MULTISTATE FUNGAL MENINGITIS OUTBREAK

AFTER ACTION REPORT/IMPROVEMENT PLAN

August 30, 2013
The Multistate Fungal Meningitis After Action Report and Improvement Plan is in compliance with the Homeland Security's Exercise and Evaluation Program (HSEEP) and will be used to enhance future Department of Health response plans, trainings, exercises and event responses.

Adopted on August 30, 2013 by:

Dr. Carina Blackmore
Interim State Epidemiologist
State Public Health Veterinarian
Division of Disease Control and Health Protection

Victor Johnson
Director
Division of Emergency Preparedness and Community Support
ADMINISTRATIVE HANDLING INSTRUCTIONS

1. The title of this document is Multistate Fungal Meningitis After Action Report and Improvement Plan

2. This is a public document – no special handling instructions are required.

3. Points of Contact:

   LT Aaron Otis
   Bureau of Preparedness and Response
   Florida Department of Health
   aaron_otis@doh.state.fl.us
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EXECUTIVE SUMMARY

The purpose of this report is to analyze the Florida Department of Health’s (FDOH) response to the Multistate Fungal Meningitis Outbreak, identify strengths to be maintained and built upon, identify potential areas for improvement, and support the development of corrective actions.

On October 1, 2012 the Florida Department of Health in conjunction with the Centers for Disease Control and Prevention (CDC), began investigating potential cases of fungal meningitis among patients who received a steroid injection with a potentially contaminated product. In several patients, the causative agent was a fungus that is common in the environment but rarely causes meningitis.

Methylprednisolone Acetate was identified as the contaminated product, specifically three lots of product distributed by the New England Compounding Center (NECC). Distribution occurred as early as May 21, 2012. The three implicated lots included:

- Methylprednisolone Acetate (PF) 80 mg/ml Injection, Lot #05212012@68, BUD 11/17/2012
- Methylprednisolone Acetate (PF) 80 mg/ml Injection, Lot #06292012@26, BUD 12/26/2012
- Methylprednisolone Acetate (PF) 80 mg/ml Injection, Lot #08102012@51, BUD 2/6/2013

Eight facilities in Florida received the contaminated products. Six facilities, within four counties, administered the product. Exposures occurred in Marion, Escambia, Orange and Miami-Dade. In addition, to residing in the previous counties exposed patients also resided in Okaloosa, and Santa Rosa counties and Alabama.

The Bureau of Epidemiology (BOE) assumed the lead for the response for FDOH. As the incident complexity increased BOE determined the need to activate a FDOH Incident Management Team (IMT). The IMT was established and the first Incident Action Plan was issued on October 11, 2012. The BOE remained the lead for FDOH with the Bureau of Preparedness & Response (BPR) assisting BOE in operating an IMT and handling logistic staffing requests.

On November 13, 2012 the operational period transitioned to a week, and the IMT began to demobilize, at that time all operations were re-assumed by BOE. As part of the demobilization process two surveys were administered, those surveys were utilized to generate the major strengths, areas of improvement and recommendations. On January 11, 2013 an After Action Conference was conducted to review, validate, assign ownership and determine completion dates of the identified corrective actions.

This investigation provided the opportunity for FDOH to exercise the capabilities that have been implemented to complete the Florida Public Health and Healthcare Preparedness 2012-2014 strategic plan, the strategic plan is directly influenced by the Public Health Preparedness Capabilities and the Healthcare Preparedness Capabilities.
The FDOH response to the Multistate Fungal Meningitis Outbreak tested the following core capabilities of the National Preparedness Goal:

- Operational Coordination
- Public and Private Services and Resources
- Public Health and Medical Services
- Public Information and Warning
- Situational Assessment

The following objectives were developed for the response to the Multistate Fungal Meningitis Outbreak:

