Operation Ender’s Game
Measles Virus TTX

After-Action Report/Improvement Plan
EXECUTIVE SUMMARY

The Northeast Florida Healthcare Coalition (NEFLHCC) conducted a measles virus tabletop exercise (TTX) at the St. Johns County Emergency Operations Center (EOC) in St. Augustine, Florida on April 29, 2015. A total of 63 people from six disciplines participated in the TTX.

The objectives of the exercise were:

1) To test Healthcare Preparedness Capabilities as they relate to healthcare system recovery (continuity of operations), information sharing, and medical surge.

2) To determine the best use of the NEFLHCC to address potential gaps in the regional healthcare network and its response during an event. What were the expectations of member agencies and organizations of ways the NEFLHCC could assist them in completing their primary roles and function for quality healthcare delivery?

It was quickly determined by the participants that the best use of the NEFLHCC during a regional health emergency or disaster was in an information sharing capacity. The NEFLHCC is not a response organization so there was little they could do to provide resources as it relates to healthcare system recovery or medical surge. Although through the use of information sharing the NEFLHCC could assist in all three capabilities to provide a regional update on situational awareness to the entire regional healthcare network.

If information sharing is to be an expected primary function of the NEFLHCC several efforts must be made to make the system as robust as possible. Some examples of this are:

- Grow the NEFLHCC membership of non-traditional and ancillary organizations within the regional healthcare network. Diversify the NEFLHCC partners.
- Expand public outreach efforts, which can include membership development activities.
- Increase the use of Everbridge and other communications platforms for distribution of information.
- Development of a formalized NEFLHCC Communications Plan

It is important to note that a group discussion was held on potential services the NEFLHCC can provide as a preparedness organization. It was conveyed that the NEFLHCC is best suited to assist members with:

- Healthcare related training, particularly as it may relate to an impending health emergency, or for timely relevant topics.
- Conducting regional NEFLHCC exercises on a regular basis
- Provide regional situational awareness updates (information sharing)

An additional item to be addressed is the determination of representation the NEFLHCC will have if a regional health emergency or disaster occurs. Most of the members will be serving in other roles as part of the response, and would be unable to serve as a HCC point of contact.
**HEALTHCARE COALITION OVERVIEW**

Healthcare Coalition Overview:

A Healthcare Coalition (HCC) is a collaborative net of healthcare organizations and their respective public and private sector response partners. Together, they serve as a multi-agency coordination group to assist Emergency Management, through ESF8, with preparedness, response and recovery activities related to health and medical disaster operations.

Healthcare Coalitions help improve medical surge capacity and capability, further enhancing a community’s health system preparedness for disasters and public health emergencies.

A Healthcare Coalition also augments local operational readiness to meet the health and medical challenges posed by a catastrophic incident or event. This is achieved by engaging and empowering all parts of the healthcare community, and by strengthening the existing relationships to understand and meet the actual health and medical needs of the whole community.

Healthcare Coalition Objectives:

Healthcare Coalition objectives are aimed at:

• Building a better community-based, disaster healthcare system;

• Strengthening the local healthcare system by fully integrating disaster preparedness into the daily delivery of care;

• Capitalizing on the links between private healthcare providers and public agencies and groups; and,

• Using evidence informed approaches to improving health and medical preparedness and response.

Northeast Florida Healthcare Coalition:

It is important to note the Northeast Florida Healthcare Coalition is not considered a response organization but rather a preparedness organization. It is expected that many of the members of the Northeast Florida Healthcare Coalition will be in a separate agency response role during a disaster.
## Exercise Overview

### Exercise Name
Operation Ender’s Game: Measles Virus Tabletop Exercise

### Exercise Dates
April 29, 2015

### Scope
This was a Tabletop Exercise (TTX), planned for 3.5 hours in St. Johns County, Florida for groups and agencies associated to the Northeast Florida Healthcare Coalition. Exercise play was limited to facilitated discussion of issues arising from a scenario based on a Measles Outbreak in the northeast Florida region. This exercise specifically addressed issues pertaining to healthcare system recovery (continuity of operations), information sharing, and medical surge.

