

Preparing Kentucky's Preparedness Staff for the Challenges of Tomorrow Through Competency Based Education

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College of Public Health, University of Kentucky **EXECUTIVE SUMMARY:**

“At what point shall we expect the approach of danger? By what means shall we fortify against it?-- Shall we expect some transatlantic military giant, to step the Ocean, and crush us at a blow? Never!--All the armies of Europe, Asia and Africa

combined, with all the treasure of the earth (our own excepted) in their military chest; with a Bonaparte for a commander, could not by force, take a drink from the Ohio, or make a track on the Blue Ridge, in a trial of a thousand years.

At what point then is the approach of danger to be expected? I answer, if it ever reach us, it must spring up amongst us. It cannot come from abroad. If destruction be our lot, we must ourselves be its author and finisher. As a nation of freemen, we must live through all time, or die by suicide.”

~Abraham Lincoln, Lyceum Address

How then can Public Health be prepared? We can be prepared by ensuring that our workforce is prepared. It is imperative that we develop our workforce and educate them so they can respond to a disaster, but at the same time do their everyday job better. Through the development of competencies, this can be achieved. Competencies give the ability to measure performance and set forth a path for achievement.

The majority of our Change Master Group is preparedness staff from across Kentucky, who have been employed in their current position for at least 2 years. Upon hire, many of us did not receive a lot of guidance from the State Department for Public Health or our local health department as to our job duties. Some were given copies of the grant deliverables and told, “go forth and do your job.” What was our job? How were we supposed to do our job? We really did not know.

Our Change Master Group wanted to positively impact public health preparedness in Kentucky. We wanted to ensure that others who were hired in positions similar to ours had a tool to guide their learning process and guarantee they are properly trained to perform the required job functions. We felt that through the development of competencies, we could achieve this.

The competencies developed are based upon the Core Competencies for Public Health Professionals. The Epidemiology Competencies are those developed by the Council for State and Territorial Epidemiologists for Tier 2: Applied Epidemiologists. The competency sets for the other positions were developed based upon the Core Competencies but made specific to the Preparedness Coordinator and Preparedness Training Coordinator positions. Competency development was aided by “Competency to Curriculum Toolkit” developed by the Columbia University School of Nursing Center for Health Policy.

Our project team talked with numerous people across the state as well as Dr. Kristine Gebbie, Director of the Columbia School of Nursing Center for Health Policy. All those we talked with thought our initiative was very important to advance everyday public health practice, as well as public health preparedness. There are several initiatives within our state that are working to address workforce development based upon competency. The Kentucky Department for Public Health Division of Epidemiology has convened a stakeholder group from agencies across the state to build epidemiologic capacity for Kentucky. The Local Health Department Personnel Section has convened groups from across the Kentucky to revise the current job classification system to be based upon competencies.

Our project deliverables are:

- 1 Job descriptions local health departments can use to recruit and develop staff
- 2 A mentoring program that would assist new public health preparedness staff in becoming more familiar with their roles by offering guidance and direction
- 3 A listing of suggested trainings to narrow down the search for quality trainings that directly tie to competencies identified
- 4 A skills check off for mentors to track the progress of new public health preparedness staff
- 5 Outline a recommended credentialing system for Kentucky Department for Public Health
- 6 A checklist for the Kentucky Department for Public Health for project implementation

It is our expectation that this project will be used to further the professional development of the preparedness staff within Kentucky; serve as a framework for those who are newly hired to preparedness positions; and serve as a guide for local health departments for staff recruitment and development.

INTRODUCTION/BACKGROUND:

“To be prepared is to be ready for action.” Louis Rowitz

The 1988 Institute of Medicine (IOM) report, *The Future of Public Health*, declared public health to be in disarray, prompting a national discussion about the status of public health, including the workforce. The report called for:

1. Development of a workforce ready to address emerging public health problems, both in terms of practice and leadership;
2. Professional development for those already operating the system;
3. Expansion of the pool of personnel prepared to perform the essential public health services.¹

The past decade has brought about a period of significant challenges and transitions in public health. At a time when many budgets for traditional services were dwindling, enormous budgets for public health preparedness were appearing. In the aftermath of 9/11, and with the increased focus on Bioterrorism and Pandemics, health departments at the federal, state, and local level are increasing disease surveillance activities and disaster planning. Public health preparedness and response have now become the new priority for public health. The Federal Government recognized the new priority and generously funded the initiative. With the rapid dissemination of Preparedness funding from the federal government, local and state health departments were overwhelmed with the task of hiring Epidemiologists, Public Health Preparedness Coordinators, and Preparedness Training Coordinators. See figures 1 and 2. Health departments, in many instances, were confronted with the need to hire entirely new staff, or move staff from under funded or cut programs into the newly created and generously funded preparedness program.

A vast majority of the public health workforce have no formal public health training. Most are trained in a primary health profession, such as nursing, environmental health, or health education, and continue to receive trainings and updates from their professional organizations, local health departments, state health departments, or schools. The Council of State and Territorial Epidemiologists (CSTE) 2004 Epidemiology Capacity Assessment stated that 48% of Epidemiologists are not academically trained in Epidemiology.³ When state and local health departments began recruiting for Epidemiologists, Public Health Preparedness Coordinators, and Preparedness Training Coordinators, a glaring weakness in public health training was identified. These positions were to be recruited from a wide-ranging pool of applicants from many different backgrounds, with the exception of the Epidemiologist, who was required to have a Masters in Public Health degree. Once hired, all learned very quickly that they did not have the guidance necessary to accomplish their mission, nor, in many instances, did they have the necessary knowledge base.

Recognizing that there exists a great weakness in many of the training programs for our public health workforce, competency sets have been established to address the major areas of public health practice. Some of those are:

- 1 Core Competencies for Public Health Professionals
- 2 Core Public Health Worker Competencies for Emergency Preparedness and Response
- 3 Environmental Health Competencies: Core Competencies for the Effective Practice of Environmental

Health

A competency is defined as the knowledge, skills, and abilities demonstrated by organization or system members that are critical to the effective and efficient organization or system.²

Competencies are:

- 1 Actions that can be seen in practice
- 2 Describable in behavioral terms
- 3 Observable in the performance of system components
- 4 Part of a continuous system/organization/individual performance improvement process

One area that has not been specifically addressed is competencies for the “Bioterrorism/Preparedness Specialists;” the Epidemiologists, Public Health Preparedness Coordinators, and Preparedness Training Coordinators. In the 2004 CSTE Epidemiologic Capacity Assessment: Findings and Recommendations Report, CSTE recommends “a national standard for competency-based, on-the-job training and/or a certificate program should be established to ensure appropriate training for epidemiologists.”³ Recommendations from this report include:

- 1 Increasing the pool of academically prepared graduates
- 2 Expanding internships and fellowship programs
- 3 Establishing national recruiting for state and local public health epidemiology positions
- 4 Developing standards through levels of required competencies and tying compensation comparability among states to these standards
- 5 Establishing incentives for choosing and maintaining a career in public health epidemiology
- 6 Developing a certification programs outside universities and other educational programs tied to competencies in epidemiology
- 7 Organizational commitment to training opportunities and workforce development
- 8 Developing training requirements for practicing epidemiologists who need additional skills in their area of work

Through this project, we hope to address the lack of guidance and competency development for the Public Health Preparedness Staff within the State of Kentucky, with the hopes that we may influence other states with our efforts. The purposes for developing these competency sets are:

- 1 To more clearly define the field and provide guidance to practitioners regarding expected competencies;
- 2 Inform supervisor and personnel systems in public health agencies of expected competencies for staff hiring and aid in establishing job titles and in the development of “career ladders” for advancement in the field;
- 3 Inform educators and academic institutions of the expected competencies.²

The use of competency sets in general lends itself to the further development of our primary public health infrastructure, our workforce. Competencies work to ensure that our workforce is adequately prepared to perform the required job functions. Thereby addressing the workforce issues that public health faces today and tomorrow.

With the increasing interest in public health system assessments, such as the National Public Health Performance Standards, and many state accreditation programs, competency development and the use of the public health competencies are becoming increasingly important. Discussions are occurring at the policy level as to the pros and cons of accreditation and credentialing. Kentucky has pilot tested the National Public Health Performance Standards and the Michigan Model for Public Health Accreditation and many districts have engaged in the MAPP (Mobilizing for Action through Planning and Partnerships) process.

Our group feels this issue is on the brink of becoming much more than a discussion. Working to build a strong public health infrastructure provides for the capacity to prepare for and respond to both acute and chronic threats to the nation's health. In the wake of Hurricanes Katrina and Rita, it is necessary that we ensure that our workforce is adequately trained to respond. With a competency based program, based upon the Core Public Health Competencies, Kentucky will ensure that its Preparedness workforce and public health workforce is competent and ready to respond, whether it is a local, state, or national disaster.

Problem Statement:

Preparedness Staff, statewide, (Preparedness Coordinators, Epidemiologists, and Preparedness Training Coordinators) do not have a defined competency set to guide their learning process or ensure that they are properly trained to perform their job functions.

Behavior Over Time Graph:

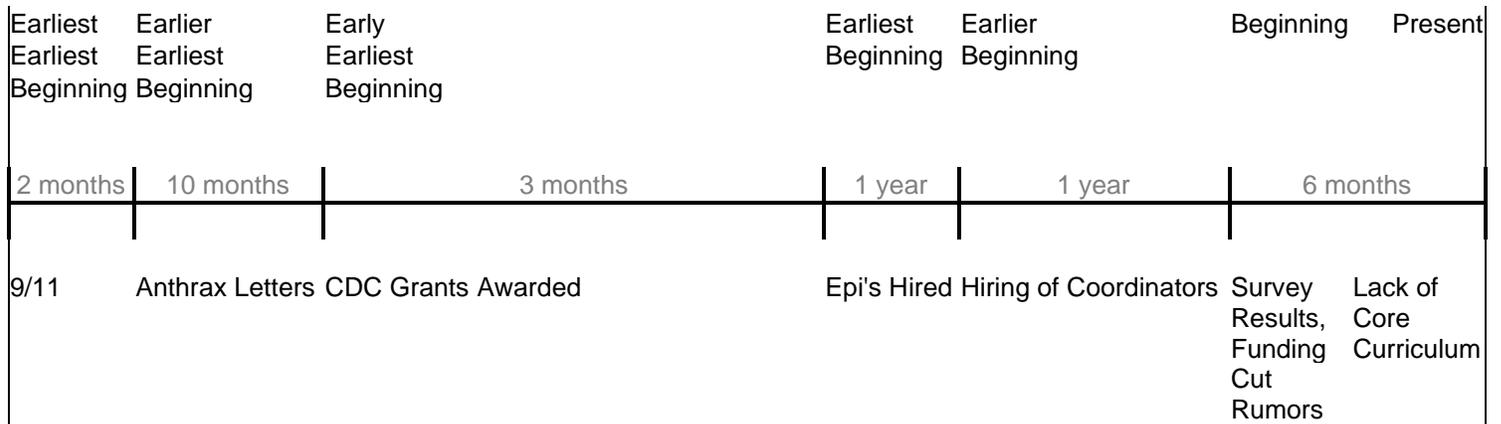


Figure 1: Timeline of events (from 9/11 to present) leading to the development of this Change Master Project