- Objective 1: Conduct active state-wide surveillance of meningitis of fungal and unknown origin in individuals exposed to the three contaminated lots of Methylprednisolone Acetate (MPA).
- Objective 2: Conduct active surveillance of laboratory isolates of fungi in Florida hospitals.
- Objective 3: Conduct prompt state-wide investigations of reported meningitis cases of fungal and unknown origin.
- Objective 4: Support county health departments by providing guidance, technical assistance and staffing resources.
- Objective 5: Provide risk based information to the general public, clinicians and those exposed.
- Objective 6: Identify long term corrective actions and strategies.
- Objective 7: Assess IMT functions and needs and provide information and guidance to team members.
Major Strengths

Major strengths identified during this incident are as follows:

1. The recognition and implementation of a FDOH BOE led Incident Management Team.
2. Dedicated communications with the impacted County Health Departments.
3. Utilization of Logistics Staffing Unit to assist in the recruiting and deploying of assets.
4. Utilization of the Florida Poison Information Center Network as the primary call center; this allowed for Floridians to communicate with a healthcare provider.

Primary Areas for Improvement

Throughout the incident, several opportunities for improvement in the DOH’s ability to respond were identified. The primary areas for improvement are as follows:

1. The establishment of an Incident Management Team that can provide organizational assistance while allowing subject matter experts to manage and lead the crisis.
   o The Department of Health Emergency Operations Plan, Attachment F.2: Standard Operating Guidelines for Establishing an Incident Management Team (IMT) dated December 19, 2011 should be updated to include standard operational considerations once an IMT has been established.

2. Ensure there is no negative impact on deploying (volunteering) staff. For example, reducing the financial burden associated with paying upfront costs.
   o Establish a focus team to review, recommend, and assign solutions to remove the burden on deploying personal.

3. Define missions for deployed resources to ensuring that there is a clear scope and tasks.
   o Requesting entities and the FDOH IMT need to clearly determine deploying assets scope and tasks. This should include reporting structure, and mission assignments. Deploying resources should clearly understand mission priorities. This will prevent FDOH headquarters and Field Management from assigning competing tasks or allow for a clear understanding of the time needed to complete.
SECTION 1: INCIDENT OVERVIEW

Incident Details

Event Name
Multistate Fungal Meningitis Outbreak

Type of Incident
Disease Outbreak

Event Start Date
October 1, 2012

Event End Date
The Incident Management Team was demobilized on November 13, 2013. However, response activities continued long after as routine epidemiology functions.*

Duration
44 days*

Location
Marion, Escambia, Orange and Miami-Dade counties

Mission Areas
Prevent, protect, respond and recover.

Capabilities
The following core capabilities, identified in the September 2011 release of the National Preparedness Goal, will be discussed in this report as they related to the FDOH response to the Multistate Fungal Meningitis Outbreak

- Operational Coordination
- Public and Private Services and Resources
- Public Health and Medical Services
- Public Information and Warning
- Situational Assessment
Participating Organizations

Many local, state and federal agencies participated in the response to Multistate Fungal Meningitis Outbreak. The Bureau of Epidemiology, Division of Medical Quality Assurance, Office of Communications, Bureau of Public Health Laboratories, Bureau of Public Health Pharmacy and Bureau of Preparedness and Response worked together on the FDOH Incident Management Team. The following is a list of those agencies with which the FDOH coordinated while responding to the event.

Local:
- Escambia County Health Department
- Marion County Health Department
- Miami-Dade County Health Department
- Okaloosa County Health Department
- Orange County Health Department
- Santa Rosa County Health Department

State:
- Division of Business and Professional Regulation

Federal
- Centers for Disease Control and Prevention
- Federal Food and Drug Administration

Non-Government Agencies
- Florida Poison Control Information Network

Number of Local and State Level FDOH Participants: 275
SECTION 2: INCIDENT SUMMARY

Event Objectives and Capabilities

The capabilities listed below form the foundation for the organization of all objectives and observations in this event. Each capability is linked to several corresponding observations and recommendations to provide additional detail.

