# Emergency Preparedness at the Community Level

Field Experience Report

Lawrence-Douglas County Health Department

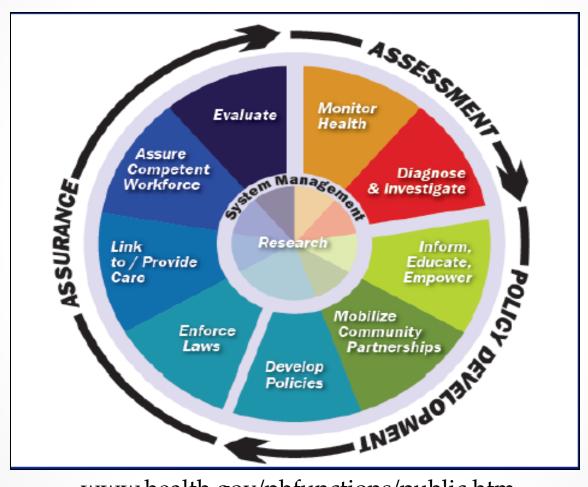
Vickie K Smith DVM

# 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, <u>public health</u> <u>preparedness</u>, 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

#### Public Health Preparedness

The capability of the public health system, communities, and individuals to prevent, protect against, quickly respond to, and recover from health emergencies, particularly those in which scale, timing, or unpredictability threatens to overwhelm routine capabilities.<sup>21</sup>

Institute of Medicine. Research Priorities in Emergency Preparedness and Response for Public Health Systems. A Letter Report. Washington, DC: The National Academies Press, 2008.

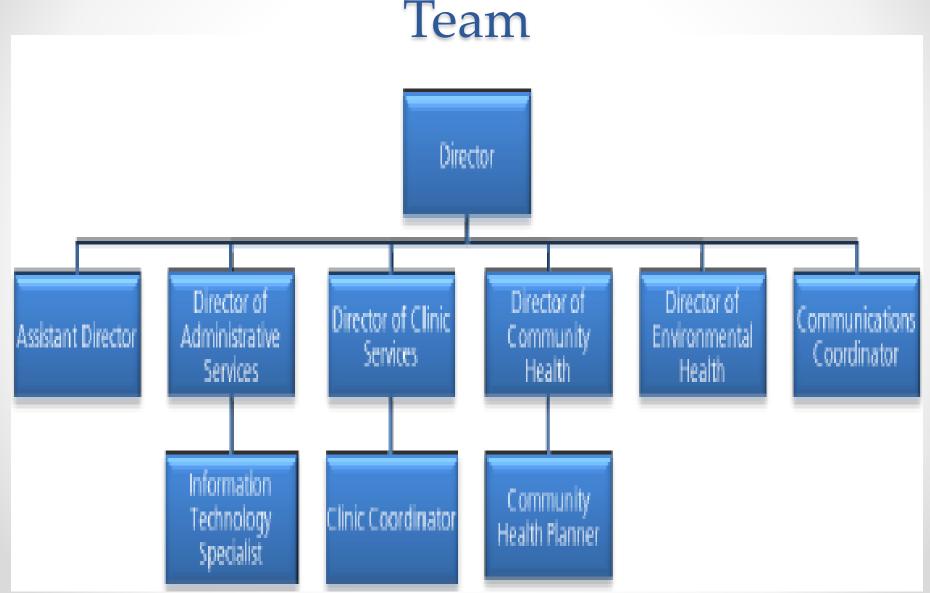


# **Public Health Preparedness**

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.

# LDCHD Public Health Emergency Team



# LDCHD Preparedness Improvement Priorities

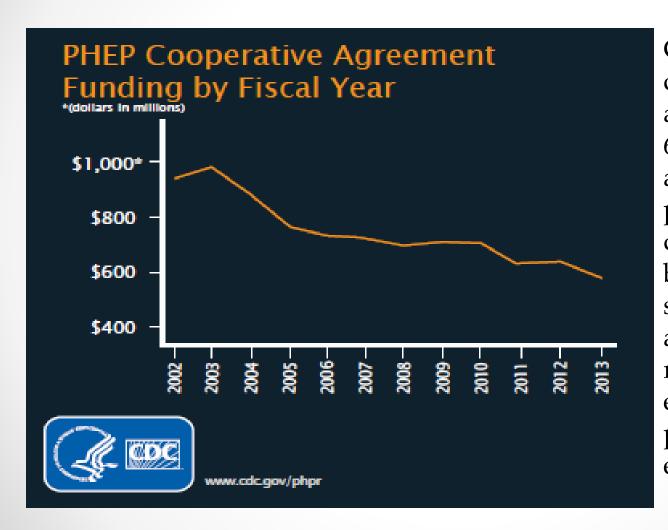
#### Priority areas for preparedness improvement 2013

- 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

# PHEP Funding



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.



