Emergency Preparedness at the Community Level

Field Experience Report
Lawrence-Douglas County Health Department
Vickie K Smith DVM
Lawrence-Douglas County Health Department

Established in 1942    Governed by a Board of Health
Essential Public Health Services

www.health.gov/phfunctions/public.htm
Purpose of Public Health

• Prevent epidemics and spread of disease
• Protect against environmental hazards
• Prevent injuries
• Promote and encourage healthy behaviors
• **Respond to disasters and assist communities in recovery**
• Assure the quality and accessibility of services
LDCHD Services

Clinic Services
• Immunizations, TB, STD and HIV/AIDS testing and counseling, family planning, WIC Nutrition

Regulatory Services
• Child care licensing, environmental health, sanitary code enforcement, pool regulations, inspection reports

Community Services
• Support for seniors, communicable disease investigations, public health preparedness, community health

Family Services
• Pregnancy and family support, breastfeeding support, well child exams, and family sexuality education
Internship Experience

• Mentor: Charlie Bryan MPA
• He serves as the LDCHD Community Planner
• Public health preparedness issues occupy 20% of his time
• I have previous experience with ICS training and preparedness issues so was asked to assist with preparedness projects during my internship
• Topics included personal preparedness, COOP review, training reviews, responder readiness survey and measles table top exercise
Defining Public Health Preparedness

The Lawrence-Douglas County Health Department works with local partners to ensure that local public health capacities are in place to address large-scale disease outbreaks, illness or bioterrorism events in Lawrence and Douglas County. Services provided:

- Preparedness and response planning and risk assessments
- Communication enhancement between public health and response partners
- Increased capacity to conduct epidemiological and surveillance activities
- Exercising our public health emergency response plan.
Priority areas for preparedness improvement 2013

- Increase staff readiness for public health emergency roles
- Increase volunteer engagement
- Increase involvement of community partners in public health preparedness activities.

Basis for my participation with:

- Creation of the Responder Readiness Survey
- Review of Centers for Public Health Preparedness (CPHP) training modules.
- Measles Table Top Exercise
CDC’s cooperative PHEP agreement funds 62 state, locality and insular area public health departments to build and strengthen their abilities to respond effectively to public health emergencies.
Provides leadership to protect the health of Kansas though efforts to mitigate, prepare for, respond to, and recover from disasters, infectious disease, terrorism, and mass casualty emergencies. To accomplish this mission Preparedness is responsible for the following:

- Health and medical planning and response in Kansas
- Serves as the coordinating unit for the Emergency Support Function #8
- Maintains the Health Alert Network (KS-HAN)
- Serves as the grantee for the Centers for Disease Control (CDC) and Health and Human Services (HHS) preparedness grants
HHS ESF #8

• Provides the mechanism for coordinated Federal assistance to State, Tribal, and local resources in response to:
  
  Public health and medical care needs
  Veterinary and/or animal health issues in coordination with the USDA
  Potential or actual incidents of national significance
  A developing potential health and medical situation
### Revenue History

<table>
<thead>
<tr>
<th></th>
<th>2010 Actual</th>
<th>2011 Actual</th>
<th>2012 Actual</th>
<th>2013 Budget</th>
<th>2014 Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Grants</td>
<td>96.0%</td>
<td>99.9%</td>
<td>97.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Local tax</td>
<td>2.6%</td>
<td>0.1%</td>
<td>3.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other</td>
<td>1.4%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

### Expenditure History

<table>
<thead>
<tr>
<th></th>
<th>2010 Actual</th>
<th>2011 Actual</th>
<th>2012 Actual</th>
<th>2013 Budget</th>
<th>2014 Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$318,202</td>
<td>$108,564</td>
<td>$78,101</td>
<td>$98,018</td>
<td>$85,869</td>
</tr>
</tbody>
</table>
All Hazards Preparedness
Continuity of Operations Plan (COOP)

COOP plans address immediate response, short-term planning and long-term planning.

- Essential functions
- Key personnel
- Delegations of authority and orders of succession
- Vital records, databases, systems and equipment
- Alternate facilities
- Communications
- Reconstitution and devolution
- Test, training, and exercises (TTE)
COOP Review

- Continuity of operations plan was drafted in 2009 and reviewed by KDHE in 2011 as is mandated by CDC
- Plan needed updating to include annexes for orders of succession and delegation of authority
- Utilized KDHE COOP Guidance document as template for revisions
- Submitted suggested changes to supervisor and assisted with final changes
<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013 target</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of essential staff responding within 60 minutes of a notification drill</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>100%</td>
</tr>
<tr>
<td>% of staff and MRC volunteers who have completed all ICS training</td>
<td>NA</td>
<td>46%</td>
<td>68%</td>
<td>&gt;90%</td>
</tr>
</tbody>
</table>
Literature Search

- 28% of hospital employees may not be willing to report to duty in the face of a pandemic influenza threat (Balicer et al 2010)
- 1 in 6 workers from public health departments would not be willing to respond to a pandemic flu emergency (Barnett, et al 2009)
- Clinical staff workers more likely to report than clerical or technical staff
- Less than 1/3rd of workers felt that they would have an important role in the response to a pandemic
- Three out of four technical/support workers do not believe they will even be asked to report to work.
Readiness

GOALS

- Foundational Public Health Competencies
- Generic Health Security or Emergency Competencies
- Position Specific or Professional Competencies
Willingness

National studies have concluded that willingness to respond is impacted by:

• Preparedness training – Do I know what to expect?
• Perception of threat – Is there truly an emergency situation?
• Perception of one's knowledge and abilities – Do I feel confident about the job I will be performing?
• Family preparation - Can my family thrive without me?
• Personal safety – Will I threaten my health or that of my family?
Abilities

- Barriers or personal needs affect the ability to respond
- Need for childcare, pet care, eldercare ranked as most common barriers
Responder Readiness Survey

Survey was developed with the goals of:

- Assessing current levels of health department personnel readiness to respond
- Using results to evaluate the needs of the public health workforce as regards emergency preparedness training and response
- Initial survey and power point was presented to the PHE team members for their input
- Survey and power point were revised before it was presented to the entire LDCHD staff
Presentation to PHE Team

Public Health Responder Readiness
Ready, Willing & Able???