- **Objective 1:** Conduct active state-wide surveillance of meningitis of fungal and unknown origin in individuals exposed to the three contaminated lots of Methylprednisolone Acetate (MPA).
  - Public Health and Medical Services Capability

- **Objective 2:** Conduct active surveillance of laboratory isolates of fungi in Florida hospitals.
  - Public Health and Medical Services Capability

- **Objective 3:** Conduct prompt state-wide investigations of reported meningitis cases of fungal and unknown origin.
  - Public Health and Medical Services Capability

- **Objective 4:** Support county health departments by providing guidance, technical assistance and staffing resources.
  - Public and Private Services and Resources Capability

- **Objective 5:** Provide risk based information to the general public, clinicians and those exposed.
  - Public Information and Warning Capability

- **Objective 6:** Identify long term corrective actions and strategies.
  - Public Health and Medical Services Capability

- **Objective 7:** Assess IMT functions needs and provide information and guidance to team members.
  - Operational Coordination
SECTION 3: ANALYSIS OF CAPABILITIES

This section of the report reviews the performance of the capabilities, activities, and tasks. The capabilities linked to the event objectives of the FDOH response to the Multistate Fungal Meningitis Outbreak are listed below, followed by corresponding activities. Each activity is followed by related observations, which include references, analysis, and recommendations.

Capability 1: Public Health and Medical Services

Capability Summary: The Public Health and Medical Services capability is defined as providing lifesaving medical treatment and avoiding additional disease and injury by providing targeted public health and medical support. This includes epidemiological surveillance and investigation, laboratory testing, mass prophylaxis, medical supplies management and distribution, and medical surge.

Activity 1.1: Conduct active state-wide surveillance of meningitis of fungal and unknown origin in individuals exposed to the three contaminated lots of Methylprednisolone Acetate (MPA).

Observation 1.1.1: Strength – The County Health Departments were able to identify and contact exposed clients.

References:
1. The County Health Department Epidemiology Guide to Disease Surveillance and Investigations

Analysis: Initially, the County Health Departments attempted to notify all exposed patients, regardless of risk. In the second round of notifications, CHDs identified high risk clients and contacted them first to provide exposure notification. Once the high risk clients had been contacted, all of the exposed clients were notified. The classification of clients by risk ensured that treatment recommendations were provided in a timely manner.

Recommendation: Prioritize notifications utilizing a risk based system. The notification process should include verification.

Activity 1.2: Conduct active surveillance of laboratory isolates of fungi in Florida hospitals.

Observation 1.2.1: Area of improvement - The shipment of samples was not fully coordinated and chain of custody was not maintained.

References:
1. The County Health Department Epidemiology Guide to Disease Surveillance and Investigations
Analysis: The lack of coordination and chain of custody for lab samples resulted in a delay of laboratories receiving samples. At the state level, the lab was asked to coordinate the shipment of samples and provide information to the IMT. DOH works well with facilities to assure samples are sent to CDC properly. In this case, DOH was supposed to be the “gatekeeper”. Rather than sending the samples, DOH could approve the shipment of the samples and implement a tracking system.

Initially, facilities were sending their samples directly to CDC (which is common practice). Then CDC decided to have the samples coordinated through the state. Sending samples through the state, could in some cases delay the results and response.

CHDs had a difficult time collecting the “dash form”. The form is very lab specific and difficult for CHD personnel to decipher. CHDs work on the assumption that everything sent to CDC needs to go through the state lab. If this is not the case, counties should be provided with some clarification and guidance.

If samples are sent directly from facilities - there could be difficulties in completing the forms, packaging the samples correctly, sending samples that don’t need to be sent. There could also be legal issues and chain of custody issues if the samples are not coordinated through the state.

Recommendation: During investigations laboratory sample guidance must be developed and disseminated. The state laboratory must be incorporated into the IMT in order to develop an effective chain of custody which will allow for effective reporting.

Activity 1.3: Conduct prompt state-wide investigations of reported meningitis cases of fungal and unknown origin.

Observation 1.3.1: Area of Improvement - Multiple case report forms (CRF) were developed during the investigation.

