



After Action Report

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Description

An After Action Report (AAR) is a detailed critical summary or analysis of a past event created to re-assess decisions and consider possible alternatives for future scenarios. It can help summarize and categorize notes taken during and throughout an event. The report provides a template for an organization to increase its preparedness efforts by analyzing a past event to determine what went according to plan, what went wrong, what areas need to be adjusted, where additional training is needed, and what areas need a redesign.⁴ The purpose of the report is not to place blame but instead to improve preparedness capacity. Health Departments often use AARs for preparedness, but also to fulfill requirements of Public Health Accreditation through the Public Health Accreditation Board. AARs are specifically mentioned in Standard 2.2.

When to Use

Plan to use the AAR immediately following a major event (e.g., flooding), following a planned event (e.g., tabletop exercise, drill), or at the end of a seasonal event (e.g., mosquito control or spraying). Those involved in the event should meet and fill out the report within a few days of an event or a few weeks of a season.

An AAR should include the following basic elements, but other details can be added to fit your circumstances⁵:

- Executive Summary
- Event Overview
- Event Summary
- Analysis of Capabilities
- Conclusion
- Improvement Plan

Construction Steps

1. Describe the event, its purpose, and identify if it had a code name.
2. Record the event date(s) and the date of the event review.

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⁴ Homeland Security Exercise and Evaluation: https://www.fema.gov/media-library-data/20130726-1914-25045-8890/hseep_apr13_.pdf (5-1)

⁵ Center for Disease Control and Prevention Public Health Preparedness Capabilities: National Standards for State and Local Planning, Page 34. <https://www.cdc.gov/phpr/readiness/capabilities.htm>

3. List out the names of participants and/or participating organizations, and their roles in the event.
4. Discuss the following questions:
 - a. What was expected to happen? (e.g., objectives for addressing the event, expectations, outcomes)
 - b. What actually occurred?
 - c. What went well and why?
 - d. What can be improved and how?
5. Record the objectives for addressing the event, performance measures and targets, and any accomplishments.
6. Determine next steps and create any improvement activities for each event objective, including who will be responsible and by what deadline.
7. Discuss other pertinent information to help improve the response to the event in the future.

Completing an AAR creates a framework for an organization to increase its preparedness efforts by assessing preparedness and response to a past event and completing an improvement plan for future action.

Example: Tulsa Health Department (THD) After-Action Report and Improvement Plan

Date: November 28, 2016

Summary

The Tulsa Health Department mosquito control program began an improvement project with the Centers for Disease Control and Prevention (CDC) National Center for Environmental Health (NCEH) and Public Health Foundation (PHF) to increase the capacity of the program, beginning in the 2015 mosquito season. The goal of the improvement project was to improve the program through day-to-day activities and to potentially cut costs. The improvements were to implement uses of best practices in mosquito control and conform to new requirements from the Oklahoma Department of Agriculture and other regulatory agencies. In 2016, the project was expanded to include data sharing and mosquito control efforts to other entities in the Tulsa metro area.

Overview

Event Name	2015-2016 Tulsa Metro Mosquito Control
Event Dates	May 1-October 31, 2015 and May 1-October 31, 2016
Project Area(s)	All parts of Tulsa County including all portions of City of Tulsa in adjoining counties.

Performance Measures/Targets	Share Information, provide training, increase capacity, save money and take appropriate measures.
Objectives	Increase capacity of the vector control program, increase media exposure and collaborate with other community entities on comprehensive mosquito program, share data with collaborating entities, and increase exposure of THD's mosquito program through regional and national outlets.
Accomplishments	Increased capacity, increased media exposure, positive feedback from field staff, ability to return calls of complainants to hotline, increased number of municipalities participating in mosquito control activities, identified daytime biting mosquitoes, fewer spray events due to targeted spray events, presented at local and national conferences, saved costs on batteries, and detected West Nile Virus earlier than ever before in the county.
Next Steps	Continue progress and projects from 2015 and 2016, send out surveys to municipalities to determine if projects were effective, get more municipalities and entities to buy in to our projects, continue providing training, further exposure to other potential mosquito causing locations, continue application experiments and continue to streamline mosquito control efforts.
Sponsor	CDC NCEH and PHF
Participating Organizations	Cities of: Tulsa, Jenks, Broken Arrow, Bixby, and Sand Springs. Other entities: Tulsa Parks, Riverparks, INCOG, Public Health International, CDC, PHF, THD, and all active citizens of Tulsa County.
Point of Contact	Scott Meador, Program Coordinator-Vector Control, THD 5051 South 129 th East Avenue, Tulsa, Oklahoma 74019 (918) 595-4341

Analysis of Improvement Targets and Improvement Activities

Project Goal: Increase the amount and types of mosquitoes collected and utilize county resources and funds effectively.

