

# Public Health Preparedness Education: Why Are Available Resources Not Utilized?

## Kentucky Public Health Leadership Institute Scholars:

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## **Mentor:**

### **Swannie Jett; Dr.P.H.c, M.S.**

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## **EXECUTIVE SUMMARY:**

Imagine having to evacuate your home at a moment's notice. What would you take? How would you survive if basic utilities were disrupted? These are difficult questions to answer, but the time to address them is now, not when a disaster strikes. As public health employees, we know the key is to be proactive and not reactive when planning for disasters. While there are numerous resources available for the public to use to assist in their own preparation for disasters, the reality is many people are not ready.

Although emergency response officials will be on the scene of a disaster, they may not be able to assist everyone immediately. People must plan ahead in an effort to protect themselves and their families.

This KPHLI team collected qualitative data by sending a survey to all LHD directors to be dispersed throughout their agencies and communities. The results indicate 73% of participants thought it was “*possible to very likely*” of an emergency event occurring. However, only 34% felt prepared for an emergency event. Other data revealed 37% felt the best method to educate was through the media, while 35% felt collaboration with community partners was the best method of preparation.

As a result, this KPHLI team developed an educational tool that can be used in a variety of settings. The concept is basic disaster preparedness with the content being appropriate for schools, faith-based settings, or any other community education venue. The video could also be utilized for public service announcements and social networks.

## **INTRODUCTION/BACKGROUND:**

Past experiences have revealed many people are not prepared for disasters. Previous disasters from Gulf Coast hurricanes to the most recent earthquake/tsunami devastation in Japan, illustrate major events are possible. Unfortunately, some people think ‘it’s not going to affect me’ or ‘I’ll have time to prepare’.<sup>1</sup> Safe America Prepared conducted a survey of 641 people asking, “What is the main reason people are not prepared during a disaster?” Forty-three percent saw a limited perceived threat of disaster; 32% had a lack of concern; consistently 13% claimed the government would take care of them.<sup>2</sup>

Although, state and local agencies have resources and personnel to help communities prepare, many people are not prepared for disasters such as tornadoes, fire, and floods. While agencies have plans in place to respond to emergencies, it is not realistic to think they will reach all of those affected immediately. The focus of our research is to understand why resources are not being utilized and identify media to better assist individuals in preparing for disasters.

From area flooding to special needs shelters, the members of this KPHLI team have worked in disaster response. Experience has indicated many people are unprepared. Despite the efforts of emergency management agencies and local preparedness

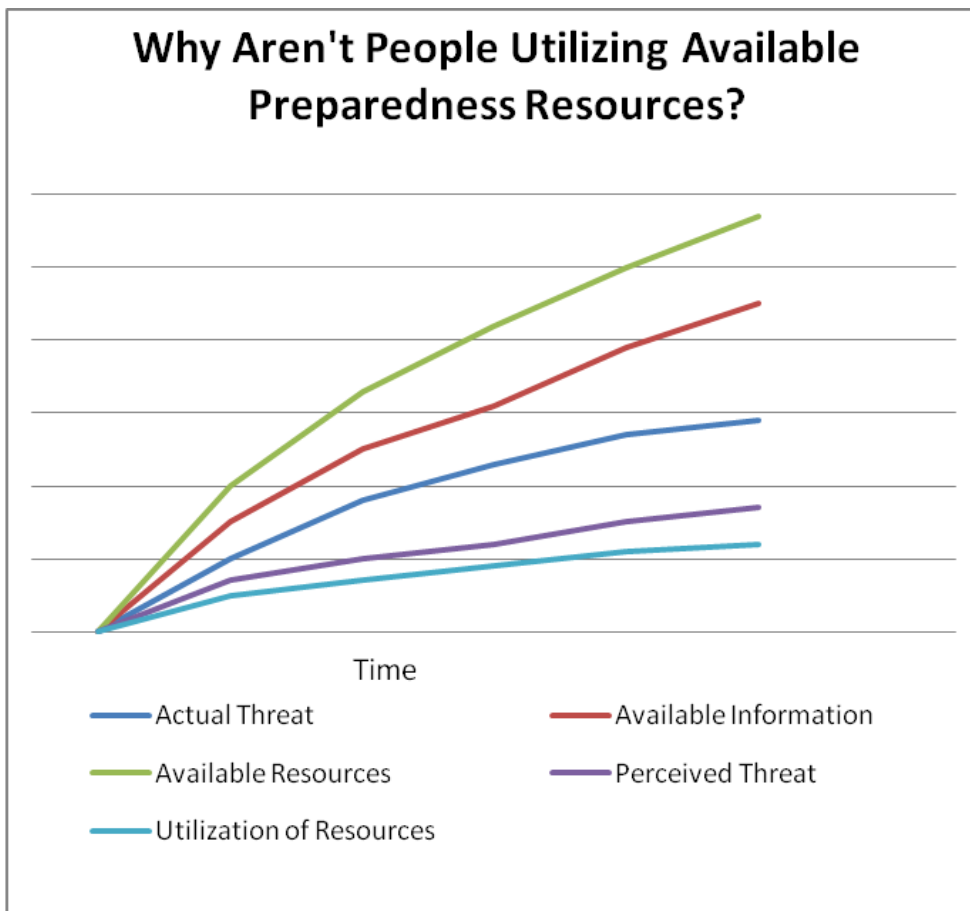
coordinators to educate their communities in personal/family disaster preparedness, there is a sense of complacency. What will be the tipping point for all people to have disaster kits and plans?