References:
1. The County Health Department Epidemiology Guide to Disease Surveillance and Investigations

Analysis: The utilization of a single CRF is a priority. Without a common CRF a proper epidemiological analysis cannot be completed. Changes need to be made timely, in order to determine the impact and potential control measures. The second version of the CRF was delayed several times due to approval processes at DOH Headquarters.

Although Individual consultation was provided to the impacted counties and BOE provided updates and technical assistance during the Epi Bi-Weekly calls, CHDs did not feel that training was provided in a timely manner. Failure to provide training on the CRF or changes resulted in the delay of case reporting. In addition, the potential to provide inadequate information continued.

Training Tuesday opportunity was used during the event to educate counties on how to report information. The CRF for this event was very detailed and the counties didn’t...
understand some of the information about medical abstraction. CDC changed the CRF three times throughout the event due to the evolving nature. CDC guidance was distributed as it changed. A better job could have been done in setting expectations for CRF completion.

Additional information was being requested beyond what was required on the CRFs. Counties were requested to complete CRFs and also provide information that could be used more immediately. This additional information was being collected to determine if individuals met the case definition. The Outbreak module was bring used for real cases

Recommendation: When a response requires a supplemental CRF, a clear process for the revision, and approval must be provided by the IMT, to include resources.

Observation 1.3.2: Area of Improvement – Multiple entities were contacting CHDs requesting investigation information. This resulted in delays and the utilization of multiple data collection systems

References:
1. The County Health Department Epidemiology Guide to Disease Surveillance and Investigations
3. Merlin Analysis Guide

Analysis: It was noted that in this response numerous entities were contacting CHDs requesting updated case information and assigning additional tasks. This included the use of two data collection systems for the outbreak. The utilization of an ICS structure and a CHD nightly brief was conducted. The IMT designated Merlin as the primary outbreak data collection system.

Failure to follow the chain of command resulted in the CHDs handling additional requests for information. Additionally, multiple data collection systems resulted in confusion during case reporting. Data management of exposure data was not standardized which resulted in duplicate data system development.

Recommendations:
1. Utilize a single point of contact for the CHDs at DOH Headquarters.
2. Utilize Merlin as the outbreak data system.
3. Develop a standardized system to maintain other confidential data (exposure data) accessible statewide.

Capability 2: Operational Coordination

Capability Summary: The operational coordination capability is defined as establishing and maintaining a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities. This includes:
executing operations with functional and integrated communications, establishing and maintaining partnerships, establishing command, control and coordination structures and maintaining National Incident Management System (NIMS) compliancy.

Activity 2.1: Assess IMT functions and needs and provide information and guidance to team members.

Observation 2.1.1: Strength – The use of the Incident Management Team structure enhanced the management and coordination of this response.

References:
1. Department of Health Emergency Operations Plan

Analysis: The utilization of an organizational structure was required in order to coordinate and communicate among the technical specialists in the multiple impacted CHDs and DOH Headquarters. A DOH Incident Management Team was established utilizing ICS trained staff to assist the technical specialist in the coordination and communication during the outbreak.

The use of ICS was noted as a strength by both the BOE and BPR. The system reduced free lancing, focused resources and provided a systematic approval process for case reporting, communication and identification of resources.

Recommendation: Establish a dedicated DOH IMT that can be deployed to provide organizational structure during DOH incidents, allowing technical specialist to focus on controlling the incident. DOH IMT should recruit from the entire agency.

Observation 2.1.2: Area of Improvement – IMT staff were not consistently activated and demobilized according to procedures.

References:
1. ESF8 Standard Operating Procedure (SOP)
2. Department of Health Emergency Operations Plan

Analysis: Some staff were activated into the IMT without advanced notice and the duration of deployment was not provided. The command staff met following the morning IAP meeting to discuss staffing needs. The expectation was that the supervisors were contacted for approval which included staff notification.

The failure to properly mobilize staff could result in the failure to complete essential tasks in non-incident missions or divert the responder’s attention from DOH mission specific tasks.

