

Cycle V Capstones

KPHLI Cycle V scholars completed the following capstone projects:

Perceptions and Barriers to Research among Kansas Local Health Department Administrators

Christie Befort, PhD, University of Kansas Medical Center, Kansas City, KS

Abstract: Background: *Partnerships between community organizations and academic researchers are being increasingly recognized as essential for developing health promotion programs that are sustainable, appropriately targeted to the needs of the community, and effective. Local health departments (LHDs) are a largely untapped resource for building public health academic-community collaborations. The purpose of this focus group study was to gain a better understanding of potential barriers and benefits of developing academic-community partnerships from the perspective of LHD administrators or directors throughout the state of Kansas. Methods:* Six focus groups ($n = 49$) were conducted at the KDHE Regional Public Health meetings in Spring, 2008. Verbatim transcripts were coded by three independent investigators. A fourth investigator compared the independent analyses, and the research team reached consensus on the major themes. **Results:** *Participants were 50.7 ± 9.6 years old, 78.8% represented rural counties, and 83% indicated they had participated in research activities in their current position. Five themes emerged: 1) Perceptions about research varied but were initially negative, 2) Numerous barriers were reported to engaging in research activities, 3) Perceived benefits of research were largely related to practice improvement, 4) Uncertainty exists about how research fits into their professional role, and 5) University researchers were perceived as out of touch with community needs. Conclusions:* *Participants' negative perceptions of research were influenced by a lack of capacity related to resources, time, and skills, and a lack of connection between research activities and primary clinical responsibilities. However, despite many negative perceptions, research was rated as highly important. Findings have implications for strategies to engage LHDs in academic collaborations and fill their research capacity needs.*

Aging on the Plains

Janet M. Brandes, MPH, Wichita State University

Abstract: *Kansas, like the rest of the Central Plains states and the U.S., is an aging society. This project examined the literature to identify several important trends relating to an increasingly aging population. The resulting literature review was intended to provide the context for discussions at a statewide aging conference about the upcoming challenges of the demographic shifts presented by the baby boomers aging on the plains. The conference, "Aging on the Plains", will be held in Wichita, Kansas on September 24-26, 2008. While it is generally accepted aging Americans is one of the most significant challenges facing the U.S. health care system, rural areas may face even greater challenges in meeting the needs of older adults and their families. This research reviewed the characteristics of older adults and discussed some of the future opportunities for meeting the health care needs of older adults and the communities of Kansas as the Baby Boomer generation ages. Healthy People 2010 focus areas addressed in this project include: **1-15. Increase the proportion of persons with long-term care needs who have access to the continuum of long-term care services.** This project addressed the following Healthy People 2010 objective and focused on the challenges faced by the rural elderly in*

accessing these services: **Healthy People 2010: Access to Quality Health Services** – Improve access to comprehensive, high-quality health care services. Included in this focus area is improving access to long-term care (LTC).

Cooperative Regionalization

Sandra Cline, RN, BS, Ottawa County Health Department

Dana Rickley, BSN, Clay County Health Department

Sara Spinks, BBA, CPM, Kansas Association of Local Health Departments

Abstract: *Faced with the challenge of protecting the public's well being, public health departments are concerned with everything from bioterrorism and disease outbreaks to clean drinking water and seatbelt laws. And as the roles of public health professionals evolve and expand, departments must continue to improve their efficiency and effectiveness. The Public Health Accreditation Board (PHAB) was created to support this effort. Simply put, the Public Health Accreditation Board is dedicated to raising the standard for public health. PHAB has developed a voluntary national accreditation program, whose processes are designed to function as an improvement tool. Implementation of the standards will begin in 2011 and will include both State and local health departments. The program will also help Americans better understand the role public health departments have in ensuring their day-to-day health and safety. (www.exploringaccreditation.org, August 15, 2008). In 2002, the Kansas Association of Local Health Departments (KALHD) began a project examining how a cooperative regionalization approach may enable access to all basic public health services by all citizens of Kansas. With Kansas' sparsely populated counties it was determined that, in order to meet accreditation standards, a regional approach was needed. It was decided to build on the existing 15 public health regions that include 103 of the 105 counties in Kansas. This capstone project developed a resource toolkit in the form of sample policies, procedures and protocols for use by local health departments for assistance in the accreditation process.*

