

Annual Report 1999-2000



KENTUCKY INJURY PREVENTION & RESEARCH CENTER

UK



Letter From the Director

In this second year as Director, I have continued to focus on making explicit the Center's goals and objectives and explaining our mission to a variety of audiences. From a business perspective, we have attempted to expand our funding base through the submission of research-focused grants as well as creation of web-based instructional materials and provision of consulting services. We recently received approval from the University Intellectual Properties Committee to market a series of six web-based construction safety training simulations. Our staff decided at the annual retreat to continue to develop and market our expertise in safety training and education. Based on this decision, we have submitted additional projects for funding in this area.

Successful injury prevention efforts require supportive partnerships. KIPRC has joined with more agencies throughout the Commonwealth and beyond to create the infrastructure necessary for implementing effective injury prevention programs. New partners include state affiliates of the American Public Health Association, National Highway Traffic Safety Administration, and American Medical Association, the University of Cincinnati, and within the University of Kentucky, the Martin School for Policy and Administration, College of Education, and the College of Engineering. Next year we will continue to expand partnerships in an effort to combine injury prevention resources in an efficient and productive manner. We are grateful for the continuing collaboration with the Kentucky Employers' Mutual Insurance, the Kentucky Department for Public Health, and several federal agencies.

This year KIPRC has participated in the development of the Kentucky School of Public Health. The Center will become an injury research laboratory for students in the area of injury science. We anticipate integrating more faculty members into our Center as a result of this relationship.

I hope as you read through this report you will gain a better understanding of the impact of injury on our society as well as an appreciation of how each of us can help decrease the incidence of this disease. Our projects touch many people directly and indirectly. May the people behind the stories and the numbers in this report become real to each of us.

A special thank you to all of the people who have supported our projects this year. You renew our energy and remind us that together we can make a difference.

Dr. Pamela Kidd
Director



KIPRC Funding, 1999-2000

KIPRC has worked with a wide variety of funding agencies this year, including but not limited to: the National Highway Traffic Safety Administration (NHTSA), National Institute for Occupational Safety and Health (NIOSH), National Institute for Environmental Health Sciences (NIEHS), Health Resources Service Administration (HRSA), National Center for Injury Prevention and Control (NCIPC), and Kentucky Department for Public Health (KDPH). These projects total greater than \$2,103,362 in direct support.

Project	Amount/Funding Source	Principal Investigator
Evaluation of Kentucky's Graduated Driver Licensing Program	\$119,415/ NHTSA	Kidd
Agricultural Disability Awareness and Risk Education	\$196,842/ NIOSH	Reed (SE Center for Agricultural Health and Injury Prevention) and Kidd
Development of Web-based Training Materials	\$14,652/ NIEHS/sub-contract from UC	Kidd/Schneider
Children's Agricultural Tasks and Risk Assessment	\$2,500/ NIOSH	Kidd
Training Coordinators' Perceptions of Disease, Injury, and Stress Risks and Prevention Efforts in Sheet Metal Work	\$2,500/ NIOSH	Kidd
Work Crew Performance Model	\$40,995/ NIOSH	Kidd
Non-traumatic, Agriculturally-related Musculoskeletal Disorders in Children	\$17,499/ NIOSH	Kidd
Loss Education to Reduce Construction-Related Injuries	\$169,062/ NIOSH	Kidd
Employer's Manual on Occupational Safety Effectiveness Research	\$24,274/ NIOSH	McClanahan
Emergency Medical Services for Children in Kentucky, Implementation Grant	\$169,000/ HRSA/ MCHB/ EMSC	Pollack
Implementation & Evaluation of a Support Group Network for the Families of Severely Injured Children Utilizing Interactive Video at Regional Sites in a Rural State - Emergency Medical Services for Children Targeted Issues Grant	\$150,000/ HRSA/ MCHB/ EMSC	Pollack
State Level Leadership for Public Health, Medicine, and Traffic Safety Mini-grant Promotional Campaign for Booster Seats in a Community Setting	\$10,000/ APHA/ AMA/ NHTSA	Pollack
General Pediatric and Adolescent Injury Prevention	\$89,000/ KDPH-ACH	Pollack
State Injury Prevention Program	\$361,654/ State General Funds	Spurlock
Ambulance Run Registry	\$38,000/ State General Funds	Spurlock



Project	Amount/Funding Source	Principal Investigator
Traumatic Brain Injury Surveillance Pilot Study	\$45,246/ KY Traumatic Brain Injury Trust Fund	Spurlock
Crash Outcome Data Evaluation System Project	\$195,692/ NHTSA	Spurlock
Programs for the Prevention of Fire-related Injuries	\$158,981/ CDC/NCIPC	Spurlock
Intimate Partner Violence Surveillance	\$202,335/ CDC/NCIPC	Spurlock
Surveillance System for Shrimping Injuries in Georgia	\$31,224/ NIOSH/sub-contract from SE Agricultural Center for Health and Injury Prevention	Struttman
Fatality Assessment and Control Evaluation	\$94,859/ NIOSH	Struttman
Engineering Controls for Rotary Motors	\$18,686/ NIOSH/sub-contract from SE Agricultural Center for Health and Injury Prevention	Struttman
Community Partners for Healthy Farming, Agricultural Injury Surveillance	\$71,510/ NIOSH	Struttman
Regional Injury Surveillance System	\$17,000/ Barren River District Health Department	Struttman
SENSOR - Occupational Burn Surveillance	\$103,278/ NIOSH	Struttman

