What is Peer Assessment?

Peer assessment is a process designed to analyze a public health system’s response to an emergency, identify root causes of successes and failures, and highlight lessons that can be institutionalized by the responding public health system and others to improve future responses. After an agency or group of agencies respond to an incident that stresses the abilities of the public health system, the jurisdictions that responded to the incident initiates a peer assessment as a “requestor.” This not only provides direct benefits to the requestor, which will have the assistance of a “peer assessment team” in the after action review process, but also fosters communication and collaboration across jurisdictions, allowing requestors to engage with their assessment team. There may be indirect benefits to the assessment team as well, given the opportunity to learn from the public health response of the requesting jurisdiction.

Peer assessment is not a substitute for a “hot wash” immediately after an incident, rather it serves a different purpose. The primary goal of a hot wash or immediate review is to identify issues that require attention and record the facts about what happened before memories fade. Rather than asking “what” and “how many” questions, a peer assessment process is intended to help jurisdictions understand “how” and “why” problems occurred as a step towards identifying and addressing contributing factors that are likely to be a problem in future incidents. (Although some hot washes identify “strengths and weaknesses” or “things that went well/not so well,” it is usually not possible to systematically address “why” questions in the immediately aftermath of the incident). The report resulting from the peer assessment process can stand alone as an incident report, serving as or complementary to a standard AAR. In addition, the incident report can be shared with others through a critical incident registry (CIR) for public health emergency preparedness (Piltch-Loeb, 2013). A PHEP CIR is intended to provide a database of incident reports, allowing for both sharing with others in similar contexts and facilitating cross-case analysis.

Assessment teams should be composed of public health practitioners from jurisdictions that are similar in terms of size, population served, and public health systems in place (as described in detailed below). Peer assessment teams will ideally include three members: one to facilitate discussions, another to take notes, and a third person to focus on the root cause analysis process.
Peer Assessment Rationale

Major public health emergencies are relatively rare, and when they do occur, they differ in important ways. While we can be grateful that the harm that emergencies cause is uncommon, their infrequency has caused difficulties in learning from real-world incidents impeding systems improvement efforts in public health emergency preparedness (PHEP). The peer assessment approach described in this toolkit provides an opportunity for health departments to collaborate in their efforts to learn from such incidents. The goals are to improve future responses for the public health agencies that responded to the incident, as well as to identify best practices for other health departments responding to similar incidents in the future.

After an agency or group of agencies respond to an incident that stresses the abilities of the public health system to respond, the public health practitioner or group of practitioners representing the jurisdictions that responded to the incident can initiate a peer assessment process as a “requestor.” This not only provides direct benefits to the requestor, which will have the assistance of a “peer assessment team” in the after action review process, but also fosters communication and collaboration across jurisdictions, allowing requestors to engage with each other and with their assessment team. There may be indirect benefits to the assessment team as well, given the opportunity to learn from the public health response of the requesting jurisdiction.

The incident report resulting from the peer assessment process can also serve as a supplement to a standard after action report (AAR). In addition, the report can be shared with others through a critical incident registry (CIR) for public health emergency preparedness (Piltch-Loeb, 2013). A PHEP CIR is intended to provide a database of incident reports, allowing for both sharing with others in similar contexts and facilitating cross-case analysis.

This peer assessment process was field tested in two jurisdictions that have experienced a public health emergency: a Salmonella incident in Alamosa County, Colorado, and a major West Nile virus outbreak in the Dallas-Fort Worth Metroplex in Texas. A site visit was conducted for each incident, during which a peer assessment team (a group of public health practitioners from other jurisdictions) led practitioners from the responding jurisdiction through a document review and “facilitated look-back” process (Aledort, 2006) to perform a root cause analysis. These analyses are documented in detail. The West Nile Virus example can be found in the example boxes throughout this toolkit and both cases can be found in full in the appendices.

