the contact about exposure and the need for a medical evaluation

PATIENT REFERRAL: Patient agrees to inform the contact about exposure and the importance of speaking with the healthcare worker regarding the need for a medical evaluation

— Discuss the referral options with the patient, deciding which contacts are appropriate for health department referral and for patient referral. Review with patient how and when referrals will be made and where the contacts will be referred

CONCLUSION

1. Request and answer patient’s questions.
2. Review and reinforce all components of the adherence plan.
3. Evaluate patient’s remaining needs or potential adherence problems.
4. Restate the date of the next medical appointment, if known.
5. Arrange for both a reinterview and home visit, if not already completed.
6. Reinforce the procedures for referral of each contact.
7. Leave information on how patient can contact you.
8. If appropriate, shake the patient’s hand, express appreciation, and close the interview.

INTERVIEW PROCESS AND SKILLS EVALUATION FORM

PROCESS ELEMENTS	Excellent	Satisfactory	Needs Improvement	Strengths/weaknesses Record keywords to summarize strengths/weaknesses
Preinterview Activity				
1. Reviews medical record of index patient				
2. Obtains/reviews locating information of index patient				
3. Establishes preliminary infectious period				
4. Develops plan/strategy for interview process				
5. Arranges interview appointment time and place				
6. Arranges and ensures privacy				
Introduction				
7. Introduces self				
8. Explains purposes of interview				
9. Emphasizes confidentiality				
Information and Education Exchange				
10. Collects/confirms index patient's personal information				
11. Determines index patient's level of disease comprehension				
12. Provides appropriate TB education				
13. Reviews symptom history				
14. Discusses basis of diagnosis by providing education				
15. Discusses appropriate disease intervention behaviors				
Contact Identification				
16. Defines close and casual exposure				
17. Verbalizes a sense of urgency				
18. Identifies household, workplace/school, other congregate setting, & social/recreational contacts				
19. Pursues detailed contact information				
20. Persists to identify all close contacts				
21. Explains contact referrals				
Conclusion				
22. Invites index patient's questions				
23. Reviews/reinforces adherence to treatment plan				
24. Establishes date for reinterview				
25. Closes interview				

SKILLS ELEMENTS	Excellent	Satisfactory	Needs Improvement	Strengths/weaknesses Record keywords to summarize strengths/weaknesses
Communication				
26. Demonstrates professionalism				
27. Establishes trust and rapport				
28. Listens actively				
29. Uses open-ended questions				
30. Communicates at the index patient's level of comprehension				
31. Gives factually correct information				
32. Solicits index patient's feedback				
33. Provides encouragement				
34. Uses appropriate nonverbal communication				
35. Motivates and encourages active participation of index patient				
36. Presents nonjudgmental behavior				
Problem-Solving				
37. Assesses the need for identifying an appropriate proxy				
38. Displays flexibility in interview process				
39. Recognizes need to stop and reschedule a stalled interview				
40. Identifies and addresses index patient's concerns				
41. Recognizes/addresses verbal problem indicators				
42. Recognizes/addresses nonverbal problem indicators				
43. Maintains control of interview				
44. Identifies/begins resolution of barriers to adherence				
Analysis				
45. Refines the infectious period				
46. Distinguishes between close and casual contact				
47. Develops rationale for contact investigation plan				
Comments:				

DEFINITIONS OF INTERVIEW ELEMENTS — PROCESS

Preinterview Activity

1. Reviews medical record of index patient:
Thoroughly reviews medical record and documents information related to basis of diagnosis including site of disease, bacteriology, X-ray results, treatment regimen, symptom history, and recent/past known exposure to TB including skin test result history. In addition, reviews and documents index patient's social history including, but not limited to, risk factors for HIV and other medical conditions.
2. Obtains/reviews locating information of index patient:
Collects and records all pertinent locating information regarding index patient's next of kin, emergency contact, and employer. Information to include name, address, telephone number, physical description, and other pertinent information, which may help to locate index patient if necessary.
3. Establishes preliminary infectious period:
Establishes preliminary period of infectiousness based on medical record review while adhering to local health department guidelines.
4. Develops plan/strategy for interview process:
Formulates a plan for interview based on analysis of information collected and reviewed from medical record and any other information obtained from additional sources such as other healthcare staff. Information may include previous admissions, history of nonadherence, drug/alcohol abuse, mental illness, and inability or unwillingness to communicate.
5. Arranges interview appointment time and place:
Prearranges, if possible, a convenient location and time for index patient interview. Interview can be conducted in the hospital, home, clinic/health department, or any other setting mutually agreed upon. However, interview must be completed within the time frame established by local health department guidelines.
6. Arranges and ensures privacy:
Stresses the importance of creating and maintaining an atmosphere of privacy by seeking a time and place for the interview where disruptions by people, telephone calls, and television are either avoided, or at the very least, kept to a minimum. Attempts to create an environment free of distractions and interruptions.