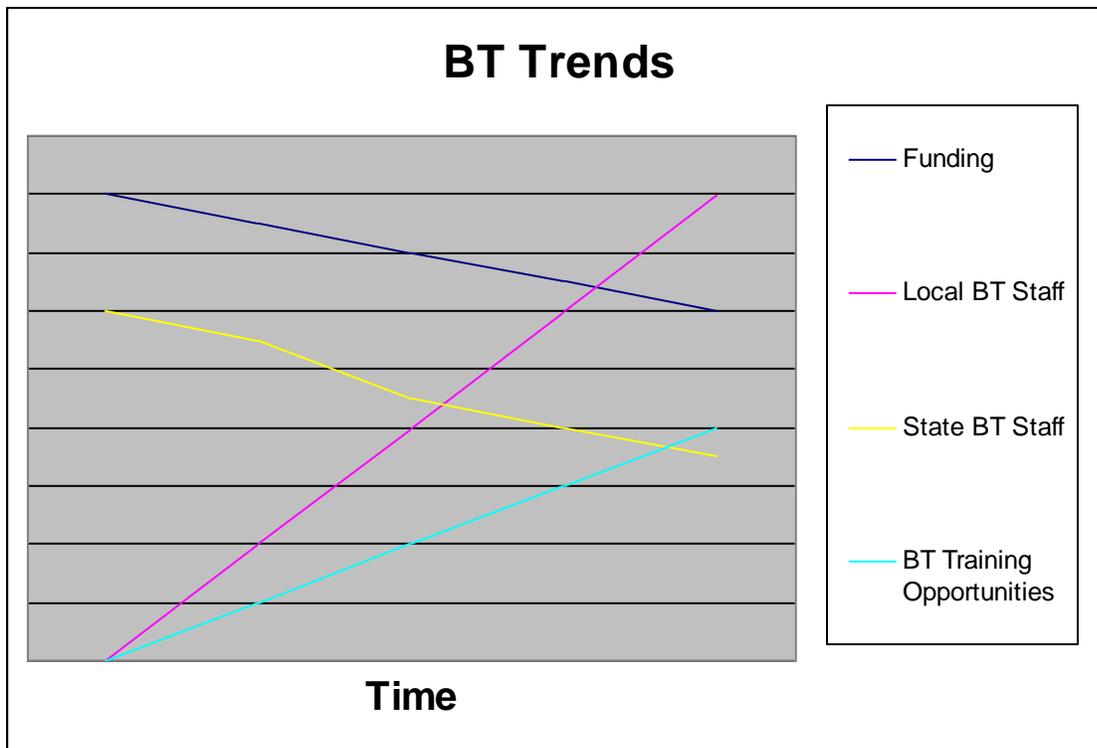


Figure 2: Graphical Depiction of the Preparedness Programs within Kentucky. Details the increase in Local Health Department Preparedness staff and training opportunities and the decreases in funding and State Preparedness Staff.

Causal Loop Diagram:

Figure 3: Causal Loop Diagram. Depicts the linkages between funding, staff, and training in Preparedness Programs in Kentucky.

10 Essential Public Health Services/National Goals Supported:

Our Change Master Project supports many of the 10 Essential Public Health Services and National Goals, as outlined below.

A. CDC's 21 Health Protection Goals

People Prepared for Emerging Health Threats

Goal: People in all communities will be protected from infectious, occupational, environmental, and terrorist threats.

Preparedness goals will be developed to address scenarios that include natural and intentional threats. The first round of these will include influenza, anthrax, plague, emerging infections, toxic chemical exposure, and radiation exposure.

Prevention

- Increase the use and development of interventions known to prevent human illness from chemical, biological, radiological agents, and naturally occurring health threats.

Detection and Reporting

- Decrease the time needed to classify health events as terrorism or naturally occurring in partnership with other agencies.
- Decrease the time needed to detect and report chemical, biological, radiological agents in tissue, food or environmental samples that cause threats to the public's health.
- Improve the timeliness and accuracy of communications regarding threats to the public's health.

Investigation

- Decrease the time to identify causes, risk factors, and appropriate interventions for those affected by threats to the public's health.

Control

- Decrease the time needed to provide countermeasures and health guidance to those affected by threats to the public's health.

Recover

- Decrease the time needed to restore health services and environmental safety to pre-event levels.
- Improve the long-term follow-up provided to those affected by threats to the public's health.

Improve

- Decrease the time needed to implement recommendations from after-action reports following threats to the public's health.

B. The 10 Essential Public Health Services

1. Monitor health status to identify and solve community health problems.
2. Diagnose and investigate health problems and health hazards in the community.
3. Inform, educate, and empower people about health issues.
4. Mobilize community partnerships and action to identify and solve health problems.
5. Develop policies and plans that support individual and community health efforts.
6. Enforce laws and regulations that protect health and ensure safety.
8. Assure competent public and personal health care workforce.
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services.

C. National Public Health Performance Standards:

Our Change Master Group developed standards to guide the development and performance of public health preparedness staff. We also recognize that we are part of an entire system of local, regional, state, and federal entities that would have a direct role in the discovery, investigation, response, and recovery from public health emergencies. The National Public Health Performance Standards focus on an overall public health system rather than a single organization. A public health system includes all private, public, and volunteer entities that contribute to public health activities within a given area. This ensures that all entities are recognized in assessing the provision of the essential public health services.

D. Healthy People 2010

23-8. Increase the proportion of Federal, Tribal, State, and local agencies that incorporate specific competencies in the essential public health services into personnel systems.

Although the disciplines in a particular agency will vary according to the resources, policies, needs, and populations served, individual public health employees must have certain competencies or levels of expertise. Their combined areas of expertise enable the organization to provide essential public health services. Failure to include references to these competencies in the formal personnel system makes achieving standards difficult. Position descriptions or performance evaluations are likely sources of data for this objective

23-9. Increase the proportion of schools for public health workers that integrate into their curricula specific content to develop competency in the essential public health services

23-10. Increase the proportion of Federal, Tribal, State, and local public health agencies that provide continuing education to develop competency in essential public health services for their employees

The above two objectives address training for both the current and future public health workforce. Tomorrow's public health workforce is being educated today by schools of public health, programs in public health accredited by the Council on Education for Public Health, and other graduate programs. These emerging leaders must be grounded in the areas of expertise needed to deliver essential public health services. This objective may be accomplished either by developing specific courses or by incorporating essential public health services into existing offerings, depending on the school or program.

There is an ongoing need to train and educate people who are currently employed in public health as new areas, problems, threats, and potential disasters emerge. For example, the threat of bioterrorism or the increased impact of any natural and technological disaster will require different training and areas of expertise so that public health workers can detect problems early, communicate rapidly, and respond effectively. A system for enabling career-long learning opportunities is desirable.

Figure 4: 10 Essential Services and Core Functions of Public Health

PROJECT OBJECTIVES/DESCRIPTION/DELIVERABLES:

Project Description

The original vision for our project was conceived by two of our Change Master Group members last year and refined by the entire group throughout the year in KPHLI. Our original goal was to create a training curriculum for Regional Epidemiologists, Preparedness Coordinators and Preparedness Educators. We quickly discovered that this task would take more time than we had available to complete the project. We then decided that a more manageable goal would be to develop competency sets for each of the positions. This process was a long and tedious one but also a very rewarding and enlightening one. We used the competency sets we developed to update the job descriptions for the three positions. Finally, we developed a list of trainings to help fulfill each competency set. In addition, we developed a model for a certification program. Our final goal is to eventually see this program further developed and implemented statewide.

Project Timeline

| | |
|----------------|--|
| April 2005 | Group forms @ KPHLI |
| May 2005 | Began to request data on training needs of the three positions from various sources looking at the same issue |
| June 2005 | First Summit at Pine Mountain State Park Developed a problem statement for the project Drafted a list of deliverables & objectives |
| August 2005 | Received Department of Public Health Survey Data from Ron Herald Began researching articles on competency based curriculum programs Group met with mentor Dr. George Graham and Dr. Andy Weiner about our project Refined objectives and deliverables |
| September 2005 | Second Summit at General Butler State Park Began to work on competency sets for each of the positions Further refined objectives |
| November 2005 | Received survey data from John Williams on training needs Jasie and Kristy spoke at state Epidemiology Capacity Meeting in Frankfort about the project Agreed to co-chair a committee to look at the standardization of the Epidemiology positions across the state as well as the Preparedness Coordinators and Educators positions |
| December 2005 | Group met in Lexington to discuss Kentucky Registered Sanitarian program and how it could be used as a model for our project Also, discussed changing job descriptions to match newly developed competency sets for each position Held a phone conference with Dr. Kristine Gebbie from the Columbia University School of Nursing Center for Health Policy Dr. Gebbie is a bioterrorism and workforce competency expert and |

was really excited about our project
Dr. Gebbie gave us some really useful information and resources
to use for our project

| | |
|----------------|--|
| January 2006 | Group met in Lexington to discuss completed competency sets and to work on the presentation portion of the project Decided to re-format job descriptions to match competency sets Talked about evaluation tools for the program and certification requirements |
| February 2006 | Third Summit at Rough River Dam State Park Discussed final deliverables, objectives and project goals Also, discussed possible evaluation process |
| March 2006 | Group met to discuss final project preparations All Kentucky Applied Epidemiologists participate in pilot test of CSTE and CDC Draft Applied Epidemiology Competencies |
| April 2006 | Final presentation at KPHLI Graduation |
| June 2006 | Post-project work with Department of Public Health leaders Develop curriculum & evaluation process |
| July 2006 | Mentoring education program begins Program to educate staff volunteering to mentor preparedness staff during the certification program |
| September 2006 | Present proposal to three position groups Make changes, if needed to format |
| January 2007 | Certification process for Regional Epidemiologists, Preparedness Coordinators and Educators begins statewide |
| January 2008 | First certificates issued |

Project Objectives

1. To develop competencies for the Regional Epidemiologist, Preparedness Coordinator & Preparedness Educator positions. Appendix 1, 2, 3.
2. To identify appropriate trainings for each of the competency sets developed. Appendix 1, 2, 3.
3. To develop a certification program for each of the positions based on the competency sets developed. Appendix 4.

Project Deliverables

1. A competency set for the Regional Epidemiologist, Preparedness Coordinator and Preparedness Educator positions. Appendix 1, 2, 3.
2. Revised job descriptions based on the developed competency sets
3. An implementation plan for a certification program, including an assessment tool Appendix 4, 5.