Objective	Expectations and Performance Measures	Accomplishments and Outcomes	Improvement Activities
Collect and Identify Mosquitoes	<ul style="list-style-type: none"> • Increase number of unique trap locations • Identify mosquitoes that carry West Nile and potentially Zika • Reduce number of trap nights per pool from seven to one 	<ul style="list-style-type: none"> • Increased surveillance sites (from 52 to 141) and mosquitoes collected (from 9,800 to 26,000) • Tested and identified West Nile Virus positive location earlier than in previous years • Increased collections with few trap nights through the use of best practices and use of infused attractant waters • Met with Oklahoma Department of Environmental Quality (ODEQ) to create a program for monitoring and educating used tire/repair shops on proper mosquito control and tire disposal 	<ul style="list-style-type: none"> • Continue to identify unique trap locations • Begin mosquito collections earlier in the year • Continue to update best practices for collections and field staff. • Continue to educate tire shops to control mosquitos. Aid ODEQ on enforcement of shops that are not in compliance.
Share data with participating communities	<ul style="list-style-type: none"> • All communities (15+) in the Tulsa metro area will participate and be willing to share data and possibly share responsibility in Tulsa County mosquito control • Provide training to all relevant staff 	<ul style="list-style-type: none"> • Only four of the 11 communities participated in 2016 mosquito control efforts • Hosted two mosquito trainings (May 12 and August 23) for staff 	<ul style="list-style-type: none"> • Continue to invite the communities in Tulsa County to annual meetings and trainings to encourage participation • Continue to provide training and updating

Objective	Expectations and Performance Measures	Accomplishments and Outcomes	Improvement Activities
	<ul style="list-style-type: none"> In exchange for data, THD would provide larvacide to communities for mosquito control 	<p>and applicators in the area</p> <ul style="list-style-type: none"> No communities were interested in treating in any capacity their own areas Adjusted the 2015 collection schedule to conform to new needs of the program employees and the time constraints for the 2016 project needs 	<p>best practices for mosquito program</p> <ul style="list-style-type: none"> Continue to offer the larvacide to communities Explore mosquito control districts where treatments are based on control needs and populations models
<p>Increase media targets</p>	<ul style="list-style-type: none"> Conduct media interviews for all outlets on media day (May 26, 2016). There were six media outlets addressed on media day Increase exposure on social media Increase exposure with neighborhood associations/groups and other relevant associations 	<ul style="list-style-type: none"> Media interviews were scheduled on media day for both TV and newspaper on May 26th. There were 28 media interviews in 2016 valued at over \$37,000 Throughout the season, THD released relevant information on social media to educate the public on mosquito control and West Nile virus. There were over 25,000 people that were provided information on social media with over 750 reactions THD made contact with several housing associations either by phone or email 	<ul style="list-style-type: none"> Continue to schedule media day in the future Expand visibility on social media Increase number of neighborhood associations we provide information for on mosquito control

Objective	Expectations and Performance Measures	Accomplishments and Outcomes	Improvement Activities
		<ul style="list-style-type: none"> THD revised and expanded the beekeeper “no spray” list 	
Present data at professional conferences	<ul style="list-style-type: none"> Present data and methods of monitoring to National Environmental Health Association (NEHA) and Oklahoma Public Health Association (OPHA) Make contact with other agencies in the state to share methods and data 	<ul style="list-style-type: none"> Presentation was made at the NEHA Annual Conference in San Antonio, Texas on Wednesday June 15, 2016 Presentation at the OPHA was made in Tulsa, Oklahoma on September 27, 2016 Increased visibility for the department both nationally and in state During OPHA, we were able to discuss lack of communication issues between several in state agencies Able to share methods with agencies that are interested in improving their program 	<ul style="list-style-type: none"> Continue to seek opportunities to present data, and increase visibility, and learn from other departments Continue to be available to state agencies interested in improving mosquito control programs Increase communication and rapport with the state health department, and assist mosquito control agencies in order to become leaders in mosquito control in Oklahoma

Final Summary

The processes put in place for the mosquito control improvement project continue to be a success for the Tulsa Health Department (THD). The greatest benefit was putting best practices of mosquito control into place. When combined with mosquito control and regular duties of field staff, the THD was able to streamline field activities and greatly expand the capabilities of those staff. The THD was also able to develop collaborations with other entities and strengthen relationships within the THD to assist with the improvement project. The THD will continue with its improvements and build on them for future successes.