The benefits of preparedness are real. As indicated by the Federal Emergency Management Agency, being prepared can reduce fear, anxiety, and losses that accompany disasters. Communities, families, and individuals should know what to do in the event of a fire and where to seek shelter during a tornado. They should be ready to evacuate their homes, take refuge in public shelters, and know how to care for their basic medical needs.<sup>3</sup>

***Problem Statement:***

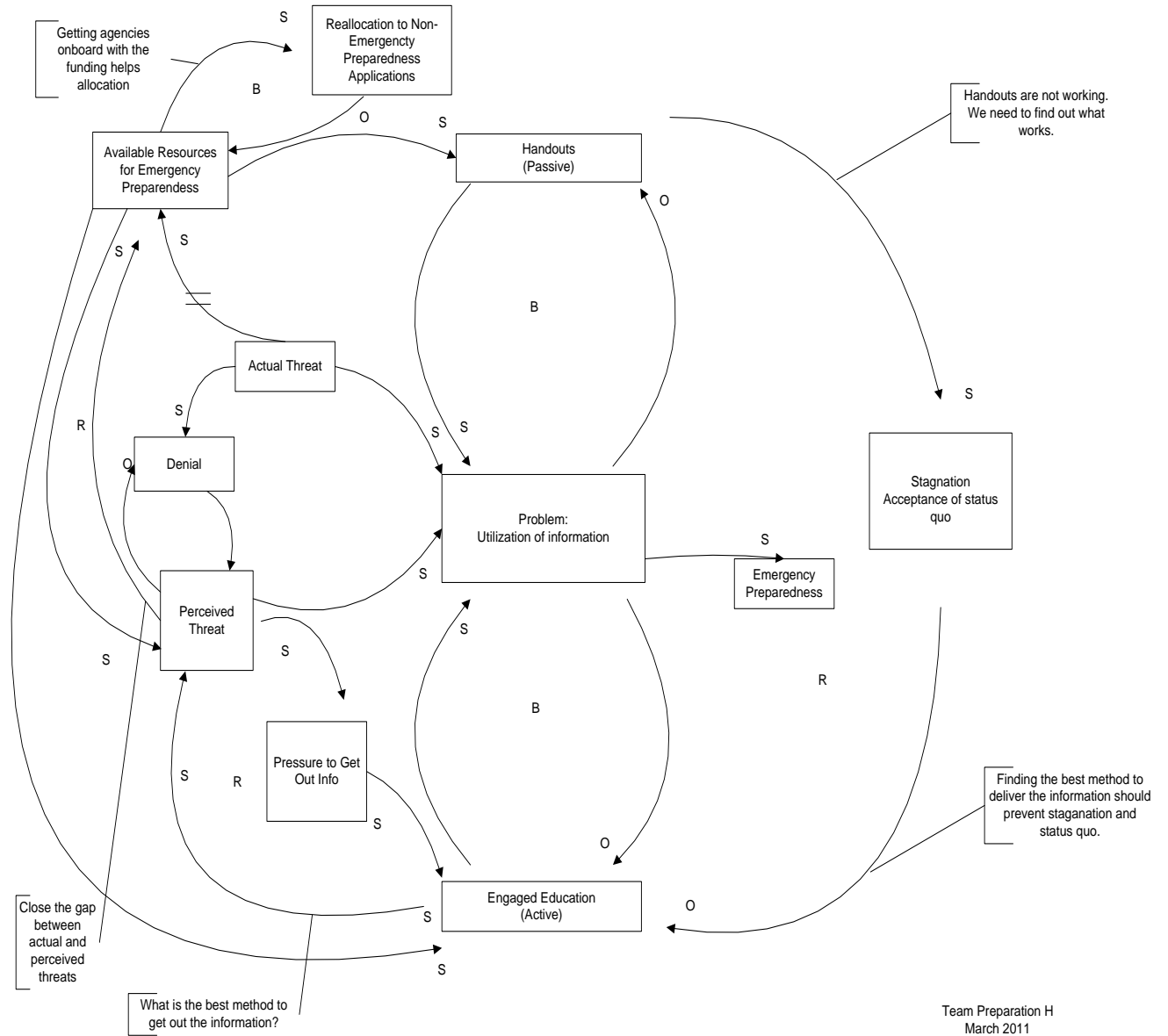
Despite current educational methods, why are people not utilizing available public health emergency preparedness resources?