METHODOLOGY:

Each member of this Change Master Group represented not only the public health workforce but also each discipline of the preparedness staff (Epidemiologists, Training Coordinators and Preparedness Coordinators). To gain knowledge and background, we began to research numerous articles on competency based curriculum programs. Our mentor recommended reviewing the Public Health Competency Handbook as a guide.

The group members divided into subgroups based on the preparedness discipline they represented. These subgroups began to work on the competency sets for their own positions. The “Competency to Curriculum Toolkit” from the Columbia University School of Nursing Center for Health Policy aided in the development of the competency framework that you see in our project. The epidemiology subgroup used the CSTE Draft Tier 2 Applied Epidemiology Competencies as the framework for the Epidemiology competency set. See Appendices A, B, and C.

We realized early in our project that we needed data to reinforce our cause. Data was available to us from a statewide survey done to identify the training needs for Preparedness Coordinators, Training Coordinators and Epidemiologists.

A telephone conference call was held with Dr. Kristine Gebbie from the Columbia University School of Nursing Center for Health Policy. Dr. Gebbie has done extensive work in the area of competency development for the public health workforce. We reviewed the project and its goals with her. Dr. Gebbie was able to offer guidance and encouraged us to go forward with this project as she deemed it extremely important and necessary.

Our group felt that it was very important to recommend trainings that we felt would be beneficial to our peers. We identified the trainings that would be needed for the competency sets developed for each position.

The current job descriptions for these three positions varied from health department to health department. We reviewed and revised the job descriptions to match the competencies developed and the trainings necessary to develop and maintain a strong and competent preparedness staff. To aid in the development of the job descriptions, we reviewed the work of the Local Health Department Personnel Section Administrative Work Groups. Those groups are working to revise the current job descriptions and job classifications to be based upon competencies. The job descriptions we developed are based upon the template developed by these work groups. We look forward to the Department for Public Health’s review of this work and expect that the same work will apply to the Preparedness Staff.

To develop the assessment and certification model for our project, we studied and reviewed the Kentucky Registered Sanitarian program. We had hoped this program could serve as a model for the Preparedness Program. Upon review of this program, we determined that it was a program based upon legislation, which our program would not be. However, we felt a certification program was a critical part of our project. A certification program for the Preparedness staff will ensure that this workforce is adequately trained and ready to perform their job functions.

We developed an assessment component for the certification program, which included a

mentoring segment. Our group felt that the mentoring segment would have a positive impact on those who are new to the positions.

Along with the assessment component, we developed a checklist for implementation as our recommendation to the Kentucky Department for Public Health. This checklist will guide the implementation of our project at the state level and provide a recommendation for structure.

RESULTS:

The short-term outcome of this Change Master Project is the identification of competencies necessary for the positions of Training Coordinator, Preparedness Coordinator, and Epidemiologist in the field of Public Health Preparedness; job descriptions based on these competencies; a mentoring program involving experienced staff; as well as a skills check off for documentation. Our project outlines a certification program that would directly link with long-term outcomes involving a competent and prepared public health workforce.

Products available for both the local and state health department include:

- 7 Job descriptions local health departments can use to recruit and develop staff
- 8 A mentoring program that would assist new public health preparedness staff in becoming more familiar with their roles by offering guidance and direction
- 9 A listing of suggested trainings to narrow down the search for quality trainings that directly tie to competencies identified
- 10 A skills check off for mentors to track the progress of new public health preparedness staff
- 11 Outline a recommended credentialing system for Kentucky Department for Public Health
- 12 A checklist for the Kentucky Department for Public Health for project implementation

Along with the above products, we recommend that the Kentucky Department for Public Health review the Local Health Department Personnel Branch Administrative Work Group recommendations for the Accounting Job Series as a template for reclassification based upon competency.

CONCLUSIONS:

The purpose of our project is to assure there are state-wide, consistent and well-defined competencies for the roles of the Epidemiologists and the Public Health Preparedness Training and Planning Coordinators. To achieve this goal, our Change Master Team through a process of research, surveys, and lessons learned, recommends a standardized credentialing process to better validate our positions in Public Health Preparedness. It is our vision that this will ensure a more consistent, competent preparedness workforce, which will be interoperable statewide. This Change Master Group has developed a proposed time-line for program implementation, which we will continue to pursue upon graduation from KPHLI. We would like to challenge other stakeholders to join us in the pursuit of our vision.

LEADERSHIP DEVELOPMENT OPPORTUNITIES:

Sara Jo Best

KPLHI has given me the opportunity to go beyond my own “fishbowl” in the way that I see public health. I have learned about more than I was even aware of. The opportunities and challenges that public health faces and how we chose to plan for those are critical to our success and will have lasting impact on the future of public health and those we serve. KPHLI has challenged me to think in new ways and to be more creative in problem solving. It has challenged me to not only look at the public health system and opportunities for growth, but also within myself as a public health leader. The learning process that has started here will be a life long endeavor. I have also enjoyed meeting public health professionals within Kentucky and those from across the United States that devoted their time to come to speak to us on topics from Cultural Competency to Policy Development. I will use my experience in KPHLI as a base on which to continue to implement positive change into the public health profession as well as my development as an individual.

Kristy Bolen

Participating in KPHLI this year has allowed me to grow not only professionally but also personally. KPHLI has allowed me the opportunity to meet and interact with many public health workers from across the state and nation. The skills and lessons I will take away from KPHLI will help me in the years to come as I strive to make my community a healthier place.

Through the numerous survey tools that were administered I learned how to use my natural abilities to become a more effective leader in my organization. I’ve also learned how others see me as a leader and how I can compensate for my emotional intelligence deficits. Without KPHLI I may have never gotten an opportunity to learn so much about myself and about how to improve myself. I’m excited to take this knowledge back to my organization and to apply the principles I’ve learned.

I am so thankful that my director allowed me to participate in such a wonderful learning opportunity. I would also like to thank the members of my change master group for all of their contributions to our project. I’m so proud of what we have accomplished and I’m looking forward to continuing our journey towards a more competent preparedness workforce in Kentucky.

Dianne M. Coleman

I wanted to participate in the Kentucky Public Health Leadership Institute (KPHLI) class a few years ago but was not afforded the opportunity. Our health department has a new director and she was aware of my interest in KPHLI and invited me to attend. The acceptance letter came and so did the fear and hesitation. What was I thinking? I was not a manager or supervisor and I only held an Associate Degree in Nursing. I now realize how much I would have missed if I had given into my insecurities. These are just a few of the positive experiences that I would have missed out on:

- 1 The chance to reflect, grow and develop professionally and personally.
- 2 The exposure to many different disciplines of public health professionals from across the state.
- 3 The instructors, guest speakers, and authors on a variety of subjects including social marketing and ethics.
- 4 Reading books from the KPHLI book list that normally I wouldn't have. I learned from and actually enjoyed these books.
- 5 Working on a change master project that I believe is needed and hopefully will be beneficial for public health preparedness.
- 6 Team work with a group of dedicated, creative, intelligent, energetic and professional public health women.

I want to thank Dr. George Graham for being a mentor for our group and providing us with what we asked for and for what he knew we needed to consider with this project. I also appreciate the hard work from the KPHLI staff, instructors, and especially Cynthia Lamberth. Although I dreaded the personal conference call with Cynthia I actually came away from it feeling better about my goals and myself. It is my hope that my director will feel that the investment made in sending me to this KPHLI class was well worth it.

Shelly Fryman

KPHLI has been a GREAT experience for me. I was interested in participating because I thought it would help me grow as an individual and become a more effective leader, and I believe it has. It definitely has given me more insight into myself as an individual. When we decided on the subject for our Change Master Project, I was very excited, since I have a vested interest in the outcome. I sincerely believe that what we have accomplished will make a positive impact on the preparedness workers in Public Health, and if implemented, will help us achieve our goal in producing a more competent workforce.

I would like to thank my team members for all the hard work they put in the project and I feel blessed to have worked with such a dedicated and talented group. I also would like to thank my supervisor, Jasie Jackson and our Executive Director, Shawn Crabtree, for encouraging me to participate and allowing me the opportunity. I am really fortunate to be able to work for an agency with such a progressive outlook on personal and organizational development.

The friends that I have made, the skills I have learned and the goals I have achieved, as a result of KPHLI, are all things that I know, will prove invaluable to me now and in the future.

Jasie Jackson

KPHLI has been a great experience for me both personally and professionally. It has given me the opportunity to reflect upon my personal styles and how those directly affect my professional style. It has forced me to move out of my comfort zone and look at myself from an entirely new perspective. Through KPHLI, I have interacted with public health professionals from all parts of the State and Nation, giving me the opportunity to learn from them. Public health at every level faces challenges that are unique to each segment but fundamentally similar. In KPHLI, I have learned that planning and leadership are the keys to confronting those challenges and being successful in addressing them. Most importantly, I have learned a new way of thinking, and how to approach issues on a personal level and a professional level. Communication is **Key** to success!

Over this year, it has been a privilege to work with all of the scholars, mentors, and staff of the Leadership Institute. I am truly blessed to have had such a wonderful change master group and mentor. I am grateful for the opportunity to participate in such a great program. I would like to thank Shawn Crabtree, my director for giving me this valuable opportunity. KPHLI is truly changing Public Health for Kentucky!

Carol Lane

KPHLI has afforded me the opportunity to grow personally and professionally through various self-improvement tools, as well as group participation projects. After working many years in the financial office of a large district health department, I definitely jumped into the deep end of the pool when I signed up to work with the Preparedness Group to define competencies for each of their positions. Fortunately, I was lucky that this group was more than willing to not only include me, but felt that my working experience would give an outside perspective to this project.

Through out this past year, the experience from KPHLI has enabled me to learn different techniques to become a more effective leader. It is my goal to incorporate these techniques into my role as supervisor in the financial office and to communicate successfully as a leader.

It has also been a privilege to participate in the trainings with all the scholars, mentors, and staff from the Leadership Institute. This opportunity to learn outside the safety of familiar surroundings has broadened my scope of understanding for public health. I am thankful that our director is supportive of providing trainings of this caliber for the staff of our district health department.

REFERENCES

1. Institute of Medicine. Educating Public Health Professionals for the 21st Century. Institute of Medicine Report. Available at: <http://www.iom.edu/CMS/3793/4723.aspx>. Accessed February 15, 2006.

2. Council of State and Territorial Epidemiologists. Draft CDC/CSTE Applied Epidemiology Competencies: Preface Document and Tier 2 Competencies. May 23, 2005. Available at: <http://www.cste.org/Assessment/competencies/comp.pdf>. Accessed September 2005.