Introduction

7. Introduces self:
If appropriate, shakes index patient's hand, properly identifies self as a representative of TB control or local health department, and provides proof through display of identification and/or business card.

8. Explains purposes of interview:
Informs index patient of role in TB control and explains the goals and objectives of the TB interview with emphasis placed on rapport building, significance of patient participation in disease management, TB education, and identification of close contacts.
9. Emphasizes confidentiality:
Conveys health department regulations as related to index patient's right to privacy, while emphasizing a commitment to maintain confidentiality. Index patient is informed of the need to share medical information with other health department staff when appropriate.

Information and Education Exchange

10. Collects/confirms index patient's personal information:
Verifies personal information previously collected from medical record review; assures that information is correct including index patient's name (alias[es]/nickname[s]), spelling of name, residence or mailing address, and phone numbers; includes other locating information such as place of employment, social/recreational gathering places, and family members/next of kin. Documents index patient's physical description. Inconsistencies in information are immediately recognized and professionally confronted.
11. Determines index patient's level of disease comprehension:
Uses open-ended questions to determine how much knowledge index patient has about TB, specifically on his/her own medical condition. Questions may be used such as: Tell me what you know about TB?; What has been told to you about your medical condition?; How much do you know about TB?. Patient should be allowed to give information freely, without interruption, while interviewer carefully listens.
12. Provides appropriate TB education:
Reviews transmission of TB and answers to the best of his/her ability all questions posed by index patient by using nonmedical terminology. Recognizes when to defer questions to the appropriate personnel.
13. Reviews symptom history:
Explains the significance of collecting an accurate TB-related symptom history; each symptom is carefully reviewed and onset date and duration are recorded.
14. Discusses basis of diagnosis by providing education:
Reviews/explains index patient's diagnosis of suspected or confirmed TB, including a review of symptom history and laboratory and test results.
15. Discusses appropriate disease intervention behaviors:
Emphasizes the importance of following the treatment plan, infection control procedures, and follow-up appointments. If applicable, reviews local/state regulations mandating adherence to disease intervention behaviors.

Contact Identification

16. Defines close and casual exposure:
Gives evidence of understanding the definition of close contact as defined by local health department guidelines. Is proficient at explaining that risk of transmission is linked to person, place, and time characteristics of index patient. If applicable, displays the ability to explain concentric circle principle.
17. Verbalizes a sense of urgency:
Communicates to index patient the significance of rapid identification of close contacts. Expresses concern for those exposed and their need to be identified and medically evaluated; maintains focus on the infectious period.
18. Identifies household, workplace/school, other congregate setting, & social/recreational contacts:
Obtains names of close contacts from workplace, school, residential, and recreational/leisure locations that the index patient spent prolonged periods of time with during the infectious period. Assists index patient to recall those locations. Understands sensitive nature of providing contacts.
19. Pursues detailed contact information:
Displays skill and perseverance in obtaining necessary detailed information, e.g., name, nickname/aliases, address, physical descriptions, and any specific identifying characteristics related to household, social, work, school, or any congregate setting contacts with focus on infectious period. Confidentiality is reinforced.
20. Persists to identify all close contacts:
Reviews importance of close contact identification. Perseveres to identify contacts exposed during the infectious period. Exhibits resourcefulness and assertiveness while not jeopardizing rapport. Recognizes when to pursue/when to withdraw line of questioning.
21. Explains contact referrals:
Reviews patient versus health department referrals for medical evaluation of contact(s). Emphasizes the importance of the rapid identification of contacts according to health department guidelines. Confidentiality is stressed. If applicable, reviews local/state regulations mandating contact medical evaluations.

Conclusion

22. Invites index patient's questions:
Requests of the index patient any final questions and addresses these with clarity and factual information.
23. Reviews/reinforces adherence to treatment plan:
(Re)emphasizes importance of adherence including directly observed therapy (DOT) and provides reminders of any pending appointments.

24. Establishes date for reinterview:

Explains the purpose of scheduling a reinterview; informs index patient of the importance to reinterview in the home setting (if not already done so). Is adept at confronting and persuading an unwilling index patient to be reinterviewed; adheres to local health department recommendations as to the time frame for completing reinterview.

