

West Virginia Division of Tuberculosis Elimination

2015 Cohort Review Report

Introduction

Each year the West Virginia Division of Tuberculosis Elimination (DTBE) conducts a systematic review of the management of patients identified with active TB disease and their contacts from the previous year. This annual review is referred to as a cohort review. The cases are reviewed after they are counted and have completed treatment or are nearing the end of treatment. Details regarding the management and outcomes of TB cases are reviewed and presented on each case by the local health department nurse who managed the case. The 2015 cohort review has been completed on cases identified and reported between January 1 and December 31, 2015 and strengths, weaknesses and recommendations are detailed in the following report.

Results

During 2015 there were 10 cases of active tuberculosis disease reported in WV. The demographic breakdown of the cases are as follows:

- 3(30%) cases were foreign-born
- 3(30%) cases were extra-pulmonary
- 4(40%) cases female and 6(60%) cases male
- 1(10%) case was <18 years old
- 5(50%) cases were between 18-65 years of age
- 4(40%) cases were >65 years old
- 3(30%) cases died from TB related complications
- 1(10%) case was lost to follow up

Eight (80%) of the 10 cases were started on the recommended 4-drug treatment regimen; 2 cases were diagnosed after death therefore no treatment was possible. Treatment was completed within 12 months by 7(70%) patients. Of the 5 pulmonary cases which were acid fast bacillus positive (AFB+), 60% had documented conversion within 60 days. Drug sensitivities and genotyping were performed on 100% of cases that were culture positive and HIV status was documented on 70% of cases.

Contacts were elicited in 100% of the pulmonary cases. A total of 104 contacts were identified, 82(79%) of which were evaluated. Of those, 76 were tested by tuberculin skin test (TST) and 6 were tested by interferon gamma release assay (IGRA). Only 27 of those contacts were tested again in the second round of testing. Four contacts were diagnosed with latent TB infection (LTBI), all 4(100%) started treatment and 3(75%) of them completed treatment.

Discussion

DTBE would like to thank every county that participated in the review process for coming to the review prepared and knowledgeable about the cases, even if they had not been the nurse who had worked on the case.

Strengths:

- Every nurse that participated in the cohort reviews were true patient advocates, they were very patient oriented and had a wonderful rapport with the patients and their families.
- The cohort review provided a great opportunity for learning for the local health department nurses as well as for the DTBE staff.
- Everyone who attended was eager to learn and participate in the review.
- Many of the cases were very unique and provided excellent opportunity for critical thinking.

Weaknesses:

- One of the biggest problems local health department nurses faced was lack of communication with facilities associated with the cases, i.e. hospitals, clinics, doctor offices.
- Communication problems were compounded when the patient was being managed by another facility that was not associated with DTBE.
- There has been a high turnover in local health department nurses and even in DTBE staff. Many of the nurses are new and have had little to no experience dealing with TB cases, however they are excellent nurses and have learned very quickly on their feet.

- There were many issues with cultural diversity as well as with language barriers. Many of the nurses reported problems associated with being unsure if the patient comprehended what was being told to them related to this.
- Management of extra-pulmonary TB cases can be very confusing and can result in mismanagement of the cases.

Recommendations/Actions

- DTBE encourages the local health departments to build rapport with their local providers to improve communication. Offer learning materials to your local providers as well as contact information for your facility. Contact them to inform them of any changes in TB recommendations and to see if they have any questions or learning needs regarding TB. Make them aware of what your role in the community is and how it can help them.
- Due to the large turnover in nurses in the state, DTBE plans to provide a training to make nurses more comfortable with the management of TB cases and to provide them with recourses to have when they get a case. DTBE also plans to provide protocols and more documentation for case management and other TB related activities to assist local health department nurses.
- DTBE has developed a treatment protocol to document the activities associated with and requirements of directly observed therapy. This protocol also establishes a requirement for patients being treated by another provider not associated with WV DTBE. In order for the patient to receive medication from DTBE, the provider managing the case must be in contact with DTBE medical staff to make sure that proper CDC recommendations are being followed.
- DTBE will make the language line available for all local health departments when they have a case where the patient does not speak or comprehend English.
- DTBE will provide guidance to the local health departments on how to properly manage extra-pulmonary cases.