***Behavior Over Time Graph:***



**Figure 1: Graph noting the use of resources in relation to available resources and actual threats and perceived threats.**

**Causal Loop Diagram:**



Team Preparation H  
March 2011

**Figure 2: Diagram notes the increase awareness of problem (Perceived Threat) as well as awareness of solution (engaged education leading to greater preparedness).**

*10 Essential Public Health Services/National Goals Supported:*



**Figure 3: From CDC National Public Health Performance Standards Program**

In 1994 the Core Public Health functions Steering Committee defined a framework of 10 Essential Public Health Services (EPHS) to guide local health systems in providing services. This KPHLI project focused on EPHS #3.

- EPHS #3 “Inform, Educate and Empower People about Health Issues”

EPHS #3 includes providing health information, health education, and health promotion activities designed to reduce health risk and promote better health. Making health information and educational resources accessible are also included in this essential service.<sup>4</sup>

The preparedness goal for Healthy People 2020 is to “Improve the Nation’s ability to prevent, prepare for, respond to, and recover from a major health incident.”<sup>5</sup> The National Health Security Strategy of the United States of America (NHSS) is the basis for the Healthy People 2020 preparedness objectives. The NHSS is a strategy mandated by the United States Congress to focus on protecting people’s health before, during and after an incident.<sup>6</sup> The NHSS has two goals supported by ten objectives. This project addresses the following:

- NHSS Goal: Build Community Resilience
- NHSS Objective: Foster informed, empowered individuals and communities.

The National Public Health Performance Standards Program (NPHPSP) developed standards designed around the EPHS. These National Public Health Performance Standards will help assure a strong public health system. This project addresses:

- CDC NPHPS 3.1 Health Education and Promotion

To accomplish this standard the Local Public Health System must:

- Provide the public, policymakers, and stakeholders with information on community health status and health needs in the community, as well as information on policies and programs that can improve community health.<sup>7</sup>
- Plan, conduct, and evaluate targeted health education and health promotion activities to develop and enhance knowledge and attitudes and assist in lowering risk or changing negative behaviors.<sup>7</sup>
- Works with other entities within the system on health education and health promotion activities that facilitate healthy living in healthy communities.<sup>7</sup>

## **PROJECT OBJECTIVES/DESCRIPTION/DELIVERABLES:**

The objectives of Preparation H are to:

- Research levels of preparedness of people
- Understand why people are not prepared
- Provide methods to better inform people on how to be prepared

The deliverables:

- Qualitative data
- Educational video

## **METHODOLOGY:**

Although information is readily available to inform people on how to prepare for emergencies, this KPHLI team knew from experience that many are unprepared. Using the causal loop diagram, the quick fix could be to distribute educational handouts detailing how to prepare for disasters. However, our literature review reveals handouts are not used by all people and often, the importance of preparing for an emergency may not be demonstrated in print. A long term fix is to develop engaged educational methods such as community classes, videos and public service announcements.

The next step was to provide a better understanding of people's level of preparedness. A survey was developed, vetted, then distributed via Survey Monkey.<sup>5</sup>

## **RESULTS:**

The survey polled 468 people. The majority of participants were white females between 40-59 years of age with varying degrees of college education. Seventy-four percent responded the occurrence of an emergency event would be *possible to very likely*.