### Healthcare Preparedness Capabilities
- #2 – Healthcare System Recovery (Continuity of Operations)
- #6 – Information Sharing
- #10 – Medical Surge

### Objectives

**Exercise Objective #1:** Discuss how healthcare/public health agencies maintain continuity of the healthcare delivery by coordinating across functional healthcare organizations and encouraging business continuity planning. This coordination assists healthcare organizations to sustain and reestablish essential services during and after an all hazards incident and enables a rapid and more effective recovery. *(Applicable HCCDA Factors #11 and #14.)*

**Exercise Objective #2:** Discuss how healthcare/public health agencies will coordinate with local and state agencies to share and disseminate Measles Virus incident related information. *(Applicable HCCDA Factors #11 and #12)*

**Exercise Objective #3:** Discuss how healthcare/public health agencies will continue to provide care during a Measles Virus incident that exceeds the limits of the normal medical infrastructure. *(Applicable HCCDA Factors #11, #12, and #14)*

### Threat or Hazard
Measles Virus Outbreak

### Scenario
The 2014/2015 Measles Virus outbreaks in the Unities States is a relevant current issue because of the re-emergence of this previously eradicated virus. Teenagers from the local area recently participated in school related activities in Orlando where they came into contact with an infected traveler staying at the same resort. Unvaccinated people from the team become infected and transmitted measles locally, resulting in a regional measles
outbreak.

Sponsor
Florida Department of Health (FDOH)
Northeast Florida Healthcare Coalition (NEFLHCC)

Participating Organizations
Participants from the following disciplines:
Emergency Management; Hospital and Health Care Organizations;
Schools/Educational Organizations; Local/State Public Health Agencies;
Fire/ Emergency Medical Services; Public Information Office
(Refer to Appendix B for a full listing of participating agencies/organizations)

Point of Contact
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Northeast Florida Regional Council
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eanderson@nefrc.org
ANALYSIS OF HEALTHCARE PREPAREDNESS CAPABILITIES

Aligning exercise objectives and core capabilities provides a consistent taxonomy for evaluation that transcends individual exercises to support preparedness reporting and trend analysis.

Table 1 includes the exercise objectives, aligned healthcare preparedness capabilities, and performance ratings for each healthcare preparedness capability as observed during the exercise and determined by the evaluation team.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Healthcare Preparedness Capability</th>
<th>Performed without Challenges (P)</th>
<th>Performed with Some Challenges (S)</th>
<th>Performed with Major Challenges (M)</th>
<th>Unable to be Performed (U)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinating across functional healthcare organizations to sustain services</td>
<td>Healthcare System Recovery (Continuity of Operations)</td>
<td></td>
<td>S</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthcare/Public Health coordination with other local and state agencies on measles virus information</td>
<td>Information Sharing</td>
<td></td>
<td>S</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthcare/Public Health coordination to provide care when an incident exceeds the limits of normal medical infrastructure</td>
<td>Medical Surge</td>
<td></td>
<td>S</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ratings Definitions:

- **Performed without Challenges (P):** The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws.

- **Performed with Some Challenges (S):** The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified.

- **Performed with Major Challenges (M):** The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws.

- **Unable to Perform (U):** The targets and critical tasks associated with the core capability were not performed in a manner that achieved the objective(s).

Table 1. Summary of Healthcare Preparedness Capability Performance

The following sections provide an overview of the performance related to each exercise objective and associated healthcare preparedness capability, highlighting strengths and areas for improvement.
Exercise Objective #1:

Discuss how healthcare/public health agencies maintain continuity of the healthcare delivery by coordinating across functional healthcare organizations and encouraging business continuity planning. This coordination assists healthcare organizations to sustain and reestablish essential services during and after an all hazards incident and enables a rapid and more effective recovery. (Applicable HCCDA Factors # 11 and #14.)

Capability: Healthcare System Recovery

Strength 1: The coordinated information sharing between the County Health Departments and Emergency Management, primarily through the ESF-8 position at the County level. This sharing of timely and accurate information allows for various groups in the healthcare sector to address localized deficiencies before they become bigger problems. Resources and people can be better used to address areas in need of additional attention, therefore making the healthcare sector more resilient in the face of a health related emergency.

Strength 2: Coordination between associated hospital groups. It was recognized that several of the hospitals and related facilities operate under the umbrella of a larger organization. An example of this is Baptist and St. Vincent's, who have multiple facilities in the northeast Florida region. These facilities coordinate internally and can allocate and prioritize resources where they are needed most throughout the region. The hospitals were best suited to communicate and deal with regional issues due to their hospital framework and locations throughout the northeast Florida region. It is an integrated healthcare network.

Area for Improvement 1: While information sharing and coordination activities were successful in individual counties, there was little discussion on a potential response approach from a regional perspective.

Analysis: This measles virus scenario would require many County Emergency Operations Centers (EOCs) to be activated. Response to the incident would be handled at the county level. As such, the counties worked well to deal with local issues. There was discussion on whether a regional response was needed or would be appropriate.

Additionally, most of the NEFLHCC leadership, as well as associated members, would be actively involved in the ESF-8 position as part of the response for their given counties. The question remains as to who would represent the NEFLHCC during these times?

Area for Improvement 2: Lack of information from the NEFLHCC highlighting resources and capabilities that could be provided to various groups during the response phase.

