

Getting the Crank Out of Dodge

“The Crank Yankers”

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Crank Yankers Getting the Crank Out of Dodge

Executive Summary:

Illegal methamphetamine drug abuse has become a national epidemic. By no means are methamphetamines a new drug to this country, as they have been used clinically since the early 1900's; however, more recently the illegal recreational use has become a dark cultural stamp on many communities and a strain on law enforcement, health care and court systems. The rate at which the drug's use has increased over the past 10 years is by any standards alarming. As with any product, supply and demand certainly applies to methamphetamines. With the increase in use there has been a tremendous increase in illegal clandestine laboratories that now plague the countries rural and urban communities. In 1995 there were a mere 327 labs busted in the United States. Kentucky has not gone unaffected by the increasing popularity of methamphetamines evident by the fact that methamphetamine laboratories have increased exponentially in Kentucky by a factor of 633% over the past four years. (69 in 1999 to 569 in 2004). In addition clandestine methamphetamine laboratories have been reported in 89 of Kentucky's 120 counties.

As a result of its growing popularity, the health risks of using methamphetamines are increasing. Some of the known effects of meth use include but are not limited to, severe physical and mental addiction, tooth loss (also known as "meth mouth"), neurological effects including permanent brain cell damage, weight loss, and even death. Many public health experts fear that the drug's popularity will also lead to increased spread of disease as it is most commonly smoked or injected intravenously and associated with promiscuity and unsanitary conditions. Injuries and property damage due to explosions and fires caused by methamphetamine laboratory operators or "cooks" can be found in nearly every community, small and large, urban and rural. Indirectly, households that have users are also thought to have higher incident rates of child and spousal abuse, which also results in increased medical costs and emergency room use.

Drug treatment facilities are also experiencing difficulties due to methamphetamines and its impact on resources and staffing as Kentucky reported a 52 percent increase in admissions of users from 1998 to 2003. Sadly, these numbers continue to grow. Contributing to the concern is the fact that many of the explosive and often times toxic laboratories have now become "mobile" in order to reduce the chance of being discovered. Clandestine laboratories have been discovered throughout Kentucky in cars, trucks, motor homes, campers and boats. Additionally, the use of public facilities such as hotels, parks, restaurants, mobile home parks, and campgrounds create potential exposure to the public health workforce and general public. Outside of highways and public facilities, these groups may still be exposed or in danger with the majority of labs being found within residential communities.

In most cases, the hazardous and highly toxic waste created during the production of methamphetamines is left behind or illegally disposed of which creates additional environmental hazards. These environmental hazards create public health concerns for many years as they can contaminate soil, groundwater, and even homes. Studies have

shown that producing one pound of methamphetamine creates approximately six pounds of toxic waste that is most commonly discarded in residential drains, trash or on the ground. An issue that continues to be a mystery in many locations used to produce methamphetamines is the amount and duration of contaminants that can be found in walls, carpet and other portions of a home. Despite clean up efforts, many contaminants may linger and continue to adversely affect residents long after production has stopped.

Perhaps what is most overlooked with the use of methamphetamines is the potential for a non-user to encounter danger or violence when in proximity of a user or addict and their laboratory facility. This is evident by the fact that the Federal Bureau of Investigations has a standardized protocol for officers/agents that may encounter methamphetamine users or cooks which addresses the need to avoid personal injury when encountering a suspected user or laboratory. Today, Kentucky's local health departments have staff working in Environmental Health, HANDS, Home Health, First Steps and other programs that may be affected by methamphetamine production during their daily activities outside of the office setting. Despite the increasing risk and expanded role of the local health departments in many counties, training and educational materials for local health department staff and at risk populations is somewhat limited and many have little or no knowledge about how to recognize and/or address warning signs for the use and production of methamphetamines. Recognition, understanding and responding to social and environmental indicators and factors are now vital to preventing and avoiding exposure, injury or death for public health employees working in the field.