Recommendation: The IMT must follow the logistics process to ensure staff and their supervisors are notified of deployments, including expectations and duration of activation.

Capability 3: Public and Private Services and Resources
Capability Summary: The Public and Private Services and Resources capability is defined as providing essential public and private resources to the area of need. This includes the mobilization, delivery, monitoring and recovery of the resources. Resources may be “hard” (supplies, equipment, tangibles, etc.) or people/manpower.

Activity 3.1: Support county health departments by providing guidance, technical assistance and staffing resources.

Observation 3.1.1: Strength – Resources were deployed to augment county health department staff.

References:
1. ESF8 Standard Operating Procedure (SOP)
2. Logistics Support Annex

Analysis: FDOH resources deployed to support the CHDs during the incident included:

- Local Incident Commander
- Case investigating/data reporting staff
- Merlin case reporting staff
- Epidemiologists
- Nurse Epidemiologists
- Data Managers
- Clerks

Recommendations: None

Observation 3.1.2: Area of Improvement – Deployment recruitments were not timely.

References:
1. ESF8 Standard Operating Procedure (SOP)

Analysis: Staff were recruited for mission on Friday with deployment expectation of that Sunday. When missions are adjusted or added in a voluntary recruitment system, time to identify staff increases with the complexity of the mission. Additionally, requests made with short deployment timeframes typically result in reduced number of resources. Failure to provide sufficient resources results in inadequate resources to complete missions.

CHDs were asked to forecast staffing needs by Wednesday; this provided additional time for recruiting staff. However, expectations were not provided to the staff in advance and questions regarding overtime costs were not addressed. Additionally, there was no overlap in staff creating a gap in service and the inability to cross-train. This response was a reminder of the challenges of staff recruitment.
**Recommendation:** The IMT must follow the logistics process to ensure staff and their supervisors are notified of activation expectations and durations.

**Observation 3.1.3:** Area of Improvement – Deployed resources were not utilized for the intent for which they were deployed.

**References:**
1. ESF8 Standard Operating Procedure (SOP)

**Analysis:** Resources were redirected by central office staff outside the IMT structure, with support from CHDs, to document exposure histories and underlying health conditions for all patients at particular clinics through systematic medical record reviews. The data would, at a later point in time, be used to identify risk factors for exposure. This delayed time sensitive case reporting efforts to CDC and staff were asked to refocus on data input into Merlin.

**Recommendation:** DOH IMT and requesting entities must clearly define scope and tasks for deploying resources.

**Capability 4: Public Information and Warning**

**Capability Summary:** The Public Information and Warning capability is defined as delivering coordinated, prompt, reliable and actionable information to the community. This includes sharing messages with the public and other stakeholders.

**Activity 4.1:** Provide risk based information to the general public, clinicians and those exposed.

**Observation 4.1.1:** Area of Improvement - Case reporting was provided daily to media outlets utilizing a standardized media briefing, handled by the Office of Communications. The potential for the release of non-validated and/or non-accurate information was identified by the IMT.

**References:** None

**Analysis:** A specific reporting schedule and authorization for the release of current case information was adopted for this response. Providing inaccurate information could result in further distrust from the public when implementing outbreak control measures.

**Recommendation:** When daily reporting is required utilize the established protocol for this outbreak, to ensure the validation of information & control case reporting. This process will insure information validation. Establish a weekly reporting schedule for low-risk non-communicable diseases.
Observation 4.1.2: Area of Improvement – A DOH call center was activated utilizing non-clinical personnel. When asked specific medical questions they referred callers to their local CHD or medical providers. The CHD and medical providers were in return directing the caller to the hotline, creating a negative feedback loop.

References: None

Analysis: The DOH staffed call center could not provide general medical based answers. The lack of a dedicated script could allow for inaccurate information to be disseminated.

A circular loop may have been created when the call center number was given to a provider and the provider gave the number to their patients for more information not realizing that the call center was referring patients to their providers. DOH should have been more clear with the counties about the capabilities of the call center and who should be referred to the line and who should not. The intent of the call center was not initially clear.