Council of State and Territorial Epidemiologists. 2004 National Assessment of Epidemiologic Capacity: Findings and Recommendations. Council of State and Territorial Epidemiologists. 2004. Available at: <http://www.cste.org/Assessment/ECA/pdffiles/ECAfinal05.pdf>. Accessed

November 2005. **Appendix 1**

CDC/CSTE Applied Epidemiology Competencies 5/23/05

Epidemiology Competencies

| Competency | Sub-Competency | Possible Training | This candidate has demonstrated competency in this by (this column to be completed by mentor): | Date Completed |
|-----------------------|---|---|--|----------------|
| Assessment & Analysis | Identify public health problems pertinent to the population <ul style="list-style-type: none"> -0 Use critical thinking to determine whether a public health problem exists <ul style="list-style-type: none"> o Identify relevant data & information sources within & outside the public health system o Synthesize existing data & information into a determination of expected & observed numbers of cases or outcomes in a population o Determine threshold values (e.g. baseline disease incidence, prevalence of risk behaviors, etc) for public health action o Conduct a thorough search of the | <ul style="list-style-type: none"> -2 Epi in Action CDC Training in Atlanta -3 Many of these skills would be learned in Graduate Level Epidemiology or Statistics classes | | |

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| | <p>scientific literature & public health databases, using search engines & methods relevant to specific problems, to identify knowledge gaps.</p> <ul style="list-style-type: none"> ○ Quantify population-based health risks <p>-1 Articulate the need for further investigation or other public health action, based on results of literature review & assessment of current data. Collaborate with others, inside & outside the agency, to identify the problem & develop recommendations</p> | | | |
| <p>Assessment & Analysis</p> | <p>Conduct Surveillance</p> <p>-2 Determine whether to conduct surveillance for the particular public health issue under consideration</p> <ul style="list-style-type: none"> ○ Identify types of surveillance methods for specific public health problems ○ Select types of surveillance systems suitable to specific public health problems ○ Identify additional burden to public health system & reporting entity anticipated to result from the proposed surveillance system <p>-3 Identify surveillance data needs</p> <ul style="list-style-type: none"> ○ Create case definition, based on person, place & time ○ Describe sources, quality & limitations of surveillance data ○ Identify mechanisms to | <ul style="list-style-type: none"> - CDC/Emory Surveillance Class in Atlanta - Many of these skills would be learned in Graduate Level Epidemiology or Statistics classes | | |

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| | <p>transfer data from source to public health agency</p> <ul style="list-style-type: none"> ○ Define timeliness required for data collection ○ Define necessary frequency of reporting ○ Describe potential uses of data to inform surveillance system design <p>-4 Implement new or revise existing surveillance systems</p> <ul style="list-style-type: none"> ○ Test data collection & analytical methods ○ Create working surveillance system ○ Verify that data collection occurs according to the defined surveillance system parameters (timeliness, frequency, etc) ○ Create good working relationships with reporting entities ○ Provide feedback to reporting entities & other organizations or individuals who need to know about the data or system <p>-5 Interpret key findings from the surveillance system</p> <ul style="list-style-type: none"> ○ Interpret system's results in the context of current scientific knowledge ○ Identify implications to public health programs ○ Develop conclusions from the surveillance data ○ Communicate results <p>-6 Conduct evaluation of surveillance systems</p> <ul style="list-style-type: none"> ○ Perform evaluation of surveillance systems using national guidance & methods (CDC. 2001. Updated Guidelines for | | | |
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| | <p>Evaluating Public Health Surveillance Systems. MMWR 50(RR13): 1-35)</p> <p>Prepare recommendations for modifications to surveillance systems based on evaluation</p> | | | |
| <p>Investment & Analysis</p> | <p>Investigate acute & chronic conditions in the population</p> <ul style="list-style-type: none"> -7 Conduct a community health status assessment -8 Prioritize potential public health problems to be addressed -9 Select investigative processes <ul style="list-style-type: none"> o Differentiate principles of investigation for acute versus chronic disease o Differentiate principles of investigation for disease clusters versus endemic conditions o Describe the major epidemiologic study designs, including the strengths & weaknesses of each -10 Create hypotheses (see competencies from Skill Domain I.1.i & Basic Public Health Sciences) -11 Assist in design of investigation (e.g. disease investigations, studies or screening programs) <ul style="list-style-type: none"> o Identify target population for investigation o Perform necessary power calculations o Identify individuals or groups eligible to be in the study o Create the case definitions by defining the outcomes of interest o Identify optimal timeframe for investigation o Select optimal investigation design under existing constraints o Identify possible sources of bias | <ul style="list-style-type: none"> -2 Needs Assessment Training -3 MAPP Training -4 Basic Epi Concepts, Principles & Methods (University of Pittsburgh SuperCourse) | | |

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| | <ul style="list-style-type: none"> ○ Identify methods to minimize or estimate effects of possible sources of bias ○ Identify potential confounders ○ Design strategies to control potential confounders <p>-12 Employ Investigation techniques suitable to the public health problem</p> <ul style="list-style-type: none"> ○ Identify sources of data for investigation ○ Identify case finding methods suitable to the investigation ○ Construct data collection instruments ○ Employ optimal sampling methods given the context of the situation ○ Organize necessary coordination between all groups involved in investigation | | | |
| ment & sis | <p>Apply principles of good ethical/legal practice as they relate to study design & data collection, dissemination & uses</p> <p>-13 Follow ethics guidelines & principles when planning studies, conducting research, & collecting, disseminating & using data</p> <ul style="list-style-type: none"> ○ Collect & use public health data, including individual identifiers, only with clearly identified justification ○ Balance respect for persons & individual privacy with the risk of the threat to the community ○ Apply public health code of ethics to collection, management, dissemination, & use of data & information, | <p>-21 Public Health Ethics Class</p> | | |

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| | <p>including principles of justice, timeliness, & transparency of purpose (www.apha.org/codeofethics)</p> <ul style="list-style-type: none"> -14 Apply appropriate laws to collection, management, dissemination, & use of data & information -15 Differentiate between public health practice & public health research -16 Describe human subjects research -17 Apply Institutional Review Board processes as necessary -18 Manage conflict of interest as necessary -19 Apply knowledge of privacy laws to protect Confidentiality, including HIPAA & applicable state & local privacy laws -20 Apply ethical principles in publication practices | | | |
| <p>ment & sis</p> | <p>Manage data from surveillance, investigation, or other sources</p> <ul style="list-style-type: none"> -22 Create database, if indicated <ul style="list-style-type: none"> o Design data base with necessary variables & data dictionary o Employ optimal coding for variables (e.g. assigning numeric codes to text response options for a variable) to ensure accuracy & ease of analysis o Employ data entry techniques that ensure accuracy & reliability o Conduct data entry validation o Perform data cleaning & error correction o Evaluate data editing & communicate results to data providers -23 Manage databases <ul style="list-style-type: none"> o Maintain original data, but transform data as needed for specific | <ul style="list-style-type: none"> -2 Epi Info Training during Epi in Action Course at Emory University in Atlanta -3 Epi Info Training Online: Analyze Data Sessions I – VII (UNC Center for Public Health Preparedness) -4 Basic Statistics Class | | |

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| | <p>analyses</p> <ul style="list-style-type: none"> ○ Create new variables as necessary to support analysis of data ○ Perform merging & splitting of databases ○ Change format of data from one software application to another if necessary (e.g. ASCII to SAS) ○ Document all data transformations ○ Insure secure (restricted accesses) & stable (routine back-ups, database redundancy) data storage | | | |
| <p>ment & rsis</p> | <p>Analyze data from an epidemiologic investigation</p> <p>-24 Create analysis plan for data</p> <ul style="list-style-type: none"> ○ Define analysis plan to insure that public health objectives are met ○ Determine the optimal statistical techniques given the data, study design, sample size, hypotheses, & other relevant factors ○ Specify the parameters to estimate ○ Specify the assumptions to be used in interpreting results ○ Create table shells ○ Select software suitable for analyzing & managing data <p>-25 Conduct analysis of data</p> <ul style="list-style-type: none"> ○ Compute frequencies & descriptive statistics ○ Calculate rates & adjust for age as necessary ○ Compute standard epidemiologic measures, including sensitivity, specificity, positive predictive value, Type 1 & 2 errors, incidence, | <p>-2 Epi Info Training during Epi in Action Course at Emory University in Atlanta</p> <p>-3 Epi Info Training Online: Analyze Data Sessions I – VII (UNC Center for Public Health Preparedness)</p> | | |

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| | <p>prevalence & attributable fraction</p> <ul style="list-style-type: none"> ○ Perform trend analyses ○ Apply measures of association (e.g. Relative Risks & Odds Ratios), confidence intervals & p-values ○ Interpret measures of association, confidence intervals & p-values ○ Assess need for multivariable analyses ○ Perform multivariable, and/or regression analyses ○ Assess the effect of potential confounders ○ Assess whether effect modification is present ○ Assess need for special analyses, including survival analyses, cost effectiveness/ cost benefit/cost utility analyses ○ Create standard epidemiology reports including tables, graphs, & charts necessary to summarize findings | | | |
| <p>Assessment & Analysis</p> | <p>Summarize results of the analysis & draw conclusions</p> <p>-26 Apply knowledge of epidemiologic principles & methods to determine the validity of epidemiologic data</p> <ul style="list-style-type: none"> ○ Determine likely sources of bias ○ Assess validity & reliability of data collection instruments & methods ○ Determine other limitations in study design, sample selection, data collection, analysis & other features ○ Recognize the limitations of significance testing | <p>-2 Basic Statistics Class</p> <p>-3 Basic Epidemiology like FOCUS on Epi Courses from UNC Center for Public Health Preparedness</p> | | |

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| | <ul style="list-style-type: none"> ○ Make causal inferences based on principles of causation (e.g. strength, consistency, biological plausibility, dose-response, & temporal relationship) <p>-27 Assess the impact of the limitations on the study's results</p> <ul style="list-style-type: none"> ○ Examine the influence of power & confidence limits on the interpretation of the study's data ○ Distinguish between a statistical association & a causal effect ○ Examine the likely influence of other study limitations on the results <p>-28 Identify key findings from the study</p> <ul style="list-style-type: none"> ○ Interpret study's results in the context of current scientific knowledge ○ Estimate measures of effect & potential impact based on study's findings ○ Identify any implications to public health programs ○ Develop inference & conclusions from the study ○ Communicate results | | | |
| Assessment & Analysis | <p>Recommend interventions & control measures in response to epidemiologic findings</p> <p>-29 Establish cultural/social/political/economic framework for recommendations or interventions</p> <ul style="list-style-type: none"> ○ Describe study data in a way that makes the rationale for the recommendations clear ○ Relate study findings to existing policies, regulations, & laws as well as environmental factors (e.g. societal, | <p>-2 Basic Epidemiology Courses like FOCUS on Epi from UNC Center for Public Health Preparedness</p> | | |