Analysis: The NEFLHCC is in the initial phases of development. The HCC has no tangible resources, and they are going through the process to determine internal capabilities that could be requested by others for use.
Exercise Objective #2:
Discuss how healthcare/public health agencies will coordinate with local and state agencies to share and disseminate Measles Virus incident related information (Applicable HCCDA Factors #11 and #12)

Capability: Information Sharing

Strength 1: The NEFLHCC is perfectly situated to provide information at the regional level through the use of their Everbridge notification system, as well as through other electronic platforms.

Area for Improvement 1: Need for a NEFLHCC Communications Plan.

Analysis: It was recognized throughout the exercise that the most important role for the NEFLHCC in this type of emergency would be as an information sharing hub. Not only for primary healthcare members such as hospitals but also for any ancillary groups within the regional healthcare system. While most primary healthcare organizations collaborate and communicate on a regular basis, there are many non-traditional and ancillary healthcare organizations that may bring resources and knowledge to the table.

It should be a primary focus of the NEFLHCC to target and attract these non-traditional and ancillary members to the NEFLHCC, and to manage and distribute information to these groups in addition to the primary healthcare organizations. This would widen the network of collaboration and communication within the entire regional healthcare network.

Area for Improvement 2: Establish a formalized process for communication with the Florida Department of Health’s Regional Emergency Response Advisor (RERA).

Analysis: Collaboration and information sharing between the NEFLHCC and the RERA would be beneficial to all members of the NEFLHCC. The RERA has the ability to provide regional information that can be used for distribution to the NEFLHCC partners and members. This relationship is necessary to maximize situational awareness throughout the regional healthcare network.

Exercise Objective #3:
Discuss how healthcare/public health agencies will continue to provide care during a Measles Virus incident that exceeds the limits of the normal medical infrastructure. (Applicable HCCDA Factors #11, #12, and #14)

Capability: Medical Surge

Strength 1: Efforts have been made to enhance Medical Surge situational awareness for its members through the use of the NEFLHCC Everbridge notification system, which is available to all members.

Area for Improvement 1: Continue to add more people to the Everbridge notification system.

Analysis: The Everbridge notification system is an easy way to provide NEFLHCC members and participating organizations with real-time information as it relates to medical surge. Adding
more people to the Everbridge system allows for a wider distribution network, therefore informing more people about medical surge issues as they may arise.

**Area for Improvement 2:** Provide a regional situation update that can be made available to member counties and organizations.

**Analysis:** Healthcare coordination and preparedness activities are conducted with all partners at the individual county level to assist with incident management decisions and resource needs during a response. This function has yet to be performed at the NEFLHCC level for the combined six counties in the region.

Individual counties would like the NEFLHCC to provide a detailed situation report for the entire region. Medical Surge is just one of the many areas that could be addressed within this regional situation update.
# APPENDIX A: IMPROVEMENT PLAN

This IP has been developed specifically for the Northeast Florida Healthcare Coalition as a result of Operation Ender's Game (Measles Virus TTX) conducted on April 29, 2015.

<table>
<thead>
<tr>
<th>Healthcare Preparedness Capability</th>
<th>Issue/Area for Improvement</th>
<th>Corrective Action</th>
<th>Capability Element</th>
<th>Primary Responsible Organization</th>
<th>POC</th>
<th>Start Date</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Increase HCC outreach to attract non-traditional and ancillary organizations within the regional healthcare network</td>
<td>Increase HCC outreach to attract non-traditional and ancillary organizations within the regional healthcare network</td>
<td>Organization</td>
<td>NEFLHCC</td>
<td>Leigh Wilsey</td>
<td>4/30/2015</td>
<td>Continuous</td>
</tr>
<tr>
<td></td>
<td>Expand the use of Everbridge and other communications means to distribute information from the HCC</td>
<td>Expand the use of Everbridge and other communications means to distribute information from the HCC</td>
<td>Planning</td>
<td>NEFLHCC</td>
<td>Leigh Wilsey</td>
<td>4/30/2015</td>
<td>6/30/2016</td>
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<td></td>
<td>Work with Health Department RERA to develop a list of regional assets and resources within the NEFLHCC boundaries</td>
<td>Work with Health Department RERA to develop a list of regional assets and resources within the NEFLHCC boundaries</td>
<td>Equipment</td>
<td>NEFLHCC</td>
<td>Leigh Wilsey</td>
<td>4/30/2015</td>
<td>6/30/2016</td>
</tr>
<tr>
<td>Healthcare Preparedness Capability</td>
<td>Issue/Area for Improvement</td>
<td>Corrective Action</td>
<td>Capability Element</td>
<td>Primary Responsible Organization</td>
<td>Organization POC</td>
<td>Start Date</td>
<td>Completion Date</td>
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<tr>
<td>HP Capability: Information Sharing (continued)</td>
<td>3. Need for Training on assets, as well as on communications systems that are available within the NEFLHCC region</td>
<td>Provide training on assets that are available for use within the NEFLHCC region</td>
<td>Training</td>
<td>NEFLHCC</td>
<td>Leigh Wilsey</td>
<td>4/30/2015</td>
<td>Continuous</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Provide training on various types of communications systems that are available within the NEFLHCC region</td>
<td>Training</td>
<td>NEFLHCC</td>
<td>Leigh Wilsey</td>
<td>4/30/2015</td>
<td>Continuous</td>
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## APPENDIX B: EXERCISE PARTICIPANTS