Recommendation: Call centers should incorporate the use of medical based information and coordination to reduce negative feedback loops. Using the Poison Information Centers for medical call center support should be considered.

Observation 4.1.3: Area of Improvement – The DOH media webpage was not user-friendly specifically; the meningitis information flashed off the home page when you entered and the information didn’t immediately link to the BOE web page.

References: None

Analysis: Failure to provide effective access to this information could result in the public seeking information from unreliable sources or inundating the county health departments with requests for posted information. The IMT was not always kept in the loop when press releases were issued. It was not easy to find the DOH Newsroom from the DOH homepage.

Recommendation: Provide effective access to incident specific information this reduces the impact of rumors and request for information at the County Health Department level.

Capability 5: Situational Assessment

Capability Summary: The Situational Assessment Capability is defined as providing all decision makers with decision-relevant information regarding the nature and extent of hazards, any cascading effects, and the status of planning and response efforts.

Activity 5.1: Identify long term corrective actions and strategies.
Observation 5.1.1: Area of improvement - Healthcare providers were not recording lot specific information on patient records.

References: None

Analysis: Patients could not be easily identified due to record-keeping standards. While a good practice to identify lot codes on patient records, this was not always completed. All solutions were reactive to identify patients through medical data extraction.

The inability to effectively identify exposed clients resulted in the delay of providing medical guidance and treatment.

Recommendation: All lot specific information should be documented from manufacturer to dispensing. The DOH responsibility for this action is to support the review and discussion as the recommendation is outside the scope of DOH responsibilities.
SECTION 4: CONCLUSION

This incident was a non-communicable disease resulting from a known exposure, which should have allowed the department to quickly move to a proactive response model. However, due to standard healthcare practices, the identification of the exposed clients proved to be extremely difficult. This was further hampered by the change in monitoring and treatment protocol as the situational awareness expanded.

In spite of these constraints the Department attempted to move to a proactive model, through standard epidemiological investigations, increased communications with the exposed, and providing updated information to the general public.

The strength of this response was the adaptive nature of the Department and the desire to adjust the corrective actions as the situational awareness improved. Further establishment of the protocols, procedures and policies for the implementation of an Incident Management Team to support technical specialists will further advance the ability of the Department to effectively and efficiently meet the needs of the impacted area to investigate, monitor and control incidents.
APPENDIX A: IMPROVEMENT PLAN

This Improvement Plan has been developed specifically for the Florida Department of Health as a result of the response to the Multistate Fungal Meningitis Outbreak. These recommendations draw on the recommendations made in the After Action Report.

<table>
<thead>
<tr>
<th>Capability</th>
<th>Observation</th>
<th>Recommendation</th>
<th>Corrective Action Description</th>
<th>Capability Element</th>
<th>Primary Resp Agency</th>
<th>Agency POC</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>Capability 1: Public Health and Medical Services</td>
<td>Strength – The County Health Departments were able to identify and contact exposed clients.</td>
<td>1.1.1: Prioritize notifications utilizing a risk based system. The notification process should include verification.</td>
<td>1.1.1.a: Develop guidance for risk-based communications with a verification step.</td>
<td>Planning</td>
<td>BOE</td>
<td>Jim Matthias/ Katherine McCombs</td>
<td>10/31/14</td>
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<td>1.1.1.b: Incorporate the utilization of local health care providers to contact those exposed</td>
<td>Planning</td>
<td>BOE</td>
<td>Jim Matthias/ Katherine McCombs</td>
<td>10/31/14</td>
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</tbody>
</table>
| Capability 1: Public Health and Medical Services | Area of improvement - The shipment of samples was not fully coordinated and chain of custody was not maintained. | 1.2.1: During investigations laboratory sample guidance must be developed and disseminated. The state laboratory must be incorporated in to the IMT in order to develop an effective chain of custody which will allow for effective reporting. | 1.2.1: BOE and BOL should establish a workgroup to complete the following:  
- Assess the problem.  
- Develop a sample submission process  
- Procedure for receiving results from State Lab  
- Communicate with CDC for a standardized reporting system to BOL (electronic). Needs to include notification to CHD and sample provider. | Planning / Process | BOE | Jamie DeMent/ Andy Cannons | 10/31/14 |
| Capability 1: Public Health and Medical Services | Area of Improvement - Multiple case report forms (CRF) were developed during the investigation. | 1.3.1: When a response requires a supplemental CRF, a clear process for the revision, and approval must be provided by the IMT, to include resources. | 1.3.1.a: CRF expectations will be included in the update to the Epi Annex. These updates will require training and exercising. | Planning | BOE | Carina Blackmore/Will Jackson | 12/15/14 |
| Capability 1: Public Health and Medical Services | Area of Improvement - Multiple case report forms (CRF) were developed during the investigation. | 1.3.1.b: Activation of the outbreak module / or other standard data system should be standard practice and included in the Epi Annex. |  | Planning | BOE | Carina Blackmore/Will Jackson | 12/15/14 |
## Section 4: Conclusion