Evaluation of an Obesity Intervention Project serving the uninsured

Irving A. Cohen, MD, MPH, Preventive Medicine Associates, LLC

Abstract: *This project evaluated a medically supervised weight-loss program serving an uninsured population at a charity clinic in Topeka, Kansas. It used patient surveys, program and medical records and staff interviews. It identified strengths and weakness, some of which were known to staff and others which had not been previously recognized. This information is being used to modify and adjust the program and to improve communication with medical providers. The program had been known for exceptional success for some patients, but staff has now come to recognize the value of more moderate success on a larger number of participants. Patients who were unable to continue participation due to scheduling and other issues were found to have continued following the program and judge their own outcomes as highly successful. Barriers interfering with program attendance most often cited included frequency of attendance and work schedule. However, this did not appear to prevent motivated individuals from successfully continuing their weight-reduction plan, even when they were no longer able to attend scheduled sessions. This knowledge maybe used to alter the program in way that makes it useful to a greater number of people and to replicate the program in other settings.*

A HEAD of the GAME – TBI Resources in Kansas

Heather Hicklin-Henke RN, ADN, Barber County Community Health Department

Abstract: *This project identified gaps in existing systems that address the needs of Kansans with Traumatic Brain injury and those who care for them. Multiple case studies were evaluated, noting resources utilized for rehabilitation and recovery. A guide listing frequently used resources was compiled and distributed to all health departments in Kansas. A partnership between SRS traumatic Brain injury Waiver Programs Department and Kansas public health departments was formed with the intent of distribution of a professional resource guide upon completion to be utilized to close identified gaps in service for Kansans living with traumatic Brain Injury and those who care for them.*

Maternal and Neonatal Outcomes Associated with a Prenatal Diabetes Case Management Program in a Suburban Health Department

Tanya L. Honderick, RN, MS, MPH, BC, Johnson County Health Department

Abstract: *Diabetes, a major public health concern in the United States, can seriously complicate an otherwise healthy state of pregnancy, and result in neonatal birth defects, miscarriage, premature or stillborn birth, low birth weight, or difficult delivery secondary to macrosomia. Therefore, a diabetic pregnant woman needs special care to prevent poor pregnancy outcomes. At the Johnson County Health Department, diabetic women are referred from the standard prenatal case management program into the high risk program designed specifically to address the special needs of this population. These services, provided by an ARNP, include regular health department visits attended by a perinatologist, nutrition education with a registered dietitian, and support from a social worker. In this historical cohort study, an archival dataset was used to assess the impact of the diabetic case management program on pregnancy outcomes for clients enrolled in the program. Comparisons were made between non-diabetic clients receiving standard case management (N=1201) and diabetic clients (N=230) receiving high risk case management in the local health department setting. Data showed similarity between the two groups on socioeconomic, medical, and behavioral risk factors. The only statistically significant difference between groups was that the diabetic women were older at intake ($p<0.001$). Review of the case management process showed that the diabetic women had more clinic visits ($p<0.001$). Gestational age at birth, infant birth weight, Apgar scores at one and five minutes, and delivery mode (vaginal vs. cesarean section) were all similar between groups. There were no cases of fetal demise or early neonatal death in the high risk diabetic group. These results suggest that the high risk case management program at the Johnson County Health Department was successful in reducing poor obstetric outcomes in diabetic clients enrolled between January 1, 2005 and December 31, 2007.*

Kansas Lodging Regulatory Program Standards

Michael S. Kopf, MPH, Kansas Department of Agriculture

Abstract: *Kansas lodging establishments have been regulated since 1913, almost 100 years. Over these years, many changes have occurred including regulatory program responsibility and the actual regulations. In 2007 a new Lodging Safety and Sanitation Program was formed along with the adoption of new lodging establishment regulations. Besides development of the new regulatory program, came the need for a program assessment tool to assist in program development. The goal of my project was to develop lodging program standards for Kansas. The Kansas Lodging Regulatory Program Standards (KLRPS) are based off of the Voluntary*

National Retail Food Regulatory Program Standards developed by the Food and Drug Administration that have proven successful in assessment and improvement of regulatory food programs across the country. The current national resource was evaluated and modified for use in the lodging program. The process began with reviewing of the national standards including comparison of similarities and differences between Kansas's food and lodging regulatory programs. Eight standards were developed for the program. Together, these standards provide a complete set of performance measures for each component of the lodging regulatory program. Each standard has one or more corresponding appendices that contain forms and worksheets to facilitate the collection of information needed to fully assess the program. Following the initial self-assessment using the program standards, short and long term action plans will be developed to help the program meet the goals set forth in the standards. Third party verification audits will be performed to receive unbiased feedback. This cycle will repeat every three years to ensure the program maintains its continuous improvement cycle. The KLRPS's can be a useful assessment tool to improve processes and achieve consistency of the regulatory program. Early implementation will be a useful asset in helping guide the development of the program.