In 2005, Kentucky community leaders and legislators recognized the growing problem of methamphetamine production and introduced Senate Bill 63 that went into effect in June of 2005 that gives the state an additional measure to track and combat the production and distribution of methamphetamines by implementing more stringent control measures for over the counter products and precursors that contain an essential ingredient to make methamphetamines. Although it is a tremendous step towards eliminating the production of methamphetamines in Kentucky, it is too early to distinguish if this legislation will ultimately affect the spread of the drug's production and use. Additionally, current proposed legislation (HB 591) would create better avenues of information sharing by requiring law enforcement to report contaminated properties to local health departments. The plan is to create a website to publicize this information and track the decontamination process to completion.

This project will help to establish additional educational needs in the interest of public health officials and potentially at-risk areas of the state. Findings from the project will be shared with all stakeholders and targeted/high risk areas in hopes of improving recognition of potential hazards associated with methamphetamine production and clandestine laboratories. It is our vision that this project will serve as a catalyst for future KPHLI teams to develop additional tools for public health workforce education.

Introduction:

Recognizing the increase of methamphetamine production across the nation and state, it is necessary to provide training and information to public health employees who conduct home visits and inspections. As the problem becomes more prominent in Kentucky, it is important to examine not only the hazards but also factors contributing the problem of methamphetamine productions. Recent data shows 89 of Kentucky's 120 counties have

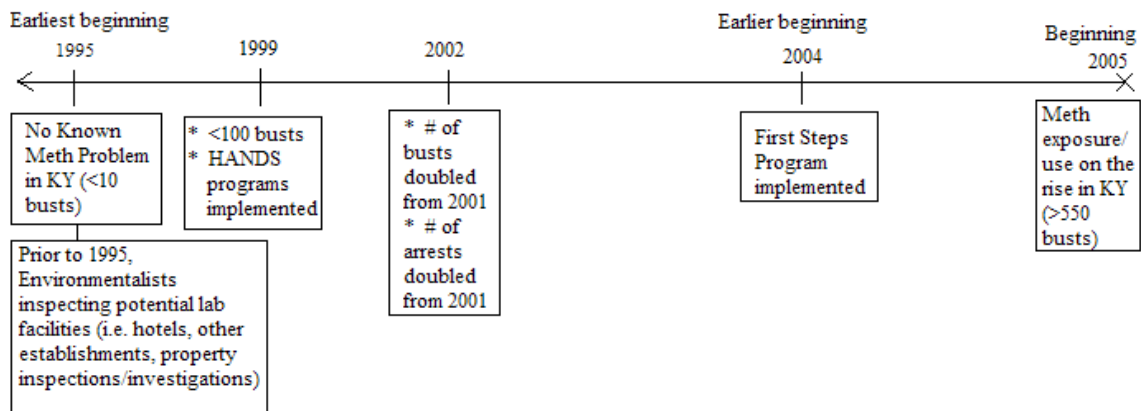
reported clandestine methamphetamine production. As production increases across the state, children and public health workers are often times placed at increased risk. This is illustrated in that nearly 150 children have been involved in clandestine methamphetamine laboratory seizures or arrests within the past two years. State drug arrest data associated with methamphetamine production and use indicates it has largely been located in the Western portion of the state. However, national trends show a move to east which puts the remaining portion of the state at risk.

Problem Statement:

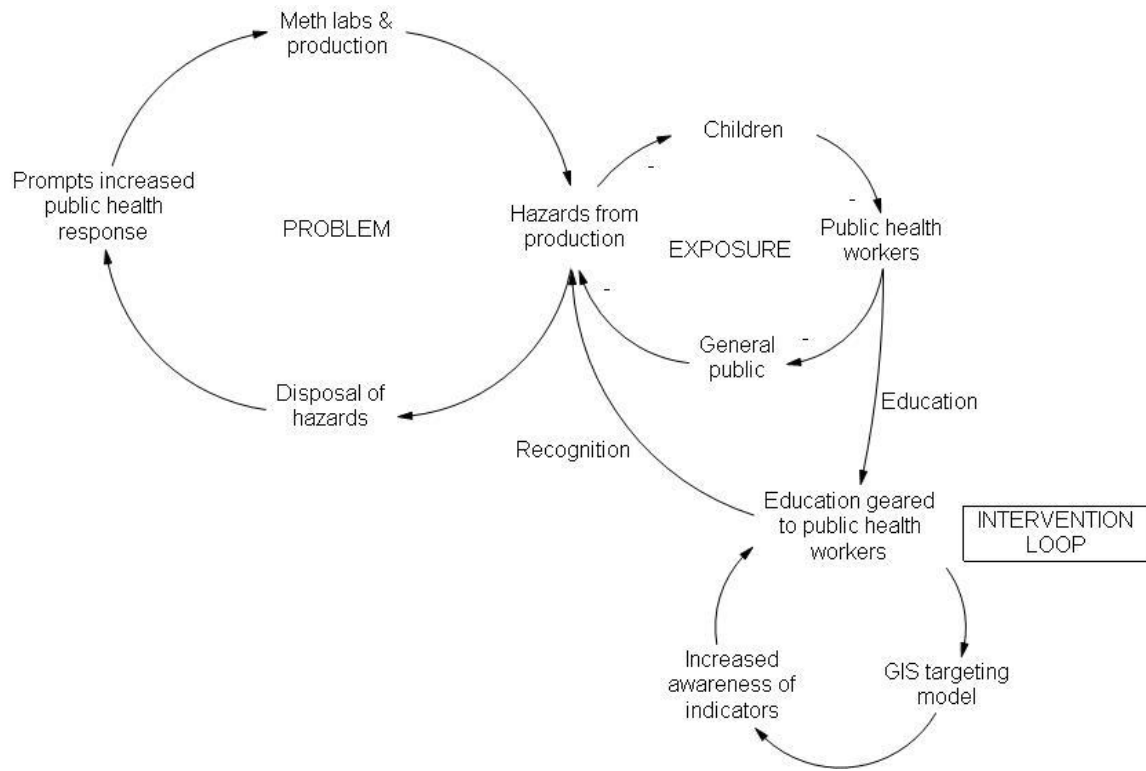
There is a lack of education and knowledge of methamphetamine production and use, which creates a hazardous environment for public health employees.

Behavior Over Time Graph:

Crank Yankers--Meth Exposure to Public Health Staff



Causal Loop Diagram:



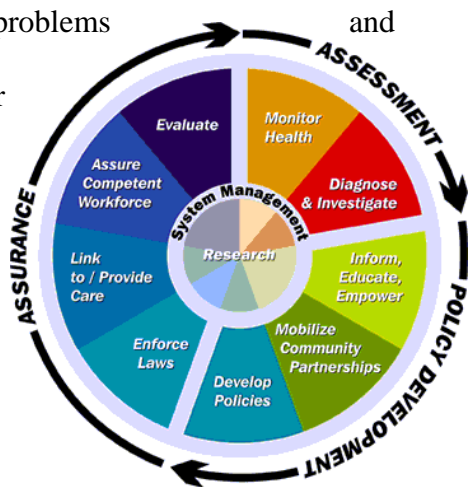
National Goals Supported:

Ten Essential Public Health Services

The goal of this project is to support the Essential Public Health Services and the Core Functions by fulfilling the following:

Under EPHS #2—Diagnose and investigate health problems and health hazards in the community. Identifying these dangerous labs can prevent the public health worker from being exposed and/or injured but additionally, the community as a whole.

Under EPHS #8—Assure a competent public and personal health care workforce. The rising popularity of these clandestine labs creates a serious public health concern that is fairly new to our area. Initiating a training is necessary to maintain the competency that our health care workforce requires.



Public Health Infrastructure (Workforce)

Helps support the following:

PH Infrastructure Goal # 23-8: Competencies for public health workers

PH Infrastructure Goal # 23-9: Training in essential public health services

PH Infrastructure Goal # 23-10: Continuing education and training by public health agencies

Health Resources and Services Administration (HRSA)

Helps support the following:

Under chapter two of the reference document, “Continuing Education for Public Health Workers”.

Objective 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.

Objective 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.