### Capability 1: Public Health and Medical Services

<table>
<thead>
<tr>
<th>Area of Improvement – Multiple entities were contacting CHDs requesting investigation information. This resulted in delays and the utilization of multiple data collection systems</th>
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<tr>
<td><strong>1.3.1.c:</strong> Technical briefings to investigation and field staff should occur anytime a major change has occurred in the collection report form and expectations should be included in the Epi Annex.</td>
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<td>Planning / Training</td>
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<tr>
<th><strong>1.3.2.a:</strong> Utilize a single CCOC POC for the CHDs.</th>
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<td><strong>1.3.2.a:</strong> All responses should designate an official IMT/ESF 8 POC to the impacted CHDs</td>
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<td>Planning</td>
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<th><strong>1.3.2.b:</strong> Utilize Merlin as the outbreak data system.</th>
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<td><strong>1.3.2.b:</strong> Distribute guidance to all investigation staff stating Merlin will be utilized as the official reporting tool</td>
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<td>Process</td>
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<th><strong>1.3.2.c:</strong> Develop a standardized system to maintain confidential data accessible statewide.</th>
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<tr>
<td><strong>1.3.2.c:</strong> Develop a database in a secure space which allows sharing of the information.</td>
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<td>Planning / Training</td>
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### Capability 2: Operational Coordination

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<th>Strength – The use of the Incident Management Team structure enhanced the management and coordination of this response.</th>
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<tr>
<td><strong>2.1.1:</strong> Establish a dedicated DOH IMT that can be deployed to provide organizational structure during DOH incidents, allowing technical specialist to focus on controlling the incident. DOH IMT should recruit from the entire agency.</td>
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<td>Planning</td>
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<tr>
<th><strong>2.1.1.a:</strong> Develop the support tools to include operating guidelines and job action sheets to support the implementation of the DOH IMT that is outlined in the DOH EOP. This should include standard reporting schedule.</th>
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<tr>
<td>Planning</td>
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| Capability 2: Operational Coordination | Area of Improvement – IMT staff were not consistently activated and demobilized according to procedures. | 2.1.2: The IMT must follow the logistics process to ensure staff and their supervisors are notified of deployments, including expectations and duration of activation. | Planning  
2.1.2.a: These command actions steps shall be incorporated into the IMT recommendation 2.1.1.a | BPR  
2.1.2.b: For non-IMT activations the operational unit should notify staff and their supervisor of the desire to activate then for duties outside of their daily responsibilities. | Process  
3.1.2: The IMT must follow the logistics process to ensure staff and their supervisors are notified of activation expectations and durations. | BOE  
3.1.2.a: Review the current Epi Strike Team structure. Review should include on-call, and the ability to activate for all Epi responses. |
| Capability 3: Public and Private Services and Resources | Area of Improvement – Deployment recruitments were not timely. Area of Improvement – Deployed resources were not utilized for the intent for which they were deployed. | 3.1.2: The IMT must follow the logistics process to ensure staff and their supervisors are notified of activation expectations and durations. | Process  
3.1.2.a: Review the current Epi Strike Team structure. Review should include on-call, and the ability to activate for all Epi responses. | BOE  
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### Section 4: Conclusion