Innovative Collaborative use of Resources to Place Amateur and 800 MHz Radios as Emergency Hospital Interoperable Communication Systems in Southwest Kansas

Karen L. Lockett, Southwest Region Hospital Preparedness Program Coordinator

Abstract: *This project is an expansion on the project titled Placement of Amateur Radio in Hospitals in Southwest Kansas developed in the Kansas Public Health Leadership Institute (KPHLI) Cycle IV Scholar Richard S. Everett. That project addressed the need for emergency backup communications system for 18 hospitals located in 17 different counties of Southwest Kansas. The intention of this project is to highlight the innovative collaboration between diverse groups to address the top Level One overarching Sub-Capability identified by the United States Department of Health and Human Services (DHHS) tasked to grantees of the Hospital Preparedness Program (HPP) as well as to the Department of Homeland Security (DHS) Regional Homeland Security Grantees. The top Level One sub-capability is interoperable communications. Over the past two years, the amateur radio project has developed from a grassroots concept into a reliable solution for one of the most challenging problems faced by all emergency preparedness planners, responders and first receivers, who strive to maintain public health and safety.*

TB Screening of International Students at Wichita State University

James Keller, MD, Sedgwick County Health Officer ProTem

Abstract: *TB is common worldwide and not uncommon on University Campuses across the US. Most cases of TB in the USA are internationally born individuals from countries where TB is common. This project looked at the screening process of entering international students at Wichita State University. Student Health Services screened in excess of 600 international students during 2007, indentifying 195 students with latent TB. No active TB cases were identified. The newer T spot blood test was compared with the standard TST for screening. With the emergence of MDR-TB and EDR-TB worldwide newer antibiotic treatments utilizing the bacterial floxins were reviewed.*

Internal Communication: Assessing Weaknesses and Working Towards Improvements

Charlotte Marthaler, BA, MS, Lawrence-Douglas County Health Department

Abstract: *Communication greatly impacts the functioning of an organization. This capstone project explored the concept of communication to further understand effective strategies for improving communication in the workplace. The need for improved communication was identified through a Quality of Work/Life Survey administered to all agency staff in August 2007. Specific weaknesses in current communication practices were noted in small group Listening Sessions. Methods for addressing the communication concerns were implemented over the next months. The Quality of Work/Life Survey was re-administered in August 2008 followed by a random survey of ten staff to assess the usefulness of agency communication methods. As public health agencies strive to increase skill level and capacity of its workforce to meet the Healthy People 2010 infrastructure goals, successful strategies for improving internal communications will be essential for a strong and effective public health organization.*

Aha, I got you! Creating a positive partnership between food service establishments and food inspectors in Johnson County, Kansas

Aqualia (Shauna) Nelson, MS, Johnson County Environmental Department

Abstract: *The restaurant industry has a huge impact on our nation's economy. In 2008, sales grossed 558 billion dollars and nine percent of the US workforce were employed at approximately 945,000 restaurant locations (Table 4) (NRA, 2008a). According to the National Restaurant Association (NRA), in 2006, the average household expenditure for food away from home was 2,694 dollars with 53 percent of adults indicating that restaurants are an essential part of their lifestyle (NRA, 2008a). With the dramatic increase in foods Americans consume away from home comes an increase in the number of food related illnesses and an increased need for food safety efforts. Restaurant inspections play an important role in protecting the public and preventing food-borne illnesses. Forging positive partnerships between restaurateurs and food inspectors—and increasing trust between these partners—is vital in order to protect the health of Americans who increasingly depend upon public establishments for their meals. The purpose of the capstone project was two-fold: 1) assess opportunities for improving and/or developing partnerships between environmental health specialists and restaurateurs in Johnson County, Kansas and 2) assess Johnson County food inspectors' attitudes about the effectiveness of the services they provide. Food inspectors were surveyed about their viewpoints in carrying out job responsibilities and interactions with food service workers. Focus groups were conducted with management and food service workers to learn their perspectives on services provided by food inspectors. A wide range of topics were discussed including educational materials and training, enforcement and compliance actions, barriers within the industry, and suggestions for creating partnerships with inspectors. The results of this project indicate that improvements can be made to increase positive interactions between restaurateurs and health department food inspectors as they evaluate food safety practices. The results also demonstrate that through partnerships, we all can do our part in reducing, controlling, and possibly preventing the economic burden of foodborne illness in Johnson County, Kansas.*

Planning for Behavioral Health Support of Public Health Staff During Emergency Response