Peer assessment for public health emergency incidents enables practitioners to learn from experience which moves public health emergency preparedness into the culture of quality improvement (QI) recommended by the National Health Security Strategy (NHSS) and enhances the health security of our nation (DHHS, 2009). Continuous QI is also
fundamental to the Public Health Accreditation Board’s national accreditation process. Through the peer assessment process, public health practitioners assist their peers in assessing the successes and failures involved in responding to a public health emergency and work with them to find solutions. Research has shown that standard quality improvement methods such as “learning collaboratives” may not be appropriate in the context of PHEP. This is due to the lack of evidence based and agreed upon performance measures, and the difficulty of carrying out rapid plan-do-study-act (PDSA) cycles and measuring processes and results after rare events (Stoto, 2013a). The peer assessment process is designed to highlight the root causes of these successes and failures, and lead to thoughtful lessons learned and improvement strategies that can be institutionalized. For further information on the research support for this approach, see Part III of this report.

**Intended Users of this Toolkit**

The primary players involved in a peer assessment are the *requestor*, the public health practitioner or group of practitioners representing the jurisdictions that responded to the incident, and the *assessment team* or assessors, the peer public health practitioners who have been called upon to review the response to the incident. An ideal peer assessment team will consist of a meeting facilitator, a note taker, and perhaps a third individual to help with the root cause analysis. In this toolkit there are separate guides for requestors and assessors.

This toolkit begins with a brief introduction to the peer assessment process and a glossary of terms used. This is followed by detailed information for both requestors and assessment teams about the peer assessment process and root cause analysis, illustrated with an example based on the Dallas-Fort Worth Metroplex West Nile Virus outbreak. Following this, two separate and parallel sections provide detailed Job Action Sheets for both requestors and assessment teams. The final section summarizes the research background supporting the peer assessment process.

To illustrate the peer assessment approach in more detail, two complete incident reports are included as appendices, one is the example used throughout the toolkit, the Texas West Nile virus experience, and the other is the Salmonella outbreak in Alamosa, Colorado. A final appendix presents templates that can be adapted to employ the peer assessment jurisdiction in other settings.

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GLOSSARY OF TERMS

**Adaptation**: A change made during the response to an incident that specifically limited the response challenge in that situation

**Assessment team** (also see facilitator): Peer public health practitioner conducting the review of the response to an incident at the request of the responding jurisdiction

**Critical Incident Registry** (CIR): A catalogue of reports on a jurisdiction’s response to an incident. The registry is in development in conjunction with the other methods discussed in this document, especially peer assessment.

**Contributing Factor**: Underlying factors (modifiable & un-modifiable) that lead to the immediate cause

**Facilitated Lookback**: A method to bring individuals together to discuss a particular incident that follows a “systems improvement” spirit to get at causes that contributed to the incident (Aledort, 2006)

**Immediate Cause**: Initially explicit reason(s) for response challenges that affected meeting the response objective

**Lesson for Systems Improvement**: Identification of why something went wrong and the way in which prevent similar response challenges in future events

**Lookback Facilitator**: Peer public health practitioner conducting the review of the response to an incident at the request of an involved jurisdiction. (Facilitator specifically refers to this person’s role being to lead the facilitated lookback in-person meeting)

**Objective**: The goal of the response

**Peer Assessment Model**: The engagement of public health practitioners in analyzing the response of a public health system response to a particular incident.

**Public Health Emergency Preparedness** (PHEP): The capability of the public health and health care systems, communities, and individuals, to prevent, protect against, quickly respond to, and recover from health emergencies, particularly those whose scale, timing, or unpredictability threatens to overwhelm routine capabilities. Preparedness involves a coordinated and continuous process of planning and implementation that relies on measuring performance and taking corrective action (Nelson, 2007).

**Requestor**: Member of the jurisdiction which has asked for a peer assessment of their response to an incident
**Root Cause Analysis:** A qualitative, retrospective, quality improvement tool used to analyze adverse incidents and sentinel events (e.g., a preventable error leading to death, serious physical or psychological injury, or risk of such injury) at the lowest system level (Wu, 2008)

**Response Challenge:** Item that limited the ability to respond to an element of the public health emergency incident

**Story Arc:** The overarching series of events that led to challenges in meeting an objective, including the various factors that enabled or barred the objective being met.