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<tr>
<th>Capability 4: Public Information and Warning</th>
<th>Area of Improvement - Case reporting was provided daily to media outlets utilizing a standardized media briefing, handled by the Office of Communications. The potential for the release of non-validated and/or non-accurate information was identified by the IMT.</th>
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<td>3.1.2.b: Reduce barriers to responders and CHDs to provide responders. To include pay, reimbursement, utilization of P-Cards and policies.</td>
<td>Process</td>
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<tr>
<td>3.1.3: DOH IMT and requesting entities must clearly define scope and tasks for deploying resources.</td>
<td>Process</td>
</tr>
<tr>
<td>3.1.3.a: Mission requests must include documentation of scope and tasks for deploying resources.</td>
<td>Process</td>
</tr>
<tr>
<td>3.1.3.b: Establish a process to track progress made on assigned tasks. A template should be included in the DOH IMT SOG.</td>
<td>Process</td>
</tr>
<tr>
<td>4.1.1: When daily reporting is required utilize the established protocol for this outbreak, to ensure the validation of information &amp; control case reporting. This process will insure information validation. Establish a weekly reporting schedule for low-risk non-communicable diseases.</td>
<td>Planning / Process</td>
</tr>
</tbody>
</table>
### Capability 4: Public Information and Warning

<table>
<thead>
<tr>
<th>Area of Improvement – A DOH call center was activated utilizing non-clinical personnel. When asked specific medical questions they referred callers to their local CHD or medical providers. The CHD and medical providers were in return directing the caller to the hotline, creating a negative feedback loop.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1.1.b: Ensure IMT SOG includes a process for establishing a reporting and briefing schedule. This corrective action links to recommendation 2.1 of this IP.</td>
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<tr>
<td>Planning / Process</td>
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<thead>
<tr>
<th>4.1.2: Call centers should incorporate the use of medical based information and coordination to reduce negative feedback loops.</th>
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</thead>
<tbody>
<tr>
<td>4.1.2.a: All call centers shall utilize a script to provide accurate information. Include requirement in CERC Annex Attachment.</td>
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<tr>
<td>Planning / Process</td>
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</tbody>
</table>

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<thead>
<tr>
<th>4.1.2.b: Include in the CERC Annex, a standard practice to coordinate with CHDs to ensure that the call center is meeting the needs of the identified clients, effectively removing the feedback loop.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning / Process</td>
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</table>

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<thead>
<tr>
<th>Area of Improvement – The DOH media webpage was not user-friendly specifically; the meningitis information flashed off the home page when you entered and the</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1.2.c: For medical related call centers DOH should establish a connection with the Florida Poison Information Center.</td>
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<tr>
<td>Planning / Process</td>
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<tr>
<td>Capability 5: Situational Assessment</td>
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<tr>
<td>4.1.3: Provide effective access to incident specific information this reduces the impact of rumors and request for information at the County Health Department level.</td>
</tr>
<tr>
<td>4.1.2.d: Establish a workgroup to document a protocol to include content development, staffing requirements, customer service satisfaction element, decision matrix for utilization and protocols for transferring DOH lines to the FL Poison Information Center.</td>
</tr>
<tr>
<td>information didn’t immediately link to the BOE web page.</td>
</tr>
<tr>
<td>5.1.1.b: Review and expansion of legislation, utilizing a cradle to grave concept for all medications administrate to humans. This should include standards for the quarantining/isolation of adulterated medications.</td>
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<td>---</td>
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<tr>
<td>5.1.1.c: In lieu of regulation document strategies utilized by investigators to track client with little to no lot specific information.</td>
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</tbody>
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