Thomas D. Pletcher, MS, COMCARE of Sedgwick County

Abstract: *Public health service providers play an important role in responding to any mass disaster, pandemic or other major event. With that response comes exposure to significant levels of stress that can threaten the ability of the individual or organization to function effectively in the crisis. Strategies do exist, however, that can reduce the impact of this stress and help the individual and organization to operate closer to their capacity. This study surveyed public health departments in Kansas to determine the degree to which they were aware of the impact of stress and to what extent their disaster response plans addressed this potential threat to their ability to operate. Results suggest that many departments feel that they are aware of the impact of stress on their staff, but response plans do not consistently take into account the potential levels of stress of provider staff during the response. When they are taken into account, they are not consistently written into the plans. To ensure maximum responsiveness, departments are encouraged to more consistently address the behavioral health needs of staff by including specific support strategies in planning and response during all phases of events.*

Integrating Viral Hepatitis Prevention Into Existing STD and HIV Services: Meeting the Clients' Needs for Adult Viral Hepatitis Vaccine

Donald "Buck" Rowland, MEd, Kansas Department of Health and Environment

Abstract: *Viral hepatitis B infections have been reduced over the last two decades, primarily through immunizations for children. Viral hepatitis infections in adults, however, have been overlooked and prevention through immunization has been piece-meal and sporadic. Under new direction for the Centers for Disease Control and Prevention (CDC), a call to integrate viral hepatitis prevention services into existing HIV and STD testing and prevention services and substance abuse treatment efforts. In cooperation with the CDC Vaccines and Immunizations, the CDC Division of Viral Hepatitis have extended access to hepatitis B vaccine for adults at risk for viral hepatitis infection. The new Kansas Department of Health and Environment (KDHE), Bureau of Disease Control and Prevention's Adult Viral Hepatitis Prevention Programs led an integration initiative through collaboration with KDHE HIV, STD, Immunization and Office of Surveillance and Epidemiology sections to assess existing efforts in vaccine preventable hepatitis infections in adults and expand to new sites. Within one year, numbers of adults at risk for viral hepatitis infections had increased, and new collaborative efforts resulted in new tools and systems extending across various sections of KDHE. Resources and efforts were combined and shared, reaching toward affecting the goals and objectives of Healthy People 2010.*

A Mutual Benefit: Childcare Providers Reporting Immunizations and Managing Compliance Using the Kansas Immunization Registry (Web IZ)

Lou Saadi, PhD, Kansas Department of Health and Environment

Abstract: *This project addresses the core public health function: Assurance. Immunization and protection against infectious disease is one of the 10 essential services. Public health agencies continually seek ways to assure compliance to immunization recommendations and improve data reporting on shots given where possible. In addition, governmental program managers attempt to streamline processes to assure the most efficient and effective resource management. This capstone project suggests that we "connect the dots" between the immunization and child care licensing programs through improved vaccination reporting by child care providers better data reporting and streamlined licensure reporting requirements.*

CAMEO ONLINE

Swapan K Saha, PhD, Kansas Division of Emergency Management

Abstract: *Computer Aided Management of Emergency Operation (CAMEO) is a system software suite that is used for planning and responding to Chemical, Biological, Nuclear, Radiological and Explosive (CBNRE) related emergencies. CAMEO is also used to access, store, and evaluate information critical for developing emergency plans, and meet the chemical inventory reporting requirements of the Emergency Planning and Community Right-to-Know Act (EPCRA, also known as SARA Title III). In a classroom setting, basic CAMEO training requires 24 contact hours, or 3 working days. In Kansas, over 80% of the responders are volunteers and often face hardship in attending training/courses away from their home. To address this issue, an online training course for CAMEO is being developed. This course will provide the students flexibility of learning at their own pace, and outside a classroom setting. The online CAMEO Training will also serve as a refresher course for those who do not use CAMEO on a regular basis. The online course discusses the software components and their functions in detail, such as extracting information for chemical hazards, predicting plume pathway during a chemical or biological release, mapping and creating isolation zones and evacuation routes, model the hazards associated with fires and explosions, etc. The online course also discusses how to incorporate populations, roadmaps, resources, schools, hospitals, special populations, fire, etc to create a hazard mitigation plan, and how to use CAMEO for regulatory compliance (Tier II Reporting). Lectora 2008, a web authoring software, has been used to develop this course. CAMEO Online will be hosted by the Kansas TRAIN and students will be able to access it through the KS-TRAIN website.*

Engaging the Electeds: A baseline study on Legislators and Commissioners perceptions of public health issues in the state of Kansas