ACH = Adult and Child Health, AMA = American Medical Association, APHA = American Public Health Association, CDC = Center for Disease Control, EMSC = Emergency Medical Services for Children, HRSA = Health Resources Service Administration, KDPH = KY Department for Public Health, MCHB = Maternal and Child Health Bureau, NCIPC = National Center for Injury Prevention and Control, NHTSA = National Highway Traffic Safety Administration, NIEHS = National Institute for Environmental Health Sciences, NIOSH = National Institute for Occupational Safety and Health, SENSOR= Sentinel Event Notification System for Occupational Risk, UC = University of Cincinnati

Proposals Submitted

Project	Principal Investigator	Funding Source
Evaluation of the Repeal of Kentucky's Protective Headgear Law (under review)	Kidd/Wojcik	NHTSA
Evaluation of Safety Training (awaiting funding)	Berger/Kidd	NIEHS/sub-contract from UC
Agricultural Disability and Risk Education Evaluation Project (under review)	Kidd/Reed	NIOSH
Evaluation of Safety Training (awaiting funding)	Kidd/Berger	NIEHS/ sub-contract from IUOE
Linking Databases for Occupational Surveillance (under review)	Struttman	NIOSH

IUOE = International Union of Operating Engineers, NHTSA = National Highway Traffic Safety Administration, NIOSH = National Institute for Occupational Safety and Health, NIEHS = National Institute for Environmental Health Sciences, UC = University of Cincinnati



Occupational Injury Prevention Program

Fatality Assessment and Control Evaluation (FACE)

Kentucky FACE is an occupational fatality surveillance project that began in 1994 as one of 14 states funded through cooperative agreements with the National Institute for Occupational Safety and Health (NIOSH). Its activities involve statewide surveillance of all occupational fatalities, recording and analysis of case-specific factors, in-depth investigations of particular types of fatal injuries, and translation of results into prevention strategies that are disseminated to a wide audience. Posters and presentations using FACE data were accepted at national and international conferences this past year. Public service announcements based on FACE data were developed for radio and television to address farm safety. FACE has become well known and staff fulfill numerous requests for information and materials from local health departments, government agencies, private industries, universities, and many others. Most importantly, information such as case reports, public service announcements and other materials are now available on the KIPRC web site, thus empowering the community with access to prevention information. *Key personnel: Mike Pope (859) 257-4955, Tim Struttmann, Donna Reed*

1999-2000 Accomplishments:

- Data linkage was performed with FACE and the Fatal Accident Reporting System (FARS) to describe work-related motor vehicle crashes
- Educational video on safe logging practices was distributed and is being used during the Master Logger training program
- New project manager was hired
- Manuscripts and presentations:

Moon E, Scheerer A, Arthur T, Struttmann T. "Logging Fatalities Due to Logs Rolling Off Trucks." American Public Health Association Annual Meeting. Sheraton, Chicago, Nov. 1999.

Struttmann T, Wojcik S, Reed D. "Describing Occupational Fatalities Using Linked Data Sets." Fifth World Conference on Injury Prevention and Control. New Delhi, India, March 2000.

Struttmann T, Scheerer A. Fatal Injuries at Sawmills Due to Logs Rolling Off Trucks - Kentucky, 1994-1998. *American Journal of Industrial Medicine*. (submitted)

2000-2001 Goals:

- Continue to identify all occupational fatalities in Kentucky
- Conduct on-site investigations and develop reports with recommendations for prevention
- Identify trends and workers at high risk for fatal injuries

Community Partners for Health Farming-Surveillance (CPHF)

The CPHF Project has become well known in agricultural injury prevention in Kentucky through strong working relationships with many organizations. Connections with the Kentucky Department of Agriculture in 1995 provided a foundation for expansion of agricultural safety and health initiatives in the state and also resulted in appropriation of funds for a Farm Safety Specialist position. CPHF staff have provided resources to many of the counties which received funding through this initiative. To provide the opportunity for networking across the state, a list of persons and organizations involved in farm safety issues is posted on the KIPRC web site. CPHF has maintained connections with Progressive Farmer Magazine which sponsors training programs for Farm Safety Day Camps. Mammoth Cave Farm Safety 4 Just Kids (MCFS4JK), formed in 1996 from a CPHF initiative, has provided many rural counties with resource materials and expertise to plan Farm Safety Day Camps and other activities. MCFS4JK membership increased from 15 members in 1996 to 100 in 2000 and received the National Chapter of the Year award in 2000.

