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R E P O R T



Bioterrorism Preparedness Training and Assessment Exercises for Local Public Health Agencies

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Prepared for the Department of Health and Human Services

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Summary

Major public health emergencies like bioterrorism are fortunately rare. The rarity of these events, however, makes it necessary for us to develop strategies that enable public health agencies to prepare for these emergencies in lieu of the pragmatic knowledge and experience that come from regularly responding to real events. Other agencies that deal with unforeseen emergencies such as agencies dealing with natural disasters (e.g., Federal Emergency Management Agency) and agencies dealing with the handling of nuclear materials (e.g., Nuclear Regulatory Commission) regularly use exercise methodologies, including tabletop exercises, as tools to assess their preparedness for emergencies and to train staff in how to respond appropriately to emergencies.

Until recently, the use of tabletop exercises in public health has been fairly rare. This is in part because public health agencies, unlike many other agencies like fire departments that respond to emergencies, have multiple roles in the community other than solely responding to emergencies and have not had as much time to focus on preparedness exercises. For example, these agencies are often in charge of managing a community's public health records, providing medical services such as immunizations, and managing public information campaigns for things like smoking cessation or healthy lifestyles. Therefore, responding to emergencies represents only a small part of the work of public health agencies and usually comes at the expense of the agencies' other tasks.

Since September 11, 2001, and the subsequent anthrax attacks, the use of tabletop exercises in public health has significantly increased. The evidence base for these exercises, however, remains sparse and the quality of many of these exercises is poor because they were not sufficiently beta tested. Most of these exercises focus on training and few provide public health agencies with tools to assess exercise performance. This narrow focus limits the ability of public health agencies to use tabletop exercises as part of an overall continuous quality improvement effort.

In 2003, the U.S. Department of Health and Human Services Office of the Assistant Secretary for Public Health Emergency Preparedness contracted with the RAND Corporation to develop and beta test a suite of tabletop exercises that focus on the response of local public health agencies (LPHAs) to outbreaks caused by bioterrorism in the first few hours to days of the response. This book is the operations manual developed from that project.

The tabletop exercises described in this manual were developed as templates that LPHAs across the country can customize and use to train public health workers in how to detect and respond to bioterrorism events and to assess the level of preparedness of LPHAs over time. They were beta tested and refined in 13 LPHAs across the United States over the course of 10 months.

The manual outlines everything the leadership of an LPHA needs to do to plan for and conduct an exercise. The exercises are led by a trained facilitator. The facilitator guides the exercise discussion and provides exercise participants with probes to keep the

discussion on track and moving forward. Checklists are provided as tools for facilitators to use to help structure the discussion and to assess the exercise. Chapter Three provides detailed information and training materials to teach individuals how to become effective exercise facilitators.

All of the tabletop exercises outlined in the manual share five common elements that are described in detail in Chapter Two:

- initial situation reports
- case reports
- facilitated discussion
- situation updates
- hot wash.

LPHAs can choose from a suite of exercises that focus on one of five potential bioterrorism agents:

- smallpox
- plague
- botulism
- anthrax
- novel (severe acute respiratory syndrome [SARS]-like) agent.

The exercises focus on these agents because they have been identified in the literature as agents that represent our most significant risks, illuminate how the public health system would be taxed in a variety of bioterrorism events, and stimulate a broad range of bioterrorism preparations.

Once an LPHA decides on an agent for its exercise, it can choose between four short (two hours), four medium (four hours), and one long exercise (six hours). Short exercises focus on topics of surveillance and detection and diagnosis and investigation while medium exercises go beyond these topics to discuss system wide coordination, risk communication, and disease control. The long exercise adds one final topic not covered in the short or medium exercises: consequence management.

After an exercise has been conducted, the manual outlines strategies for assessing exercise performance in Chapter Four. The final chapter of the manual discusses how to incorporate the regular use of tabletop exercises into a continuous quality improvement framework for public health preparedness.