However, only 34 percent polled felt they were prepared for such an event. The gap between these two questions is the basis for the project and it is our intent for this survey to be a springboard to better inform people. Of those polled, 36 percent indicated the media was the best method to help people prepare for emergency events. Also, 37 percent felt it was necessary to collaborate with community partners to reach people. Only 22 percent responded that the traditional means of educating the public through brochures and community classes were the best methods. The majority polled indicated supplies would better prepare them for an emergency event. Others mentioned information on packing supplies, an assistance hotline, and internet website are resources that would better prepare them for an event.

In an effort to get a large and diverse sampling, it was the intention of this KPHLI team to email the survey to all contacts on the state's global network. Due to the Cabinet for the Office of Technology's (COT) policy, we were unable to do so. We were given permission to send the survey directly to local health department directors and preparedness coordinators. Therefore, we recognize the limitations to the survey as the majority of participants are local public health employees.

Utilizing the available data, the team proceeded in developing an educational video to reach a variety of stakeholders through use of multimedia and social networking. The video was designed to be informative, yet attention grabbing. A previous KPHLI team collaborated with EdTV, a television station operated by residents of the Kentucky State Reformatory, to make a quality video. It was our good fortune to have EdTV produce this video. The team provided PowerPoint slides, home video, pictures, skits, and dialogue to Correctional Staff who supervised the EdTV residents. The technology and creativity of the EdTV residents made the video a quality product to captivate stakeholders' attention and convey a persuasive message. They appropriately titled the video and theme song "Be Prepared".

## **CONCLUSIONS:**

We would encourage any future KPHLI teams, choosing to conduct a survey, to start immediately. This was a tedious process and we thank our mentor for his perseverance and encouragement to pursue this part of our project. The results provided data to support our focus question and helped us design an educational tool that can be used by many collaborating agencies.

The literature review revealed collaboration with other community partners is imperative. As we engage with our faith-based groups, local officials, emergency management, school systems, etc, we can reach more people and demonstrate how individuals can prepare for emergencies. The informational video is appropriate for a variety of settings and audiences and designed to motivate people to begin preparing for disasters. It would be a great resource and method for community partners to utilize as they encourage people to be involved in their own planning process and development of kits.

Furthermore, the limitations of the research project included a convenience sample provided through the Department of Health (DPH) employees completing the survey. The ideal scenario would have been distribution to a broader community for input. Many local DPH employees are familiar with emergency planning therefore the quantitative portion of this project maybe slightly skewed. Despite the aforementioned, the qualitative review supports the survey findings and provides validity for this project. Throughout our literature review, the overarching theme is community resilience. Preparedness is critical for protecting and securing the health of our communities. We must empower individuals to be self-sufficient for at least three days during a disaster. In order to get individuals planning and preparing for an emergency, they must have the knowledge and the resources to know how to care for themselves. It is our desire that this educational video will have such an impact that people go out and make their individual/family preparedness kits.

## **LEADERSHIP DEVELOPMENT OPPORTUNITIES:**

### ***Regene' Collier***

This past year as a KPHLI scholar has been a very growth producing experience both personally and professionally. I have become aware why seemingly obvious solutions to problems are often only “quick fixes” and thereby create larger problems. I have improved my communication skills, thereby being more direct and more skillful in managing those “critical conversations”. These two learning experiences alone have been invaluable to me as continual changes have been required at my agency since I began my position as Nurse Administrator three years ago. Participating in KPHLI and working with my team on our Change Master Project has been a wonderful networking and learning opportunity. I am thankful to each of my team members Mike, Andrea, and Tim, our mentor Swannie Jett and to Scott Lockard.

### ***Mike Harmon***

This past year as a KPHLI scholar has been a wonderful and busy experience for me. I have been exposed to many things that I will never forget such as my team, the summits and the information provided. I have learned a lot about myself, not only in the workplace, but in my personal life as well. The 360, the social styles and emotional intelligence assessments were of great benefit to me. Those results made me feel that I was doing some really good things and also opened my eyes to some things that I needed to pay attention to. Good stuff. My Change Master Project group was awesome. I would like to thank Andrea Renfrow, Tim Wright, Regene' Collier and our mentor Swannie Jett for being professional, flexible when scheduling and most of all, being team players.