### Preparedness Section

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

# LDCHD Preparedness Funding

#### Revenue History

	2010 Actual	2011 Actual	2012 Actual	2013 Budget	2014 Budget
Operating	0.0%	0.0%	0.0%	0.0%	0.0%
Grants	96.0%	99.9%	97.0%	100.0%	100.0%
Local tax	2.6%	0.1%	3.0%	0.0%	0.0%
Other	1.4%	0.0%	0.0%	0.0%	0.0%

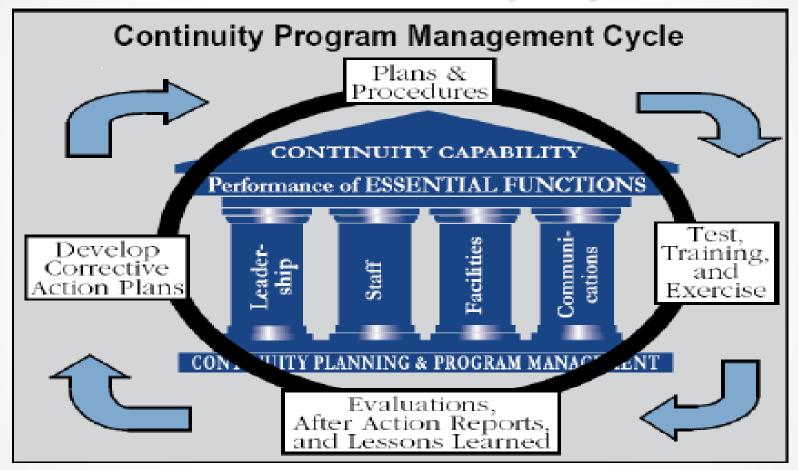
#### Expenditure History

2010	2011	2012	2013	2014
Actual	Actual	Actual	Budget	Budget
\$318,202	\$108,564	\$78,101	\$98,018	\$85,869

# All Hazards Preparedness



# FEMA Continuity Cycle



CDC Continuity Guidance Circular #1 (2009)

# 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

#### LDCHD Performance Measures

% of essential staff responding within 60 minutes of a notification drill

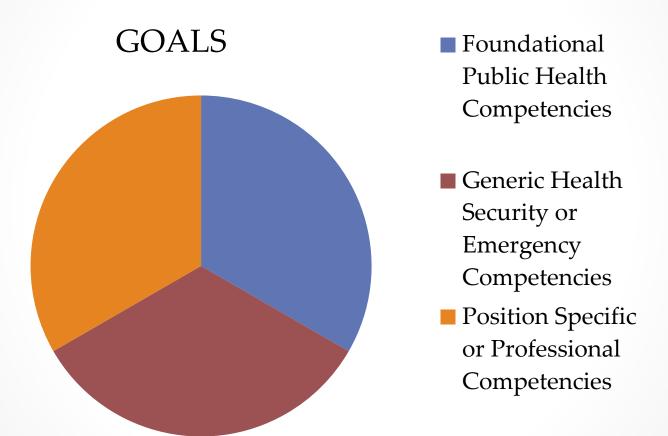
% of staff and MRC volunteers who have completed all ICS training

2010	2011	2012	2013 target
NA	NA	NA	100%
NA	46%	68%	>90%

#### 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 1/3<sup>rd</sup> 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



# 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 ones 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.





# Table Top Exercise

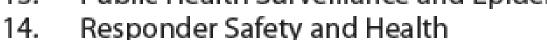
#### February 28, 2014



Homeland Security Exercise and Evaluation Program (HSEEP) Measles Tabletop Exercise (TTX) 2/28/2014 8:30 AM - 12:00 PM Lawrence-Douglas County Health Department First Floor Meeting Room 200 Maine Street, Lawrence, Kansas 66044 Exercise Agenda 0830: Registration & observers 0845: Exercise Overview 3 evaluators 0900: Module 1 · Presentation of Scenario 1 facilitator · Moderated Discussion 0930: Module 2 · Presentation of Scenario 1918 players Moderated Discussion 1015: Break 1030: Module 3 · Presentation of Scenario Moderated Discussion 1100: Wrap Up · Participant Feedback Forms Hot Wash 1200: End Exercise

# Preparedness Capabilities

- Community Preparedness
- Community Recovery
- Emergency Operations Coordination
- **Emergency Public Information and Warning**
- Fatality Management Information Sharing 5.
- 6.
- 7. Mass Care
- Medical Countermeasure Dispensing
- Medical Materiel Management and Distribution 9.
- Medical Surge 10.
- Non-Pharmaceutical Interventions 11.
- Public Health Laboratory Testing 12.
- Public Health Surveillance and Epidemiological Investigation 13.
- Responder Safety and Health
- Volunteer Management 15.



# 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.

Department of Health and Environment

#### Exercise Scenario

 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 heath 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