25. Closes interview:

Thanks the index patient for his/her time and information. There is a reiteration of the importance of the contact interview process. Information is provided on how index patient can reach interviewer should questions or concerns arise.

Definitions of Interview Elements — Skills

Communication

26. Demonstrates professionalism:

Displays self-confidence, competence, dependability, preparation, integrity, appropriate seriousness, and is nonjudgmental and objective about index patient's behavior and lifestyle.

27. Establishes trust and rapport:

Displays respect, empathy, and sincerity to index patient throughout the interview process.

28. Listens actively:

Does not interrupt index patient unnecessarily. Gives evidence that important information is noted, by following up with additional questions or paraphrasing.

29. Uses open-ended questions:

Phrases questions beginning with who, what, when, where, why, how, and tell me to stimulate meaningful responses. Uses closed-ended questions (those requiring a one-word answer), only when necessary, to guide conversation or to clarify/confirm statements.

30. Communicates at the index patient's level of comprehension:

Avoids technical terms, jargon, or words deemed beyond the comprehension of the index patient and clearly explains necessary medical and technical terms and concepts. Periodically asks questions to gauge index patient's understanding. Speaks slowly and clearly. Assesses index patient's ability to speak and understand English.

31. Gives factually correct information:

Demonstrates an accurate knowledge of TB, corrects index patient's misconceptions, provides comprehensive disease information, and avoids extraneous information.

32. Solicits index patient's feedback:

While providing information and education, asks appropriate questions to determine whether index patient understands; asks index patient to paraphrase, summarize, or provide examples.

33. Provides encouragement:
Responds to index patient's positive behaviors. Displays affirmative verbal and nonverbal reinforcement.
34. Uses appropriate nonverbal communication:
Conveys sincerity such as maintaining eye contact and open body posture, minimizing physical barriers, and not appearing pressured for time.
35. Motivates and encourages active participation of index patient:
Displays a desire and ability to engage index patient in the interviewing process through patient-interviewer partnership. Conveys importance of index patient taking an active role in the identification of those at risk of exposure and transmission. Demonstrates significance of source/spread principle in communicable diseases.
36. Presents nonjudgmental behavior:
Displays empathy towards the index patient's illness and explains why certain sensitive questions are being asked. Shows respect toward cultural differences using the index patient as a source of information about his/her own culture.

Problem-Solving

37. Assesses the need for identifying an appropriate proxy:
From initiation to conclusion of interview, determines whether proxy interviewee is needed to assist in the interviewing process. Decision may be based on the perceived or documented inability/unwillingness of the index patient to communicate with the interviewer. Determines whether the index patient has the ability/willingness to answer questions accurately, clearly, and responsibly.
38. Displays flexibility in interview process:
Is adept at recognizing the need to deviate from prearranged interview outline. Illustrates confidence in allowing the interview to address the needs of the index patient in conjunction with the needs of the interviewer, while remaining in control of the interview.
39. Recognizes need to stop and reschedule a stalled interview:
If necessary, gives evidence of knowing when to stop pursuing an unproductive line of questioning. Is resourceful, professional, and nonthreatening in justifying the rescheduling of an ineffective interview due to unavoidable barriers (e.g., distractions, patient's fatigue, etc.). Acknowledges when another healthcare worker is needed to complete the interview.
40. Identifies and addresses index patient's concerns:
Through careful observation of verbal and nonverbal indicators, demonstrates the ability to identify and address index patient's concerns and displays a sense of concern for index patient's well being.

41. Recognizes/addresses verbal problem indicators:
Identifies and displays readiness to address index patient's contradictions, concerns, misunderstandings, and reluctance to reveal pertinent information. Displays sensitivity, professionalism, assertiveness, and confidence in interacting with index patient.
42. Recognizes/addresses nonverbal problem indicators:
Identifies and displays readiness to interpret and address nonverbal gestures such as eye contact, body language, posture, distance, facial expressions, voice inflections, etc.
43. Maintains control of interview:
Fosters an environment that allows the index patient to freely express her/himself, yet demonstrates an ability to extrapolate relevant information and move interview in a meaningful direction.
44. Identifies/discusses potential barriers to adherence:
Addresses and attempts to resolve all known barriers to adherence including, but not limited to, substance abuse, coexisting medical conditions, lifestyle, transportation availability, scheduling problems, availability of family/friend support, and comprehension of TB disease and its transmission and treatment.