Becky Springer, BAS, Shawnee County Health Agency

Susan Norton, PhD, Wichita State University

Abstract: *In our project, we used a survey to explore the question of what our elected officials recognize, understand and include as public health issues. A secondary goal became how we could best communicate with our electeds on issues of current public health needs and policy. We felt this project was important due to the many policy decisions that are made at the state and local levels. We also felt that including county commissioners in a separate survey was important as they sit as the local board of health in many counties and they also make policy decisions that affect their communities. Of pivotal concern was the relationship to core public health functions specifically those that surround policy development. The original goals of the project were to: achieve a baseline reading on what currently seated legislators and county commissioners in the state of Kansas felt were topics that were inclusive to public health and what were not; to know what the preferred avenues are to receive public health information by the officials to help them in their decision making process; to inform the general public on methodology to contact their elected officials with their public health concerns; and to reveal an avenue of contact for the general public in the hope that communities may get more involved in the decision-making process. Although the response rates were not as large as hoped for, and the availability and use of the internet and e-mail by the target population was not as high as hoped, continued research and replication of this study using other communication avenues*

should validate the findings and verify the need for ongoing relationships with our electeds and continued options to increase communication and education in public health.

Stepping Stones to National Voluntary Accreditation in Public Health: A Regional Approach

Janet Wertzberger, BSN, RN, Wabaunsee County Health Department

Abstract: *This project is the work of eight local public health departments in East Central Kansas who are collaborating in a regional approach to build capacity for voluntary national public health accreditation. The movement toward building capacity has been supported through major grant funding sources that drive the direction of the project. This regional coalition has a vision to improve health outcomes for the populations served by the East Central Kansas Public Health Coalition. The group recognizes that small local health departments do not have the resources to independently increase their internal capacity as they move toward accreditation. They demonstrated that working together as a coalition creates strength to address common areas of need and statistically supports funding efforts at the local, state, and federal level. As the group continued to focus on capacity for voluntary accreditation they formalized their relationship and enhanced program services. The group learned and utilized collaborative quality improvement skills to assure participation among all of the partners. Strategies for long term and short term goals to increase capacity toward accreditation were identified.*

Components of Program Integration within the Office of Health Promotion

Cindy Winters, BA, BA, Kansas Department of Health and Environment

Abstract: *Program integration is a process and not an outcome. Improving opportunities for program integration within the Office of Health Promotion (OHP) was the focus of the 2007 strategic planning session. The Education Integration workgroup, one of eight workgroups developed to improve program integration was charged with developing seamless program integration resulting in decreased risk factors and program outcomes achieved earlier. Two program integration tools are in the process of being developed to assist in the program integration process. The Education Integration workgroup developed and implemented a questionnaire to gather additional program information to be used in educating all OHP staff and local level partners on program specifics. The information collected was used to design a database to support an OHP map to be placed on the KDHE website. The map will contain icons at program locations throughout the state. The icons can be accessed by the general public and local partners to access program information and local contact information for the purpose of program integration and resource identification at the local level. OHP staff will have the ability to run reports on specific geographic locations to assist in providing technical assistance at the local level and to increase awareness for the opportunity of program integration at the state level. Through interviews with four individuals from external agencies the OHP brochure was evaluated for information content promoting program integration at the state and local level. The information collected from the interviews will be incorporated into the updated version of the brochure when it is reprinted. Insight from external partners was also used to help design the database for the OHP map to increase opportunities for program integration and increase the awareness of local partners of resources available through the Office of Health Promotion.*

Eisenhower Center for Homeland Security Studies

Maj. Dave Young, MA, Kansas Adjutant General's Office

Abstract: *America's ability to maintain essential public safety services will be directly challenged in the next two decades. Professionals involved with health, transportation, communication, emergency management, law enforcement, national security, education and a host of other critical disciplines will experience fiscal and other resource stresses unforeseen in their or their parent's lives. To address this approaching trend, the Integrated Initiatives Office of the Kansas Adjutant General's Department partnered with Defense Microelectronics Activity (an office within the Office of the Secretary of Defense) to develop a collaborative homeland security (HLS) effort at the state level for all disciplines, agencies, non-governmental entities, educational institutions and private sector entities. Specifically, the concept focused on developing a public/private consortium of governmental, private sector and educational entities, dedicated to multi-agency multi-discipline homeland security education, technologies evaluation, scenario simulation and research for Kansas. Known as the Eisenhower Center for Homeland Security Studies, the Center has been designed by Governor Kathleen Sebelius as Kansas' one-stop shop for homeland security activities, initiatives and best practices.*