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| | <p>cultural, or other factors that may affect the recommendations or interventions)</p> <p>-30 Utilize scientific evidence in preparing recommendations for action or interventions</p> <ul style="list-style-type: none"> ○ Synthesize scientific evidence & knowledge for use in preparing recommendations ○ Identify the key types of intervention for problem from models of causation (e.g. host-agent-environment, ecological models, Haddon’s strategies, etc.) ○ Develop assessment of the potential impact on the public’s health from alternative interventions ○ Propose new recommendations or modifications to existing interventions as necessary based on study findings ○ Prioritize potential public health interventions ○ Link any recommended behavioral interventions with necessary risk communication & risk reduction methods | | | |
| <p>Assessment & Evaluation</p> | <p>Evaluate programs</p> <p>-31 Assist in development of measurable & program-relevant goals & objectives</p> <p>-32 Assist in development of program logic models & theories of action</p> <p>-33 Identify surveillance & other data for use in tracking program goals & objectives</p> <p>-34 Track progress toward program goals & objectives</p> <p>-35 Communicate information on progress toward program goals & objectives to program managers & staff for use in program</p> | <p>-36 Program Evaluation Course</p> | | |

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| | planning & modification | | | |
| Public Health Sciences | <p>Use knowledge of causes of disease to guide epidemiologic practice</p> <ul style="list-style-type: none"> -37 Relate basic etiologic processes for human diseases to subject matter areas of interest (e.g. infectious diseases, chronic diseases) -38 Apply understanding of human & environmental biology to determine potential biological mechanisms of disease -39 Explain how genetics & genomics affect disease processes & public health policy & practice -40 Apply principles of the host/agent/environment model to disease causation, prevention & control -41 Describe the role & influence of socio-behavioral factors (including community, political, social, family, & individual behavioral factors) in health risks & health status -42 Incorporate etiologic principles into development of disease prevention strategies | <ul style="list-style-type: none"> -43 Basic Infectious Diseases Course -44 Basic Biology Courses on biological mechanisms of disease and biological processes | | |
| Public Health Sciences | <p>Use laboratory resources to support epidemiologic activities</p> <ul style="list-style-type: none"> -45 Identify the roles & capabilities of public health laboratories & other laboratories, & how they are used in epidemiology investigations -46 Coordinate laboratory & epidemiology activities including test selection, communication & reporting results in the field -47 Interpret laboratory data accounting for factors that influence the results of screening & diagnostic tests -48 Implement necessary specimen collection, storage, & transportation measures | <ul style="list-style-type: none"> -49 Tour of KY State Lab -50 Disease specific & generic guidelines from State lab -51 Basic Laboratory Science Course | | |
| Public Health Sciences | <p>Apply principles of informatics, including data collection, processing & analysis, in support of epidemiologic investigations</p> | <ul style="list-style-type: none"> -2 Epi Info or other statistics package course -3 More training on upcoming | | |

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| <p>-52 Use full range of information technologies & communication tools necessary to support epidemiologic investigations & surveillance</p> <p>-53 Utilize software tools that adequately support on-line searching, public health data acquisition, entry, management, analysis, planning, mapping, & reporting</p> <p>-54 Apply all relevant procedures (policies) & technical means (security) to ensure the integrity & protection of confidential information in electronic files & computer systems</p> <p>-55 Combine data & information from multiple sources, to create new information to support public health decision-making</p> <ul style="list-style-type: none"> ○ Determine whether new data collection is needed or existing data sets or systems can be mined ○ Participate in the development of new or enhancement of existing data bases to support epidemiologic investigations, surveillance, etc. ○ Utilize (or ensure the utilization of) interoperable data standards for storage & transmission, & be able to find the relevant standards specification as needed ○ Maintain electronic documents (guidelines, data sets) including with documented versions, dissemination methods & relevant standards specifications | <p>KYEPHRS system and tools that will be available within the system</p> | | |
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| <p>communication</p> | <p>Prepare written & oral reports & presentations that communicate epidemiologic findings to professional audiences, policy makers, & the general public</p> <p>-56 Identify audience, methods & content for communication of epidemiologic findings</p> <ul style="list-style-type: none"> ○ Identify target audience for communication ○ Identify relevant data to report ○ Identify optimal methods of communication for target audience <p>-57 Communicate epidemiologic findings to professional audiences through written reports & oral presentations</p> <ul style="list-style-type: none"> ○ Prepare abstracts either for publication or for presentation at scientific meetings ○ Prepare manuscripts for scientific publication ○ Prepare summary reports & memoranda for use within the agency ○ Use modern audio-visual tools to maximize communication ○ Create charts, tables & figures that communicate to the targeted audience <p>-58 Communicate epidemiologic information to the general public, the press and/or to policy makers through giving oral presentations or developing or contributing to development of written documents</p> <ul style="list-style-type: none"> ○ Participate in the development of press releases for the general public ○ Participate in the development of disease prevention materials for lay audiences ○ Communicate scientific | <p>-62 Basic Public Speaking Class</p> <p>-63 Basic PowerPoint Technique Class</p> <p>-64 Writing for scientific journals course</p> | | |
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| | <p>findings in a language tailored to the need of decision-makers, the press & other target audiences</p> <p>-59 Tailor surveillance information content & periodicity of dissemination for specific audiences & their uses</p> <p>-60 Respond to public queries about epidemiologic data or related issues</p> <p>-61 Demonstrate ability to explain or teach basic epidemiologic principles to non-epidemiologists</p> | | | |
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| <p>communication</p> | <p>Demonstrate the basic principles of risk communication</p> <ul style="list-style-type: none"> -65 Participate in developing risk communication messages that adequately convey epidemiologic information relevant to particular public health problems <ul style="list-style-type: none"> o Provide content to the public information officer & other relevant agency staff o Review risk communication messages for scientific accuracy & clarity -66 Use basic risk communication principles to communicate epidemiologic messages <ul style="list-style-type: none"> o Refer inquires to the correct spokespersons for the agency o Respond to media inquires as requested by public health agency o Adhere to the agency risk communication strategy | <ul style="list-style-type: none"> -2 Basic Risk Communication Class (like the one given this summer) -3 FEMA Basic PIO Course -4 Emergency Communications for Public Health Professionals course at University of Washington School of Public Health & Community Medicine -5 http://www.nwcphp.org/edu/riskcomm | | |
| <p>communication</p> | <p>Incorporate interpersonal skills in communication with agency personnel, colleagues, & the public</p> <ul style="list-style-type: none"> -67 Demonstrate ability to listen effectively when epidemiologic findings are being presented or discussed -68 Demonstrate interpersonal, interdisciplinary, transdisciplinary & multidisciplinary communication <ul style="list-style-type: none"> o Lead discussions & participate in group settings o Demonstrate ability to respect & promote diverse opinions o Demonstrate ability to solicit input from individuals & groups o Demonstrate ability to communicate epidemiologic findings, methodology & | <ul style="list-style-type: none"> -2 KPHLI -3 How to manage meetings effectively | | |

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| | principles when part of a multidisciplinary team | | | |
| Communication | <p>Employ available & suitable communication technologies</p> <p>-69 Participate in the design of Web-based communication</p> <p>-70 Utilize policies that address security, privacy, & legal considerations when communication epidemiologic information via email, health alert networks, or other potentially public documents</p> <p>-71 Utilize effective educational & behavioral techniques & technological tools to promote public health (e.g., through community education, behavior modification, collaborative policy development, issue advocacy & community mobilization)</p> | <p>-72 Risk Communication Course</p> <p>-73 Communication Technology Course</p> <p>-74 Possibly a training with KDPH IT</p> | | |
| Community Extensions of Practice | <p>Provide epidemiologic input into epidemiologic studies & community public health planning processes at the state or local level</p> <p>-75 Use information from the community & from health status assessments to aid in the design, interpretation, & conduct of epidemiologic studies</p> <ul style="list-style-type: none"> ○ Utilize strategies for engaging communities in dialogue on health issues requiring study ○ Utilize strategies for reaching populations & individuals that traditionally may not have had the opportunity to participate in priority setting processes ○ Assist communities in identifying health priorities for study ○ Provide technical assistance to communities & outside partners with respect to surveillance, | <p>-2 MAPP Course</p> <p>-3 Basic Communications Course</p> | | |

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| | <p>epidemiological data & evaluation</p> <ul style="list-style-type: none"> ○ Maximize positive & mitigate negative aspects for communities of epidemiologic data collection, analysis & use <p>-76 Provide epidemiologic input into an assessment of the local public health system to aid in state & local public health planning</p> <ul style="list-style-type: none"> ○ Map out the different levels of governmental public health (local, state & federal) & their roles & responsibilities in the community ○ Characterize the interactions between different levels of government in relation to community public health programs ○ Assess the funding streams for public health & epidemiology programs that affect the community ○ Identify the populations & special populations within the community or region that each public health program seeks to reach ○ Identify the epidemiology data collection & analysis needs of each program ○ Identify community themes & strengths ○ Map out the community medical care delivery system ○ Characterize relationships among public & private organizations within the community ○ Identify environmental, social & cultural factors that affect the | | | |
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| | <p>community's health</p> <ul style="list-style-type: none"> ○ Examine changes that are occurring or are expected to occur that affect the community's health or local public health system (i.e. a MAPP forces of change assessment) ○ Identify threats & opportunities that arise from these changes | | | |
| Community Extensions of Core Competency | <p>Participate in development of community partnerships to support epidemiologic investigations</p> <ul style="list-style-type: none"> -77 Identify partners & stakeholders appropriate to an epidemiologic investigation -78 Develop community-specific participation strategies to engage the public in the planning, implementation, & evaluation of epidemiologic investigations when indicated -79 Clarify the roles of partners & stakeholders in the epidemiologic investigation -80 Demonstrate ability to develop & participate in & receive input into epidemiologic studies from task forces & other target audiences | <p>-81 MAPP Course</p> <p>-82 Community Assessment Course</p> | | |
| Community Extensions of Core Competency | <p>Engage the public in the public health work & decision making of the Health Department when needed using mechanisms suitable to the circumstances</p> | <p>-2 Risk Communication Course</p> <p>-3 MAPP Course</p> | | |
| Cultural Competency | <p>Describe population by race, ethnicity, culture, socioeconomic, educational, and professional backgrounds, age, religion, and sexual orientation.</p> | <p>-2 Cultural Competency Training (UNC Online Course)</p> <p>-3 Meaningful Exchange: Enhancing Cultural Competence of Public Health Personnel (DPH seminar)</p> | | |
| Cultural Competency | <p>Establish relationships with groups of special concern (e.g. disadvantaged or minority groups, groups subject to health disparities, historically underrepresented groups)</p> <ul style="list-style-type: none"> -83 Study historical context of populations' history and past treatment by public health system | <p>-85 Crisis & Emergency risk Communication Online Workshop – Michigan Department of Community Health</p> | | |