<table>
<thead>
<tr>
<th>Participating Organizations</th>
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<tbody>
<tr>
<td><strong>State</strong></td>
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<tr>
<td>Florida Department of Health</td>
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<tr>
<td>State Medical Response Team - Region 3</td>
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<tr>
<td><strong>Counties</strong></td>
</tr>
<tr>
<td>Department of Health - Baker, Clay, Duval, Flagler, Nassau, &amp; St. Johns</td>
</tr>
<tr>
<td>Emergency Management – Baker, Clay, Flagler, St. Johns</td>
</tr>
<tr>
<td>Fire/Rescue - Clay, St. Johns</td>
</tr>
<tr>
<td>Public Information - St. Johns</td>
</tr>
<tr>
<td>Public Schools – Baker, Nassau, St. Johns</td>
</tr>
<tr>
<td><strong>Hospitals</strong></td>
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<tr>
<td>Baptist Medical Center - Beaches, Jacksonville, Nassau, South</td>
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<tr>
<td>Ed Fraser Memorial Hospital</td>
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<tr>
<td>Flagler Hospital</td>
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<tr>
<td>Florida Hospital Flagler</td>
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<tr>
<td>Kindred Hospital</td>
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<tr>
<td>Mayo Clinic</td>
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<tr>
<td>Memorial Hospital</td>
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<tr>
<td>Orange Park Medical Center</td>
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<tr>
<td>St. Vincent’s - Clay County, Riverside, Southside</td>
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<tr>
<td>UF Health – Jacksonville, North</td>
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<tr>
<td><strong>Other</strong></td>
</tr>
<tr>
<td>Brooks Rehabilitation</td>
</tr>
<tr>
<td>Century Ambulance</td>
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<tr>
<td>Children’s Medical Services - Jacksonville</td>
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<tr>
<td>Florida Youth Challenge Academy</td>
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<tr>
<td>Liberty Ambulance Service</td>
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<tr>
<td>North Central Florida Healthcare Coalition</td>
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<tr>
<td>Northeast Florida Healthcare Coalition</td>
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<tr>
<td>Northeast Florida Regional Council</td>
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<tr>
<td>Red Cross</td>
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APPENDIX C: EXERCISE EVALUATIONS

The following information provides a general overview of the evaluations received from the Exercise participants.

The following statements were rated on a scale of 1-5, with 1 = strong disagreement with the statement and 5 = strong agreement. The average scores were:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Score</th>
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<tbody>
<tr>
<td>The exercise was well structured and organized</td>
<td>4.8</td>
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<tr>
<td>The exercise scenario(s) was plausible and realistic</td>
<td>4.7</td>
</tr>
<tr>
<td>The exercise documentation provided to assist in preparing for and participating in the exercise was useful</td>
<td>4.6</td>
</tr>
<tr>
<td>This exercise allowed me to practice and improve priority Capabilities</td>
<td>4.4</td>
</tr>
<tr>
<td>This exercise helped me to identify strengths and weaknesses in the execution of plans, protocols, and procedures</td>
<td>4.5</td>
</tr>
<tr>
<td>After this exercise, I believe my agency is better prepared to deal successfully with the scenario(s) that was exercised</td>
<td>4.4</td>
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The following is a sample of the most common comments that were received from participants regarding the Exercise.

Exercise Strengths:

- Collaboration & Communication with other counties and organizations
- Made me aware of other organizations needs to resolve specific issues
- Opportunity to advocate for children’s health needs
- Realistic measles scenario
- Real Life, current, and practical

Areas for Improvement:

- A clearly defined role for the HCC
- Use of social media regarding the HCC and their activities (Example: This Exercise)
- Invite more organizations to participate in future exercises
- Include Federal organizations if possible
- Public Information Officer involvement should be stronger
- Increase the discussion time to address questions and issues
- Disciplines were groups by their county. Consider adding some discussion time for individual disciplines to gather and discuss issues as a region
Recommendations of how the HCC can assist your organization:

- Sharing information from other counties in the region
- Provide a robust messaging system
- Continue to provide regional exercises
- Provide a list of who we can call in our county
- I need to know more about the HCC
- Provide situational awareness at the regional level