Situation

A final step in conducting an outbreak investigation is the development of a final report to document the findings of the investigation. The current outbreak reporting process allows for prompt and thorough reporting though has become increasingly complex and inefficient. The added complexity has subsequently increased the burden of documenting outbreak investigations, which has contributed to a decline in the frequency, quality, and completeness of the data submitted. The Missouri Department of Health and Senior Services (DHSS) Bureau of Communicable Disease Control and Prevention (BCDCP) has evaluated the current reporting process and subsequently identified opportunities for improvement. The amendments to the process will lessen the burden of documenting outbreaks and increase the overall consistency and quality of the data collected. The BCDCP is excited to move forward with the statewide implementation of the updated process for reporting and documenting communicable disease outbreaks.

Background

Public health investigations into possible communicable disease outbreaks are required to determine the existence of an outbreak, identify the specific cause and source of the outbreak, and to implement appropriate control measures to prevent additional illnesses from occurring. These investigations often require a multidisciplinary collaboration of public health professionals from local public health agencies (LPHAs), DHSS, and other local, state and federal partners. Communicable disease outbreaks investigations are unscheduled, high priority tasks that are often challenging, labor intensive, and time consuming. During the course of an investigation other routine responsibilities are prioritized and often put on hold pending resolution of the outbreak. This dynamic can impede the timely submission of a final report.

Completing the final documentation at the conclusion of a communicable disease outbreak investigation is important to inform those impacted by the outbreak of the findings of the investigation. The final documentation is also retained in the records and used to inform future outbreak investigations, education and training activities, fulfill legal requests, and for policy development. In addition, final reports can provide documentation of all the work and accomplishments of public health in responding to outbreaks of communicable diseases in the community.

The current outbreak reporting process consists of several documents, which include the provisional written narrative, provisional CD-51, final written narrative, and a final CD-51. Additional documents may also be required depending on the cause and source of the outbreak. These may include the Influenza Investigation Form, School Closure Form, National Outbreak Reporting System (NORS) Form, and/or NORS Waterborne Form. The provisional documents
are submitted as soon as possible at the beginning of an investigation and the final documents within 90 days of the conclusion of the outbreak.

The updates to the process include the development of a new form, Missouri Outbreak Report Form (MORF) that can be used for almost all outbreaks. The NORS Waterborne Form will continue to be requested for all waterborne outbreaks in place of the MORF. The MORF (or NORS Waterborne, if appropriate) will be requested for every outbreak investigation. A formal final written narrative will no longer be required for many of the most routinely reported outbreaks. A formal final written narrative will be reserved for the more complicated or non-routine outbreaks that require a more in-depth or unique public health investigation and response.

Assessment

The BCDCP conducted a review of documentation submitted for all outbreaks reported during the year 2011 through 2016, and conducted a thorough evaluation of the current process for reporting and documenting communicable disease outbreaks. Several areas of concern were identified including, but not limited to, the following:

- Redundant data is requested in multiple documents.
- Many of the outbreak report documents were incomplete.
- The documentation varied greatly among comparable outbreaks.
- Inconsistencies in the data provided on various forms submitted for the same outbreak.

A pilot project of the revised process was conducted to obtain input from LPHAs. Fifteen LPHAs participated in the pilot by using the MORF to document reported outbreaks. Participating agencies also participated in a follow up survey at the end of the pilot. Feedback from all 15 jurisdictions was compiled. The comments received indicated the amendments to the process would be an improvement over the current process for reporting and documenting outbreaks. Participating LPHAs also identified specific training needs as well as recommendations on improving the MORF. The feedback and recommendations provided is currently being used to implement additional changes to the overall process, MORF, and the supporting documentation.

Recommendations

Outbreak documentation and reports are an important final step in the investigation of a communicable disease outbreak. The BCDCP has developed several updates to improve the efficiency of the process for documenting outbreak investigations and to mitigate many of the noted areas of concern identified with the current process. The BCDCP recommends statewide implementation of the updated process for documenting outbreaks of communicable diseases, which includes incorporating required data elements into a single form (MORF), and prioritizing formal written reports to large, complex, and/or non-routine investigations. Support documentation, instructions, trainings, and a yearly review of the updated process will facilitate data integrity and consistency in the documenting of communicable disease outbreaks in Missouri.