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| | -84 Develop mechanisms to receive input from groups of special concern into the design and conduct of epidemiologic practice. | | | |
| ral petency | Design surveillance systems to include groups subject to health disparities or other potentially under-represented groups. (using standard categories where available) -86 Know standard used to define special populations -87 Know historical, social, and political contexts of standard categories -88 Know limitations of standard categories -89 Working with community as necessary to develop new categories if standard categories are unavailable -90 Design data collection tools to capture information needed to assess health disparities. -91 Design sampling plan to ensure sample size large enough to provide stable estimates in populations of interest. -92 Avoid potential adverse impacts of data collection on special populations. | -93 Assessment Settings and People (UNC Center for Public Health Preparedness) | | |
| ral petency | Conduct investigations using languages and approaches tailored to population. -94 Identify primary language of the population under study -95 Utilize knowledge of specific socio-cultural factors in the population | -96 Epi Info Online: Analyze Data Sessions I – VIII (UNC Center for PH Preparedness) -97 Northwest Center for Public Health | | |
| ral petency | Use standard population categories or subcategories when performing data analysis | | | |
| ral petency | Utilize knowledge of specific socio-cultural factors in the population to interpret findings | -2 Data Analysis (UNC Center for Public Health Preparedness) | | |
| ral petency | Recommend public health actions that would be meaningful to the affected community | | | |
| ral | Communicate findings to affected | -3 Communicate to Make a Difference: | | |

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| Competency | community using mechanisms that are tailored to that community/special population. | Exploring Cross Cultural Communication (NY/NJ PH Training Center web-based course) | | |
| Social and Operational Planning and Management | <p>Conduct epidemiologic activity in a manner that is aligned with financial and operational plan of the agency.</p> <p>-98 Describe personnel, staffing, travels, and other needs for epidemiologic activity.</p> <p>-99 Maintain accurate records.</p> <p>-100 Assist in preparation of proposals for extramural funding</p> <ul style="list-style-type: none"> o Identify funding needs for epidemiology activity o Identify funding opportunities for epidemiology activity o Prepare proposals, in whole or in part, to obtain funding for epidemiology activity. <p>-101 Adhere to financial rules of agency</p> <ul style="list-style-type: none"> o Describe financial rules of agency o Follow financial rules of agency <p>-102 Follow chain of command</p> | <p>-103 Program Planning & Evaluation</p> <p>-104 KPHLI</p> <p>-105 Management Course</p> | | |
| Social and Operational Planning and Management | <p>Use skills that foster collaborations, strong partnerships, and team building to accomplish epidemiology program objectives</p> <p>-106 Build collaborative relationships with key personnel of other agencies relevant to the particular epidemiology activity</p> <p>-107 Collaborate and cooperate with other epidemiology project team members of diverse backgrounds and education.</p> | <p>-108 MAPP Training or Collaboration/Networking Training</p> <p>-109 Assessment Competencies (UNC Center for Public Health Preparedness)</p> | | |
| Social and Operational Planning and Management | Clarify roles and responsibilities of all participants in epidemiologic activities. | | | |
| Partnership and Systems Thinking | <p>Promote shared vision to drive action.</p> <p>-110 Assist in strategic planning</p> <ul style="list-style-type: none"> o Describe process for organizational strategic planning o Identify internal and | <p>-2 Crisis Leadership: Leadership at the Speed of Light (NC Center for PH Preparedness)</p> <p>-3 KPHLI</p> | | |

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| | <p>external issues that may impact delivery of essential public health services (competency from Council on Linkages)</p> <ul style="list-style-type: none"> ○ Facilitate collaboration with internal and external groups to ensure participation of key stakeholders (competency from Council on Linkages) ○ Participate in the development of strategic priorities and associated action plans. <p>-111 Implement change</p> <ul style="list-style-type: none"> ○ Demonstrate individual skills necessary to implement change, including ability to support change during times of chaos ○ Demonstrate ability to function as member of a team during change processes. ○ Participate in monitoring and sustaining organizational change. | | | |
| ership and ms Thinking | <p>Conduct performance driven work.</p> <p>-112 Contribute to development, implementation and monitoring of organizational performance standards</p> <ul style="list-style-type: none"> ○ Demonstrate Knowledge of performance standards ○ Adopt and implement performance standards <p>-113 Take action to improve program performance.</p> | | | |
| ership and ms Thinking | <p>Promote ethical conduct</p> <p>-114 Demonstrate ethical conduct in personal behavior</p> <p>-115 Promote ethical conduct in organization’s policies and practices including emphasis on addressing health disparities.</p> <p>-116 Make expectations of ethical</p> | <p>-118 Public Health Ethics</p> <p>-119 KPHLI</p> | | |

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| | <p>conduct clear to team members</p> <p>-117 Monitor ethical conduct on the part of team members.</p> | | | |
| Leadership and Critical Thinking | <p>Promote workforce development</p> <p>-120 Promote ongoing team learning</p> <ul style="list-style-type: none"> o Periodically assess the proficiency of team member’s skills against standard competency sets o Identify professional development opportunities for team members o Assure that team members take advantage of development opportunities <p>-121 Demonstrate knowledge of workforce, workplace and other issues that impact recruitment and retention.</p> <p>-122 Practice professional development</p> <ul style="list-style-type: none"> o Assess own skills and abilities against current and projected future job needs. o Obtain necessary education and training to meet required skills and abilities. | <p>-2 Mentoring Training</p> <p>-3 KPHLI</p> <p>-4 Workforce Development in Public Health (UNC Center for Public Health Preparedness)</p> | | |
| Leadership and Critical Thinking | <p>Prepare for emergency response (from Columbia University Bioterrorism and Emergency Readiness competencies – form Public Health Leaders and Public Health Professionals)</p> <p>-123 Perform emergency response planning.</p> <ul style="list-style-type: none"> o Create epidemiology section of emergency response plan. o Communicate epidemiology information, roles, capacities, and legal authority to all emergency response partners – such as other public health agencies, | <p>-2 Incident Command (Anniston)</p> <p>-3 Principles of Emergency Management (KYEM)</p> <p>-4 IS – 700</p> <p>-5 IS – 800</p> | | |

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| <p>and other government agencies – during planning, drills and actual emergencies.</p> <ul style="list-style-type: none"> ○ Maintain regular communication with emergency response partners. ○ Assure that the agency (or agency unit) has a written regularly updated epidemiology section of emergency response plan for major categories of emergencies that provides for continuity of agency operations. ○ Participate in regular exercises of all parts of emergency response. ○ Participate in the evaluation of emergency response drill (or actual response) to identify needed internal and external improvements in epidemiologic preparedness and response capacity. ○ Assure that knowledge and skill gaps identified through emergency response planning, drills, and evaluation are addressed. ○ Participate in continuing education to maintain up-to-date knowledge in areas relevant to emergency response (e.g., emerging infectious diseases, hazardous materials, and diagnostic tests.) <p>-124 Respond to public health emergencies</p> <ul style="list-style-type: none"> ○ Use community resources for emergency response ○ Describe the epidemiology role in | <p>-6 ICS for Public Health (UNC Center for Public Health Preparedness)</p> | | |
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| | <p>emergency response in a range of emergencies that might arise</p> <ul style="list-style-type: none"> ○ Describe the chain of command and management system (“incident command system” or similar protocol) for emergency response in the jurisdiction. ○ Describe one’s own role within the jurisdiction’s chain of command and management structure ○ Adhere to individual’s role in incident command and incident management ○ Maintain regular communication with partner professionals in other agencies involved in emergency response. | | | |
| <p>opment</p> | <p>Participate in development of public health policies</p> <p>-125 Demonstrate understanding of how policy decisions are made at the local, state, and national level</p> <ul style="list-style-type: none"> ○ Describe breadth and limitations of existing regulations and laws at agency, local, state and federal level that affect epidemiology activities <p>-126 Provide epidemiologic rationale for policy development</p> <ul style="list-style-type: none"> ○ Demonstrate to decision-makers the value of epidemiology and other evidence in developing policy ○ Provide epidemiologic and evidence-based information and data in the development of new policies, including data that demonstrate the need for change in existing policies ○ Participate in creating | <p>-129 Health Law & Ethics (Pitt Community College)</p> <p>-130 Communicable Disease Law (KY)</p> <p>-131 Reading & Translating Epi Information/Technical Information Unit 1 and 2 (UNC Center of Public Health Preparedness)</p> <p>-132 Continuous Improvement Measurement and Sustainability (UNC Center of Public Health Preparedness)</p> | | |

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| | <p>decision memos that outline policy alternatives and facilitate scientifically-sound decision-making</p> <p>-127 Participate in translation of public health policies into epidemiology roles in programs or plans</p> <p>-128 Demonstrate ability to use designated channels to influence policy decisions made by entities other than the public health agency (such as dealing with elected officials or their staff)</p> | | | |
| <p>Development</p> | <p>Participate as a team member in evaluating policies affecting epidemiology programs</p> <p>-133 Examine the impact of policies on achieving epidemiology program goals and objectives</p> <ul style="list-style-type: none"> o Develop an evaluation plan to assess program performance <p>-134 Provide epidemiologic information on program performance to inform public health policy</p> <ul style="list-style-type: none"> o Collect epidemiologic information to monitor the implementation of policies o Develop the evidence base to allow assessment of policy effectiveness. | <p>-2 Yearly Personnel Evaluation</p> <p>-3 Program Evaluation</p> <p>-4 Winter/Summer Public Health Institute (University of Florida/University of Minnesota)</p> | | |

Appendix 2

Preparedness Training Coordinator Competencies

| Competency | Sub-Competency | Possible Training | This candidate has demonstrated competency in this by (this column to be filled by mentor): | Date Completed |
|---|--|--|--|-----------------------|
| Design and implementation of training and education. | <ul style="list-style-type: none"> -2 Formulate a wide variety of the alternative educational methods. -3 Select strategies best suited to implementation of educational objectives in a given setting. -4 Plan a sequence of learning opportunities building upon, and reinforcing mastery of preceding objectives. -5 4. Match educational content of training to training objectives. | <ul style="list-style-type: none"> -6 Course work or training in health education, adult learning theory, public health theory. | | |
| Assess the effectiveness in identifying training needs. | <ul style="list-style-type: none"> -2 Pretest learning to ascertain present abilities and knowledge relative to proposed program objectives. -3 Perform evaluation of exercise activity, drills, and actual incidents to identify future training needs. -4 Coordinate training needs which have been identified during preparedness planning. | <ul style="list-style-type: none"> -5 KY Dept. of Public Health, MAPP -6 Community assessment training -7 KY EM exercise evaluation | | |
| Demonstrate knowledge of the Incident Command System and its components. | <ul style="list-style-type: none"> -2 Provide training on NIMS and ICS. -3 Respond to incidents using ICS. -4 Evaluate ICS and NIMS execution in exercises, drills, and actual incidents. | <ul style="list-style-type: none"> -5 IS-100 -6 IS-200 -7 IS-700 -8 IS-800 -9 ODP WMD ICS | | |
| Understand the design and implementation of training plans. | <ul style="list-style-type: none"> -2 Evaluate exercise activity. -3 Assist with After Action Reports. -4 Identify training needs as part of the evaluation. -5 Identify the different types of exercises (tabletop, drill, function, and full-scales) and understand the scope and purpose of each. | <ul style="list-style-type: none"> -6 Exercise Design and Evaluation, An Introduction to Community Exercise (KY EM) | | |