Analytical

45. Refines the infectious period:
Based on the index patient's level of disease comprehension, explains the significance of the infectious period; explanation includes the importance of prioritizing the identification of close contacts during this period and the subsequent repercussions if those close contacts are not identified. Preliminary infectious period is modified, if necessary, or confirmed based on additional information collected.
46. Distinguishes between close and casual contact:
Has ability to differentiate between a close and casual contact. Applies this knowledge when working with index patient to concentrate on close contact identification. Uses contact information to form decisions about where to conduct potential field investigations.
47. Develops rationale for contact investigation plan:
Uses the infectious period and information the index patient has shared to test only close contacts and to expand testing only if necessary. Develops strategy for reinterview based on what additional information that is needed to further refine the contact investigation plan.

DISEASE INTERVENTION REPORT*

Date _____
Interviewer name _____ Patient ID _____

I. PERSONAL BACKGROUND/LOCATING INFORMATION

A. Patient name _____ alias(es)/nickname(s) _____ Marital status _____

Height _____ Weight _____ Race _____

Other identifying characteristics (e.g., complexion, hair color, beard, etc.)

Date of birth _____ Place of birth(city/state) _____ SS# _____

If born in foreign country, name of country _____

Date arrived in USA _____

B. Current address _____

Telephone (____) _____

How long living at current address _____

C. Current employer/school (name, address) _____

Telephone (____) _____

Next of kin at different address (name, address) _____

Telephone (____) _____

Person to notify in emergency (name, address) _____

Telephone (____) _____

*The DIR may be modified to reflect all of the information that is required to be collected on state and local forms.

Patient Name _____
Patient ID _____

II. MEDICAL INFORMATION/PROBLEM INDICATORS

A. Known exposure to TB (who, when) _____

B. Recent hospitalization(s) for TB (name, admission/discharge date[s]) _____

Medical provider for TB (private or clinic, name, address, telephone) _____

Transportation availability to medical provider _____

C. Other medical conditions (including HIV status) _____

Substance abuse (type, frequency, how long) _____

D. Understanding of disease transmission/treatment (provide comments) _____

E. DOT plan, if known (where, when, by whom) _____

F. Barriers to adherence/follow-up _____

Patient Name _____
Patient ID _____

IV. CONTACT TRACING INFORMATION

During the **infectious period** from _____ to _____, discuss the following:

A. Type of housing (house, apt., shelter, nursing home, etc.) _____
If known, description of housing (square footage, ceiling height, number of rooms, method of ventilation, source of heating/cooling) _____

Household members (spouse, partner, children, etc.) _____

B. Source of income during **infectious period** (employed, welfare, etc.) _____

C. If employed during **infectious period**, employer name _____

Address _____

Telephone (____) _____ Occupation/type of work _____

Indoor or outdoor work space? _____ Enclosed or open work space? _____

How long employed _____ FT/PT _____ Hours per day/week _____

Meals/breaks location _____

Transportation to/from work (type) _____ Commute time _____

D. If attended school during **infectious period**, name of school _____

Address _____

Telephone (____) _____

Grade/year _____ Hours per day/week _____

Transportation to/from work (type) _____ Commute time _____

E. If resided at additional address(es) during **infectious period**, please list:

Address _____

Telephone (____) _____ Dates _____

Address _____

Telephone (____) _____ Dates _____

If additional space is needed please use the back.

Patient Name _____
 Patient ID _____

F. During the **infectious period** from _____ to _____, discuss the following:

1. Activities

Activity	Yes	No	Place	Hours per day	Days per week	Means of transportation
Hangout						
Bar						
Team sport						
House of worship						
Community center						
Other						
Other						
Other						

2. Travel history

Place	Yes	No	Where	Date from	Date to	Means of transportation
Out of town						
Out of state						
Out of country						
Additional travel						
Additional travel						
Additional travel						

3. Places of service, volunteering, frequenting, or accommodation

	Yes	No	Where	Date from	Date to
Armed services					
Hospital/Emergency department					
Doctor's office / outpatient clinic/department					
Nursing home					
Drug treatment center					
Detox center					
Shelter					
Group living home					
Hotel					
Prison/jail					
Other					

Patient Name _____

Patient ID _____

Date of initial interview _____ Date(s) of reinterview _____

Place of interview _____ Place(s) of reinterview _____

No. of contacts identified _____ No. of new contacts identified _____

INVESTIGATION PLAN/COMMENTS	SUPERVISORY REVIEW/COMMENTS

INVESTIGATION PLAN/COMMENTS	SUPERVISORY REVIEW/COMMENTS