Writing After Action Reports

Bureau of Community Preparedness

Webinar Series

January 11th 2017

LOUISIANA DEPARTMENT OF HEALTH
Public Health

Defining AARs

Writing After Action Reports

What is an After Action Report?

- Documents the actions taken during an incident response (real or simulated) and the results of those actions
- Compares the desired outcomes for the incident with the actual outcomes
- Describes specific improvements to be made for future incident responses

How is an AAR used?

- To inform how plans should be revised and identify gaps in planning
- To determine training needs and help shape training and exercise programs
- To determine resource needs and the specific allocation of those resources

In the Beginning…

Writing After Action Reports

What is needed to write an AAR?

- Desired outcomes of an incident response
- Detailed observations of actual outcomes
- Analysis of actual outcomes compared to desired outcomes

AAR Writing Process in 4 Easy Steps

1. Collect observations relating to the desired outcomes
2. Compare the desired outcomes to what actually happened
3. Determine the reasons for the differences between desired and actual outcomes
4. Formalize the necessary revisions and additions to existing plans and processes (improvement planning)

Anatomy of an AAR

Writing After Action Reports

Desired Outcomes

- Most commonly in the form of objectives
- Describe the “ideal reality” of what should happen during a response
- Keep in mind that an outcome describes *what* happened, and not *why* it happened
- Sometimes the desired outcome during post-incident analysis is different from the initial desired outcome

Example: During mass prophylaxis operations, vials of SUPER-MEGA™ vaccine will be held unrefrigerated for no more than 30 minutes before being discarded.

Detailed Observations

- Observations should include:
  - What action was performed
  - Who performed the action
  - Under what conditions was the action performed
  - The consequence of the action
- Directly observable actions and consequences are the best source for analysis
- Indirectly observable actions and consequences (inferring what happened) should usually be discarded for analysis
  - Difficult to determine relationship between action and apparent consequence
  - Any other observations linked to a shaky observation also become suspect
- Multiple similar observations should be summarized into a single statement

Detailed Observations

- Each observation is classified as one of three things
  - *Strength*: an activity that achieved a desired outcome
  - *Area for Improvement*: an activity that was less effective in achieving a desire outcome, or actually inhibited progress toward achieving a desired outcome
  - *Irrelevant*: the observation doesn't relate to the desired outcomes being addressed

Example Observations

- At dispensing stations 3, 4, 6, and 7, SUPER-MEGA™ vaccine vials were discarded on average at 24.75 minutes, with a range of 22 to 29 minutes.
- At dispensing stations 1 and 2, SUPER-MEGA™ vaccine vials were discarded on average at 39 minutes with a range of 37 to 41 minutes.
- No observations were made at Dispensing stations 8 or 9, so no data are available

Summarized Observation Statement: While most observed dispensing stations discarded vaccine according to protocol, a small number exceeded the discard time by a significant period, and data were not available for all dispensing stations.

Observational Analysis

- Often described as “root cause analysis”
- Each observation is closely examined for relevant information
- Analysis answers the question “Why?”
  - Why was a specific action taken?
  - Why was the outcome successful or not successful?
  - Why should this action be retained or discarded in the future?
- Analysis provides justification for revision of how things are done
  - Response plans
  - Training plans (topics, frequency, audience, methodology)
  - Exercise plans (type, capabilities, participants, scope)
- Analysis leads directly to improvement planning, which is the point of writing an after action report

Observational Analysis

Example Analysis

For all observed dispensing stations, the time at which vaccine was removed from refrigeration was noted on each vial (station #4 also wrote the discard time on the vial). However, after later interviews with the staff at each station, it became apparent that the primary difference between stations that discarded according to protocol and those that did not was the availability of an easily visible clock.

Stations 3, 4, 6, and 7 used the large wall clock in the main gymnasium, whiles stations 1 and 2 relied on personal mobile phones for time keeping (the large gym clock was not visible) and were checked only periodically during lulls in the vaccine line. Though direct observations of stations 8 and 9 were not made (a separate issue), those stations also did not have view of a clock (as noted by the staff), so may have also exceeded vaccine discard time.

Additionally, tracking vaccine temperature control and discard time seems somewhat under-developed for such a critical task.

Example Observational Analysis Section

[Relevant Objective]

Strengths

The [full or partial] capability level can be attributed to the following strengths:

- Strength 1: [Observation statement]
- Strength 2: [Observation statement]

Areas for Improvement

The following areas require improvement to achieve the full capability level:

- Area for Improvement 1: [Observation statement. This should clearly state the problem or gap; it should not include a recommendation or corrective action, as those will be documented in the Improvement Plan.]

Reference: [List any relevant plans, policies, procedures, regulations, or laws.]

Analysis: [Provide a root cause analysis or summary of why the full capability level was not achieved.]

Improvement Planning

- Improvement planning is the final output of an after action report
  - Ensures that lessons learned from a response are not lost
  - Provides and organized way to incorporate needed changes in the overall response process
- Analysis of the response outcomes results in three categories of observations
  - Activities that are currently described in a plan and should be retained in that plan (perhaps with minor revisions) because those activities were effective in achieving objectives
  - Activities that are currently described in a plan and should be revised (or discarded entirely) because those activities were *not* effective in achieving response objectives
  - Activities that are not described in a plan, but should be added to a plan because those activities were effective in achieving response objectives (a novel approach)

Improvement Planning

- Identified revisions and additions to plans must be translated into specific implementation steps named corrective actions
- Taken as a whole, the corrective actions are referred to as an Improvement Plan.

Improvement Plan							
Core Capability	Area for Improvement	Corrective Action	Capability Element	Primary Responsible Organization	Organization POC	Start Date	Completion Date

Corrective Actions

- Corrective actions describe the following:
  - A measurable action relating to planning, training, or exercises
  - The group or agency responsible for implementing the action
  - An identified contact for the responsible group or agency
  - A timeline (or deadline) for completing the assigned action
- A corrective action describes *what* should be done, but not *how* it should be done. Determining how to approach a corrective action is the responsibility of the assigned group or agency
- Part of the corrective action process is tracking improvements, so it must include a system for ensuring implementation of the Improvement Plan

Corrective Actions

Improvement Plan							
Core Capability	**Area for Improvement**	**Corrective Action**	**Capability Element**	**Primary Responsible Organization**	**Organization POC**	**Start Date**	**Completion Date**
Mass Dispensing	Vaccine discard times exceeded 30 minutes at some dispensing stations	Provide easily accessible time-keeping capability to each station	Equipment and Systems	DOH Logistics Brigade	Ben Solo	February 2017	March 2017
		Develop tracking log for vaccine including unique identifier for each vial, time out of temp control and time to discard for use at each dispensing station	Equipment and Systems	DOH Clinical Oversight Directorate	Jessica Jones	February 2017	April 2017
		Conduct training on vaccine specific temperature protocols and use of tracking logs to vaccinators	Training	DOH Staff Enhancement and Training Division	Bobby Hill	April 2017	June 2017

The End Is Here

Writing After Action Reports