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| <p>strate an standing of tucky Health National Core ons of Public and the essential Health s.</p> | <ul style="list-style-type: none"> -2 Plan training for emergency/disaster response in coordination with the core functions of public health. -3 Target training for public health professionals within the scope of the ten essential public health services. -4 Know public health's possible roles and responsibilities to public health emergencies. | <ul style="list-style-type: none"> -5 HHS, Basic Public Health Course -6 KPHLI -7 TRAIN -8 Columbia University Emergency Core Competency for all Public Health Workers | | |
| <p>strate ence in the ogy of r and m.</p> | <ul style="list-style-type: none"> -2 Conduct training on the mental health needs of responders to disaster and terrorism. | <ul style="list-style-type: none"> -3 KCCRB Psychology of Disaster TTT | | |
| <p>strate l diversity/ ence.</p> | <ul style="list-style-type: none"> -4 Obtain information about social and cultural environments, needs and interest of targeted audience. -5 Train responders to plan and prepare for special needs populations. | <ul style="list-style-type: none"> -6 Cultural competency and/or special population training -7 Emergency Preparedness for Elders Daycares, Schools, Non-English Speaking, etc. | | |
| <p>strate ence in g for all s planning.</p> | <ul style="list-style-type: none"> -2 Train personnel and community in areas such as first aid, CPR, family disaster planning, tornado, earthquake, flood, evacuation, shelter in place, fire, and power outage emergency preparedness, implications, and possible response in coordination with existing business continuity plans. | <ul style="list-style-type: none"> -3 First Aid Certification -4 CPR certification -5 CERT, EM 101 | | |
| <p>strate ence in ive nication, ogical, and er tions.</p> | <ul style="list-style-type: none"> -6 Act as a regional point of contact for TRAIN. -7 Assist with the training for Health Alert Network. -8 Facilitate and coordinate KY Teleconference, satellite, and datacast, webcast trainings and | <ul style="list-style-type: none"> -11 KYDPH, Basic Computer class i.e. college, technical school etc. | | |

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| | <p>meetings.</p> <p>-9 Develop PowerPoint presentations and trainings to address training needs when appropriate.</p> <p>-10 Assist with training on communication equipment such as satellite phones.</p> | | | |
| strate ence in risk nification. | <p>-2 Train community partners and public information officers in risk communication.</p> <p>-3 Train public information officers to act within the appropriate chain or command and joint information systems.</p> <p>-4 Demonstrate knowledge in risk communication and joint information centers and systems.</p> | <p>-5 Risk Communication Training/PIO Training</p> <p>-6 IS-700/800 (CDC, EMI, KYEM)</p> | | |
| strate dge of al, eal, gical, t, and ve ncies and e. | <p>-2 Assist with training for public health response to CBRNE as outlined in emergency response plans.</p> | <p>-3 Weapons of Mass Destruction</p> <p>-4 BT 101</p> | | |
| strate dge of the ic National le program. | <p>-5 Train public health professionals, medical community, and volunteers on the resources available through SNS.</p> <p>-6 Train public health professionals, medical community, and volunteers on the receipt, management and distribution of SNS as outlined in emergency response plans (mass vaccination/distribution).</p> | <p>-7 CDC SNS training module, KY DPH</p> | | |
| strate dge of al protective ent and ive ions ted with e biological | <p>-2 Train public health professionals, first responders, medical community, and volunteers on proper handling and protective equipment when responding to biological events.</p> | <p>-3 OSHA</p> <p>-4 Epi Training</p> | | |

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| <p>s and g infectious</p> | | | | |
| <p>strate ence in idemiology les and s.</p> | <p>-5 Incorporate basic epidemiological principles into training.</p> | <p>-6 Epi for Everyone -7 College Epi course -8 Epi Rapid Response Team Training</p> | | |
| <p>community ations, e people ential s for t and ce in e to public emergencies.</p> | <p>-9 Promote preparedness and response training to regional community organizations, resource people and potential partners. -10 Maintain working relationships with regional community organizations, resource people and potential partners. -11 Coordinate training with community organizations, resource people and potential partners.</p> | <p>-12 CERT and MRC TTT</p> | | |

Appendix 3

CDC/Public Health Competency Handbook 2002
 Columbia
 University School of
 Nursing Center for
 Health Policy

Preparedness Coordinator Competencies

| Competency | Sub-Competency | Possible Training | This candidate has demonstrated competency in this by (this column to be completed by mentor): | Date Completed |
|------------|--|--|--|----------------|
| Leadership | <ul style="list-style-type: none"> -2 Receptive to new ideas and innovative solutions and modifies own thinking and behavior accordingly. -3 Promotes the development of a shared vision for organizational success. -4 Is able to operationalize the mission of the organization within personal scope of work. -5 Promotes need to understand “present reality” to determine strategies to reach vision of “preferred future.” | <ul style="list-style-type: none"> -2 KPHLI (Kentucky Public Health Leadership Institute) -3 On-line courses per http://www.sph.unc.edu/nccphp for: -4 BT Leadership -5 Public Health Ethics | | |

| Competency | Sub-Competency | Possible Training | This candidate has demonstrated competency in this by (this column to be completed by mentor): | Date Completed |
|---------------|---|---|--|----------------|
| Leadership | <ul style="list-style-type: none"> -2 Understands and supports the contribution of other agency programs relative to achieving the public health vision, mission. -3 Promotes the formulation of a collective vision for a healthier community. -4 Facilitates a dialogue among multisector organizations and stakeholders about strategies to attain and sustain healthier communities. -5 Participates with other components in community health system to create systems that support health. -6 Influence the use of community resources to promote public health mission and vision. -7 Supports both community institutions and organizations in their efforts to improve community way of life. -8 Manages program within budget constraints. | <ul style="list-style-type: none"> -6 Grant Writing & Budgeting for Public Health Programs -7 On-line courses per http://www.nynj-phtc.org for: -8 Introduction to Public Health (for those without a Public Health background) -9 Comprehensive Curriculum Resource (for those without a Public Health background) -10 Understanding Budgets -11 Mentoring Program | | |
| Communication | <ul style="list-style-type: none"> -2 Establish emergency communications roles and responsibilities for bioterrorism/emergency response. -3 Ensure, coordinate, or contribute to the development and | <ul style="list-style-type: none"> -2 Basic Public Speaking Class -3 Basic PowerPoint Technique Class -4 Basic Risk Communication Class -5 FEMA Basic Public Information Officer Class -6 Cross-Cultural Communications available on-line at www.nynj-phtc.org -7 Health Alert Network Module available on https://ky.train.org -8 Limited English Proficiency Module available on | | |

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| <p>delivery of accurate event-specific, science-based risk communication messages to the public, to health care providers, to the media, and to the response community during a bioterrorism/emergency event.</p> <p>-4 Generate a bioterrorism/emergency response plan for the public health information staff that is integrated with the emergency response plan for the agency.</p> <p>-2 Maintain a system for 24hr/7days notification or activation of the public health emergency response system.</p> <p>-3 Identifying and recommending participants to receive access to the Kentucky Health Alert Network (KyHAN) collaboration tools.</p> <p>-4 Gather and enter applicable demographic data from local health responders and stakeholders identified by local planning activities. media This data will be entered into the state role based contact directory via the Internet.</p> <p>-5 Maintain the accuracy of this data by periodic testing of local communication infrastructure and phone/email based follow up.</p> <p>-6 Gather applicable</p> | <p>https://ky.train.org</p> <p>-9 Psychology of Disaster and Terrorism sponsored by the KCCRB (Ky. Community Crisis Response Board)</p> <p>-10 Risk Communication available on line http://a2a38.a2hosting.com/zope/riskcomm/overview</p> <p>-11 Terrorism, Preparedness and Public Health available on-line http://www.ualbanycphp.org</p> | | |
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| <p>demographic data from individuals in the community who can assist in risk communication activities (i.e., spokesperson, news outlet).</p> <ul style="list-style-type: none"> -7 Enter this data into state role based contact directory via the Internet and maintain the accuracy of this contact data by periodic review. -8 Develop and expand relationships necessary to improve the capacity (in conjunction with Department for Public Health and Ky. Emergency Management public information officials) to communicate immediately and reliably with the public, healthcare providers, the response community, the media, and elected officials. -9 Demonstrates cultural sensitivity in interactions with communities served. -10 Teaches and counsels community members at level of understanding. -11 Knows public health organization mission and priorities. -12 Listens and learns in order to adapt personal and professional behavior to culturally unique needs of organization members. -13 Speaks and writes clearly and concisely in language tailored to the audience. -14 Is able to project the mission of the organization to constituencies within organization. -15 Uses technology to | | | |
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| | <p>facilitate communication among individuals and groups within the organization.</p> <ul style="list-style-type: none"> -16 Understands social and marketing principles and consumer behavior. -17 Projects message of public health to community constituents with level and content of message appropriate to audience. -18 Promotes culturally sensitive and relevant dialogue regarding community health issues. -19 Able to work with media to increase public's knowledge of and support for public health. -20 Communicates effectively both in writing and orally, or in other ways. -21 Advocate for public health programs and resources. -22 Leads and participates in groups to address specific issues. -23 Uses the media, advanced technologies and community networks to communicate information. -24 Effectively presents accurate demographic, statistical, programmatic, and scientific information for professional and lay audiences. -25 Designate or serve as a media spokesperson during a bioterrorism or emergency event. | | | |
| Information Management | <ul style="list-style-type: none"> -2 Facilitates the sharing of client information by providers within legal and ethical constraints. (i.e., | <ul style="list-style-type: none"> -2 Needs Assessment Training -3 MAPP Training | | |