- Determine barriers specific to local health department employees and determine possible strategies for intervention
- Enhance emergency core competencies with training i.e. NIMS and other non-ICS emergency preparedness courses
- Promote family preparedness to reduce challenges to worker willingness to respond

Strategies for Intervention
Staff Presentation

STRATEGIES

- Determine barriers specific to LDCHD workplace
- Assess training needs or gaps
- Promote and facilitate family preparedness

SURVEY

- All employees will be receiving a Public Health Responder Readiness survey link
- Please complete the survey
- Results will be used to evaluate the needs of the public health workforce as regards emergency preparedness training and response.

[Images of emergency management cycle, emergency supplies, and Survey Monkey logo]
Table Top Exercise

February 28, 2014
<table>
<thead>
<tr>
<th></th>
<th>Preparedness Capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Community Preparedness</td>
</tr>
<tr>
<td>2.</td>
<td>Community Recovery</td>
</tr>
<tr>
<td>3.</td>
<td>Emergency Operations Coordination</td>
</tr>
<tr>
<td>4.</td>
<td>Emergency Public Information and Warning</td>
</tr>
<tr>
<td>5.</td>
<td>Fatality Management</td>
</tr>
<tr>
<td>6.</td>
<td>Information Sharing</td>
</tr>
<tr>
<td>7.</td>
<td>Mass Care</td>
</tr>
<tr>
<td>8.</td>
<td>Medical Countermeasure Dispensing</td>
</tr>
<tr>
<td>9.</td>
<td>Medical Materiel Management and Distribution</td>
</tr>
<tr>
<td>10.</td>
<td>Medical Surge</td>
</tr>
<tr>
<td>11.</td>
<td>Non-Pharmaceutical Interventions</td>
</tr>
<tr>
<td>12.</td>
<td>Public Health Laboratory Testing</td>
</tr>
<tr>
<td>13.</td>
<td>Public Health Surveillance and Epidemiological Investigation</td>
</tr>
<tr>
<td>14.</td>
<td>Responder Safety and Health</td>
</tr>
<tr>
<td>15.</td>
<td>Volunteer Management</td>
</tr>
</tbody>
</table>
Exercise Objectives

- Identify the process to manage and sustain public health response to a disease outbreak using the Incident Command System (ICS). (Capability 3)
- Exchange information with other incident responders and other jurisdictional stakeholders to determine a common operating picture for a public health emergency affecting the community. (Capability 6)
- Identify processes to expand routine epidemiological surveillance and detection systems in response to incidents of public health significance in the community. (Capability 13)
Exercise Situation Manual

KDHE exercise planner, LDCHD Community Planner, LDCHD Director of Clinical Services met to plan the table top exercise and revise the KDHE SitMan to include all of the Douglas County stakeholders.

LDCHD, Douglas County Emergency Management, Baldwin, Lawrence, & Eudora public schools, the University of Kansas, MRC members, physicians offices, Lawrence Memorial Hospital, and KDHE were included as stakeholders.

The scenario began with a 44 year old male that presented to the emergency department with a rash, fever and cough. He had recently returned from a mission trip to Africa.
As the scenario unfolded it was discovered that he and his family had attended a church supper the previous evening. His wife and sons present to the ED with similar symptoms. Samples are submitted to the lab and the hospital notifies the Health Department. Meanwhile 4 other patients present for treatment including 1 that is a friend of the original patient’s son. Both boys had attended a football camp on the KU campus and had stayed in a university dormitory. By this time KDHE has notified the CDC and a health alert notification (HAN) has been issued to all health care providers.
Evaluation

• There was a KDHE evaluator present to assess each of the 3 preparedness capabilities being tested at the exercise.
• During the “hotwash” session each participant was asked to contribute their thoughts on strengths and weaknesses of the exercise.
• Each participant also was asked to complete a written feedback form
• I prepared a summary of participant feedback responses for use in completing the AAR.
Strengths

• Partnering between the agencies and organizations represented.
• Communication and information sharing modalities are in place including the county PIO.
• MRC members represented
• Exercise was good opportunity to meet face to face and establish relationships prior to an emergency.
• Broad areas of expertise represented.
• Opportunity to identify agency processes that may require improvement
Weaknesses

• Hospital and schools have no means in place to identify vaccination status of staff.
• Further education of public is needed regarding the necessity of vaccination.
• Identified need for workforce development and cross-training as adequate staffing could be an issue.
• Group was unable to identify a trigger point to initiate the Incident Command System (ICS).
• Decontamination procedures for exposed locations were not addressed.
After Action Report

- I compiled participant and evaluator feedback to complete an initial AAR.
- The community planner, clinical administrator and I met to discuss revisions to the AAR.
- The AAR will be presented to the PHE team at a later date to determine the final improvement plan and target completion dates.

AFTER ACTION REPORT AND IMPROVEMENT PLAN
EXERCISE DATE: FEBRUARY 28, 2014
AAR PUBLICATION DATE (TBD)
Acknowledgements

• Field Experience Supervisor Charlie Bryan
• LDCHD staff
• MPH Supervisory committee
  Dr. T.G. Nagaraja
  Dr. Justin Kastner
  Dr. Dave Renter
• MPH Program Staff
  Dr. Michael Cates
  Barta Stevenson