***Andrea Renfrow***

My KPHLI experience has afforded me many opportunities for professional growth, self-reflection, and networking. It is with a great sense of pride that I am implementing the complex concepts learned throughout the year into my daily routine. Initially, when I was selected as a scholar, my impression was the entire year would revolve around the *Change Master Project*. However, one of the most valuable aspects of KPHLI is the Individual Development Plan and the opportunity for self-analysis. The assessment tools provide a wealth of feedback and have helped me strengthen areas both personally and professionally providing me with a greater sense of self-awareness. Overall, I feel fortunate to participate in the KPHLI experience. I collaborated with a fantastic team and supportive mentor and forged valuable relationships that will continue long after graduation.

***Tim Wright***

My experience with KPHLI has been very helpful with improving my leadership skills. The tools we used to evaluate ourselves and others evaluate us was very beneficial. These tools made me more aware of my weakness as a leader and also helped me identify my strengths. When I implement the things I have learned about me and my leadership skills, it will make me a better person and leader. I would recommend KPHLI to others that wanted to get to know themselves and improve their leadership skills.

## REFERENCES

1. Most People Unprepared for Disaster. USA Today. [http://www.usatoday.com/new/nation/2006-12-17-prepare\\_x.html](http://www.usatoday.com/new/nation/2006-12-17-prepare_x.html). Published 2006. Accessed January 1, 2011.
2. What is the Main Reason People Are Not Prepared During a Disaster? Safe America Prepared. <http://www.safeamericaprepared.org/component/poll/14-joomla-is-used-for.html>. Published 2011. Accessed 1/13/2011.
3. Are You Ready. FEMA. [http://www.fema.gov/areyouready/why\\_prepare.shtm](http://www.fema.gov/areyouready/why_prepare.shtm). Updated August 11, 2010. Accessed March 24, 2011.
4. Centers for Disease Control and Prevention. 10 Essential Public Health Services. Centers for Disease Control and Prevention Website. <http://www.cdc.gov/nphpsp/essentialServices.html>. Updated December 9, 2010. Accessed March 23, 2011.
5. Healthy People 2020. U.S. Department of Health and Human Services Website. <http://www.health.gov/healthypeople/document>. Updated 2010. Accessed March 31, 2011.
6. National Health Security Strategy. U.S. Department of Health and Human Services Website. <http://www.phe.gov/Preparedness/planning/authority/nhss/Pages>. Updated 2010. Accessed March 30, 2011.
7. National Public Health Performance Standards Program. Centers for Disease Control and Protection. Website. <http://www.cdc.gov/od/ocphp/nphpsp/index.htm>. Updated 2010. Accessed March 31, 2011.
8. Survey Monkey. <http://www.surveymonkey.com>. 1999-2011.

## APPENDIX

Your assistance is needed to acquire information on community preparedness needs. As a Kentucky Public Health Leadership Institute (KPHLI) project, our team is gathering data to establish education needs when helping individuals prepare for disasters/emergencies. It should take less than 10 minutes of your time. In an effort to gather data from a large sample, feel free to forward this survey to staff. Thank you in advance for your time.

### 1. AGE

18-24

25-29

30-39

40-49

50-59

60 and over

### 2. GENDER

Male

Female

### 3. EDUCATIONAL LEVEL

HS/GED

Some College

Associates Degree

College Degree

Masters Degree

PhD

### 4. ETHNICITY

White (non Hispanic)

Black

Hispanic or Latino

Asian or Pacific Islander

Native American

Other

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**5. SELECT ONE OF THE FOLLOWING GROUPS THAT BEST DESCRIBE YOU:**

- Local Health Department
- Emergency Management
- First Responder
- Local Official
- American Red Cross
- Business Community
- Health Care Facility
- Community

**6. WHAT IS THE LIKELIHOOD OF AN EMERGENCY EVENT OCCURRING?**

- Department for Public Health
- Unlikely
- Somewhat likely
- Possible
- Very likely

**7. AT WHAT LEVEL ARE YOU PREPARED IF AN EVENT OCCURS?  
1 is not prepared and 5 is very prepared. Please rate 1-5**

- 1
- 2
- 3
- 4
- 5

**8. DO YOU KNOW HOW TO ACCESS EMERGENCY INFORMATION TO HELP YOU PREPARE FOR A DISASTER?**

- Yes
- No

9. WHAT IS THE BEST METHOD TO HELP YOU AND PREPARE YOUR COMMUNITY FOR EMERGENCY EVENTS?

- Brochure
- Media
- Community Classes
- Collaborate with community partners
- Other (please specify)

10. WHAT CAN BETTER PREPARE YOU FOR AN EVENT (Disaster)?

- Supplies
- Information needed to pack
- Hotline to call for assistance
- Internet website
- Other (please specify)