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| <p>immunizations, etc.)</p> <ul style="list-style-type: none"> -3 Collects information regarding current health research, treatment effectiveness, and/or innovative programs for dissemination within organization. -4 Collects and utilizes data on community infrastructure including social, economic, and political indicators. -5 Collects data on organization operations: programs, resources, services, constituents/clients served, etc. for planning, evaluation, and accountability purposes. -6 Promotes use of appropriate technology to facilitate data organization, retrieval, and utilization. -7 Provides ongoing training and technical assistance to organizational members to improve data collection methods and utilization of information. -8 Identifies and organizes information on community resources: social services, educational, political, business, faith communities, support systems, etc. -9 Identifies and organizes information about local health (public and private) system: referral networks, providers, prevention-oriented organizations, alliances, etc. -10 Collaborates with other health system and public agencies to facilitate the | <ul style="list-style-type: none"> -4 KYEPHRS System and Tools Training available through KY DPH | | |
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| | transmission of data in format that can be utilized by policy makers. | | | |
| Assessment, Planning & Evaluation | <ul style="list-style-type: none"> - Under the direction and coordination of the Division of Epidemiology and Health Planning through the Public Health Preparedness Branch, will facilitate a process for strategic direction, coordination, and assessment of public health emergency preparedness activities. This structure will establish a coordinated and integrated process for setting goals and objectives, implementing work plans with timelines, monitoring progress and allocating resources. - Develop, exercise, and evaluate comprehensive public health preparedness and response plans (All Hazards Emergency Operations Plans). - Develop scalable plans that support local, regional, and statewide responses to incidents of bioterrorism, catastrophic infectious disease, such as pandemic influenza, other infectious disease outbreaks, and other public health threats and emergencies. - Plans should include the development of crisis mental health services. - Plans should include emergency mutual aids and/or compacts. - Plans should include hospitals and other medical care providers. - Develop and maintain a Strategic National | <ul style="list-style-type: none"> - Participate in quarterly meetings held by staff from the Public Health Preparedness Branch for technical guidance in issues related to preparedness assessment, planning, exercises, and evaluation. - Participate in video conferencing held between quarterly meetings for opportunities to receive additional assistance from state staff with the ability to interact. - Needs Assessment Training (i.e., MAPP or PACE-EH Training) - Epi Training (ERRT) available on line at https://ky.train.org - FEMA on-line courses available at www.fema.gov - IS 100 an introduction to Incident Command System - IS 200 ICS for Single Resources and Initial Action Incidents - IS 700 National Incident Management Systems-Introduction - IS 800 National Response Plan-Introduction - Comprehensive Exercise Curriculum (CEC) - Master Exercise Practitioner Program (MEPP) -2 The following courses are available on line at www.sph.unc.edu/nccphp -3 Public Health Agency Emergency Planning I & 2 -4 Bioterrorism/Disasters -5 Bioterrorism Public Health -6 Bioterrorism Agents -7 Bioterrorism Pharmacy -8 Bioterrorism Mental Health -9 Bioterrorism Technology -10 Chemical Terrorism -11 Disaster Planning & Recovery -12 Risk Assessments -13 Standards, Assessments & Audits -14 Sedgwick County MMRS: Mass Pharmaceutical Dispensing Medication Prep Video -15 CDC-Preparedness Programs -16 Mentoring Program with a designated planner or emergency manager. | | |

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| <p>Stockpile preparedness component within the organization's All Hazards Emergency Operations Plan. These plans should include detailed preparations to receive, store, manage, and rapidly administer vaccines, and other pharmaceuticals to large populations.</p> <p>Plans and maintains population and environmental surveillance systems to identify health problems in community by magnitude, duration, trends, and population at risk.</p> <ul style="list-style-type: none"> - Participate in planning and implementation of KyEM regional HAZMAT teams, and integrate team capacities into local and regional response activities. -2 Collaborate with KyEM to plan, execute, and analyze regional "all hazards" exercises that will stress regional planning strategies. -3 Exercise all plans annually to demonstrate proficiency in responding to bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies. -4 Analyze, revise, and update local and regional plans in accordance to deficiencies recognized through exercises. - Progressing gradually in exercise proficiency from instructional tabletop exercises to executing | | | |
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| <p>mock drills for receiving, managing, and dispensing prophylactic medications or vaccines from the Strategic National Stockpile.</p> <ul style="list-style-type: none"> - Collaborate with community and regional partners to identify, organize, and train volunteers that will be needed to staff response activities. - Implement a volunteer credentialing process. - Maintain updated listing of volunteers. - Complete an integrated assessment of public health system capacities related to bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies to aid and improve planning, coordination, and implementation using the assessment tool: CDC Local Emergency Preparedness Response Inventory, 8/2003. Collaborating with regional emergency response partners will do this. - Conduct vulnerability and threat assessments related to chemical or radiological material and collaborate with emergency preparedness partners to develop regional response strategies. - Collects and utilizes community information and data that provide a context for analyzing health problems and seeking acceptable | | | |
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| <p>interventions.</p> <ul style="list-style-type: none"> - Evaluates interventions according to effectiveness, economic feasibility, and acceptability to targeted population and community at large. - Assesses the capacity of the organization to meet community needs and expectations. - Identifies the need for, and the direction of, adaptation and change within the organization. - Surveys the community as to perceived needs and priorities. - Communicates health status data to community. - Develops process for participatory planning with community. - Develops strategy to strengthen community infrastructure and to mobilize community support. | | | |
| <p>Partnership & Collaboration</p> <ul style="list-style-type: none"> - Ensure interagency collaboration to enhance local, regional, and statewide readiness. - Collaborate and coordinate with all local and regional emergency response partners (i.e., KEMA, Hospitals, clinics, physicians, nurses, pharmacists, veterinarians, law enforcement, local government, emergency medical services, fire and rescue, HAZMAT, transportation agencies, etc.). - Collaborate with hospitals, pharmacies, and other medical resources to develop antibiotic inventories to prophylaxis | <p>-2 The Community Based Emergency Response Program sponsored by The Group http://www.health.loukymetro.org</p> | | |

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| <p>local first responders within the first 6 hours of an event.</p> <ul style="list-style-type: none"> - Collaborate and coordinate with county Ky. Emergency Coordinators and Managers to plan medical response strategies for Annex M for each county KyEM Emergency Operations Plan. - Collaborate with HRSA (Health Resources and Services Administration) regional preparedness partners to ensure: <ul style="list-style-type: none"> - Integration of county and regional planning and response strategies - Effective coordination with state and federal response assets - Mutual cooperation with hospitals, the medical community, and others to plan critical health and mental health services - Development of strategies for management of mass casualties and mass shelter or treatment facilities. -2 Collaborate and coordinate with emergency response partners in border states. Public health planners from local and district health departments that lie on state borders will attend interstate meetings for discussion of the Strategic National Stockpile deployment and distribution strategies. -2 Facilitates interaction among groups to communicate needs and identify effective solutions to health problems. | | | |
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| | <ul style="list-style-type: none"> -3 Catalyzes and facilitates organizational change through building a shared vision of success. -4 Encourages cross training and transfer of skills. -5 Provides opportunities for diverse talents and perspectives to be utilized in cross-functional councils or quality improvement teams. -2 Emphasizes service delivery built on community partnerships and coalitions. -3 Collaborates with other agencies in common and coordinated efforts. -4 Is knowledgeable about community resources to meet needs and improve health status. -5 Utilizes group processes to organize and catalyze community constituents to improve health status. | | | |
| Systems Linking | <ul style="list-style-type: none"> -2 Shows outcomes and benefits of prevention and preparation in order to get communities to take responsibility for their own health. -2 Is receptive to new ideas and innovative solutions and modifies own thinking and behavior accordingly. -2 Promotes and manages change as a process for positive growth and continuous quality improvement. -3 Generates organizational policy, processes, and procedures to support performance of core public health functions and provision of essential health services. | <ul style="list-style-type: none"> -2 Bioterrorism Policy and Planning and Public Health Law are available on line @ www.sph.unc.edu/nccphp | | |

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| | <ul style="list-style-type: none"> -4 Acknowledges that a problem exists and involves stakeholders at all levels of the organization in its solution. -2 Understands that a public health organization is one component of a dynamic community health system in a time of rapid change and role redefinition. -2 Provides health-related data and information showing relationships, trends, and patterns in a format that is clear and useful to community policy makers. -3 Anticipates consequences of alternate solutions to community health problems. -4 Involves relevant stakeholders in the definition and the formulation, implementation, and evaluation of the solution. -2 Participates with the other components of health system in ensuring conditions with the community in which people can be healthy. | | | |
| <p>promoting health & preventing disease</p> | <ul style="list-style-type: none"> -2 Knows disease process in individuals; understands the determinants of disease and the appropriate care interventions. -3 Provides disease prevention and clinical care services in a manner consistent with the mission, priorities, and resources of the health organization. -4 Maintains surveillance methodology to determine the incidence and | <ul style="list-style-type: none"> -2 ERRT Training Modules -3 SARS Module -4 Pandemic Influenza Module -5 UK Disease Surveillance Module -6 These are all available on https://ky.train.org -7 CDC Preparedness Programs | | |

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| <p>prevalence of disease in individuals and communities.</p> <ul style="list-style-type: none">-2 Knows current guidelines for prevention, disease intervention, and therapy including the etiologic, risk, and contributing factors related to communicable disease.-2 Provides technical assistance in epidemiological interpretation of data.-3 Maintains established professional standards (i.e., medical licensure, certification, etc.).-4 Knows and communicates morbidity and mortality patterns in communities.-5 Acts as a community resource through surveillance and investigation of health hazards.-2 Provides recommendations to community constituents regarding improvement of health status through interruption of disease transmission patterns and modification of environmental, occupational, and behavioral risk factors.-3 Provides training and technical assistance to employers/businesses related to improved sanitation and/or safety techniques.-4 Enforces current standards of sanitation and safety.-5 Knows other community resources with similar mission and/or responsibilities. | | | |
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Assessment and Certification Process

- 1 All Epidemiologists, Preparedness Planners, and Preparedness Training Coordinators are to participate in a Mentoring Program
 - To be determined by State
 - Recommend: at least 2 days per month for six months with a subject matter expert.
- 2 Upon completion of Mentoring Program, the Mentor will evaluate the Mentee based upon the Competency Set and check-off areas met.
- 3 Kentucky Public Health Preparedness Examining Committee (to include local Epidemiologists, Preparedness Coordinators, and Training Coordinators) to review all training certificates to ensure that all competencies are met.
- 4 Certification issued by State Dept. for Public Health based upon completion of Mentoring Program as well as completion of approved trainings that address all competency areas.
- 5 Education/Degree curriculum will be considered and can substitute for required trainings.
- 6 To maintain certification, 12 hours of CEUs must be completed each year.
- 7 CEUs must be reported to the Examining Committee on a yearly basis by submitting copies of certificates. (utilize TRAIN as an electronic tracking device)
- 8 The Examining Committee will maintain a database of certified personnel.
- 9 All current employees with more than 1 year experience as an Epidemiologist, Public Health Preparedness Coordinator, or Public Health Preparedness Training Coordinator will be credentialed in based upon the trainings completed and experience.
- 10 All employees with less than 1 year experience shall complete the competency-based curriculum and mentoring program.

Mentoring Component

- 1 Mentor selection
 - Must have 2-3 years experience in current position.
 - Must volunteer to be in program.
 - Must complete recommended Mentor Training Program.
 - Must be willing to dedicate 2 days per month to Mentee.
 - Must be willing to dedicate other time as needed to do evaluation and answer questions the Mentee might have.

Mentor will be assigned by the Examining Committee.

Appendix 5

| Kentucky Department for Public Health Program Implementation Checklist | | | |
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| Not Started | In progress | Complete | |
| | | | Establish Kentucky Public Health Preparedness Examining Committee |
| | | | Identify/develop trainings thru the Kentucky Department for Public Health or Schools of Public Health based on competencies identified. |
| | | | Conduct an assessment of the applicability of the competency sets. (ex. CSTE assessment of Applied Epidemiology Competencies) |
| | | | Credential Existing staff based upon competency based training. |
| | | | Establish and maintain a database of certified Public Health Preparedness Staff (utilize ESAR-VIP) |
| | | | Recruit/train mentors from credentialed staff. |
| | | | Implement Public Health Preparedness credentialing program for new hires. |