Centers for Disease Control and Prevention Health Protection Goals

Helps support the following:

“Healthy Workplaces”: Promote and protect the health and safety of people who work by preventing workplace-related fatalities, illnesses, injuries, and personal health risks.

Objectives

1. Develop a power point presentation which will be utilized on Train.
2. Use GIS and demographic data to determine if there are environmental indicators to predict geographic areas of concern relative to methamphetamine use, production, and dangers.

Deliverables

A power point presentation that will be available on Train for field public health workers. This 40-45 slide presentation will enable public health workers to identify methamphetamine and detail dangers that may be associated with methamphetamine clandestine laboratories.

Methodology

The “Crank Yankers” team engaged in many activities between April 2005 and April 2006 including: (1) Participated in the Department for Public Health’s Methamphetamine Task Force; (2) Education of team members on methamphetamines in Kentucky, attended Kentucky on Crank Meeting at Natural Bridge State Park- presentations given by John Cane, attended Kentucky Public Health Practice Education Summit in Lexington – presentations given by the University of Kentucky and the Kentucky State Police; (3) Obtained methamphetamine statistics (1998-2004) from the El Paso Intelligence Center; (4) Obtained methamphetamine statistics from the Kentucky State Police (2001-2004); (5) Obtained methamphetamine statistics from the University of Kentucky (2005) ; (6) Met with David Knapp of Department of Public Health to gather information about presentation of power point for Train.

An attempt was made to develop a geographic information systems (GIS) predictive model to better alert public health workers to methamphetamine areas. However, issues were encountered in receiving lab location data from the Kentucky State Police (KSP) which was needed to construct a worthwhile model. While not currently feasible, proposed legislation (HB591) will ultimately create a website of these locations for public health use that may further GIS model development.

LEADERSHIP DEVELOPMENT OPPORTUNITIES:

Justin Pittman

KPHLI--Well, what can I say: good times, good people, on occasion good fishing, and skills I couldn’t have gathered anywhere else. Never have I had such an opportunity to examine myself through self surveys and 360 degree analyses. KPHLI has helped me grow personally and professionally, and I can barely remember “how things used to be”. I’ve enjoyed learning and actually getting to do something about what I view as a problem in our field with our Change Master Project, but most of all, I’ve enjoyed meeting other professionals in other fields of public health that I may have not had the opportunity to meet without KPHLI. There comes a time in everyone’s career that they need leadership skills. It has been a great pleasure honing mine with the help of KPHLI. My goal is to take the skills I’ve learned, apply them to my everyday work and life, and strive towards being a better leader, manager, and mentor to my staff and colleagues.

Vijay Munagala

It has been an honor to participate in this year's KPHLI program. The program has provided me with the unique opportunity of working with other public health professionals from all across the state with various backgrounds. The change master project has been the ultimate experience and I strongly recommend the KPHLI program to anyone interested in participating in the future.

Pamela Hendren

Participating in KPHLI has given me the opportunity to meet and interact with public health professionals from around the state. I have really come to appreciate the talents of the team members of my Change Master Project. This year has been a challenge and a great learning experience that I soon will not forget. I would like to thank everyone involved in KPHLI.

Justin T. Carey

The KPHLI experience has provided me with a tremendous opportunity for expanding and improving my knowledge and capabilities as a leader. Through the systems thinking approach, KPHLI has taught me to better analyze situations and problems in a way which will ultimately result in long term solutions and improvements. The knowledge and friendships I have gained take from this program have made it very rewarding and will hopefully continue to serve me as I move forward with my career in public health. As the problems we face in public health continue to grow it is imperative that the current and future leaders be well prepared to address them with effective measures of prevention and response and I believe the KPHLI experience is a tremendous step in doing just that.

Kenny Ratliff

Participation in KPHLI has been a very valuable experience. State government opportunities for leadership development are non-existent or not typically supported. Having the support of my Division administration was a real plus. My goal was to identify my personal leadership strong points and, more importantly, areas that need improvement. The program content certainly fulfills that, and along the way introduces new concepts for addressing present day public health issues. "Systems Thinking" is a very valuable tool that can be used to progressively approach and potential solve a myriad of concerns.

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