In 1997 the CPHF Project consisted of both surveillance of farm-related injuries and a campaign to promote the use of rollover protective structures (ROPS) and seatbelts on tractors in collaboration with the Southeast Center for Agricultural Health and Injury Prevention. Because of the relationships developed over the years with farmers, healthcare providers, equipment dealers and others, we were able to recruit community leaders to assist with promoting ROPS and farm safety. These partnerships improved the visibility and validity of the campaign and simultaneously promoted CPHF and KIPRC as leaders in agricultural safety. Activities involving community members enabled staff to identify farmers who were willing to share their personal stories to help prevent farm-related injuries. Materials developed by CPHF can be found on the KIPRC web site. *Key personnel: Vickie Brandt (270) 782-9593, Tim Struttmann, Donna Reed*

1999-2000 Accomplishments:

- Two public service announcements were developed for television to alert farmers to the hazard of carbon monoxide poisoning from tractors when workers are riding on a tobacco setter



- Farm safety day camps were conducted for children in summer 1999
- Donations totaling \$4760 were secured from local businesses to support the FS4JK chapter
- Worked in collaboration with the Southeast Center for Agricultural Health and Injury Prevention to promote ROPS and safe tractor operation; documented more than 70 ROPS sales in the two treatment counties
- Manuscripts and presentations:

Struttman TW, Brandt VA, Morgan SE, Piercy LR, Cole HP. (2000) Equipment Dealers' Perceptions of a Community based ROPS Campaign. *Journal of Rural Health* (submitted)

Cole HP, Westneat SC, Browning SR, Piercy LR, Struttman TW. (1999) Gender Differences in Principal Farm Operators' Tractor Driving Safety Beliefs and Behaviors. *Journal of the American Medical Women's Association*. Spring 2000.

Gelberg KH, Struttman TW, London M. A Comparison of Agricultural Injuries Between the Young and Elderly: New York and Kentucky. *Journal of Agricultural Safety and Health*. 1999. 5(1):73-81.

Brandt V, Moon S, Ehlers J, Struttman T. "Dermal and Respiratory Exposure to Endosulfan in Agricultural Workers: Two Case Studies." North American Agromedicine Consortium. Raleigh, NC, Sept. 1999.

Cole HP, Lindberg J, Struttman T, Brandt V, Muehlbauer J, Piercy LR, Perera R, Scheerer A. "How and Why Kentucky Farmers Retrofit their Tractors with ROPS." Summer Conference of the National Institute for Farm Safety, Inc. Ocean City, MD, June 1999.

Brandt V, Struttman T, Piercy LR, Cole HP, Muehlbauer J. "Use of Fatal and Non-Fatal Tractor Overturn Photos to Promote Favorable Attitudes About ROPS and Seat Belts." Summer Conference of the National Institute for Farm Safety, Inc. Ocean City, MD, June 1999.

Brandt V, Struttman T, Piercy LR, Cole HP, Piercy L. Delivering Health Education Messages for Part-time Farmers Through Local Employers *Journal of Agromedicine*. (Submitted)

Brandt V, Moon S, Ehlers J, Methner M, Struttman T. Dermal and Respiratory Exposure to Endosulfan in Agricultural Workers: Two Case Studies. *American Journal of Industrial Medicine*. (Submitted)

2000-2001 Goals:

- Develop manuscripts from the data that has been collected as the project comes to a close this year
- Develop interventions based on the surveillance data

Interviews Following a Fatal Farming Incident

Staff of the FACE and CPHF projects have a special interest in the farming community because this industry is so important in Kentucky and there are a high number of farmers being fatally injured in our state every year. When a farming fatality occurs, the surviving family members are left to deal with not only the tragedy of losing a loved one, but also the loss of a coworker in the interwoven family business. We interviewed nine families who experienced such an event to learn more about how they coped with the changes. The families were identified through FACE records. Using a software package designed for qualitative data analysis, the interview data were coded and organized into meaningful themes and categories. *Key personnel: Amy Scheerer (859) 257-6712, Vickie Brandt, Donna Reed*

For those that have lost a family member on the farm, the reminder of the loved one is always there during both work and leisure time. As one widow explained,

...I have to go everyday to the barn where we worked. I mean, I can't dissociate myself from work, where he worked, because that's where I work. (Widow, age 47)

For one widow, the farmland where she and her husband worked together offered a sense of comfort and a way of coping with his death.

When [my husband] first got killed, I would get up early, early in the morning, and because he loved the land so much, I would just walk over the land. And I guess for me that was a way of kind of feeling closer to him and thinking of the things we did. (Widow, age 55)

The telling of stories is one way of teaching, particularly in rural communities. The OIPP staff collects these stories from farm families who are willing to share the story of the loss of a loved one and uses these stories to help other farm families correct unsafe actions while completing farm work.

1999-2000 Accomplishments:

- Nine interviews were conducted last summer
- The qualitative data were analyzed
- A manuscript is in development
- An abstract was submitted to a national conference



2000-2001 Goals:

- Submit manuscripts to journals for publication and present results at professional meetings to enhance awareness of family coping after a fatal injury event

Web Based Training Materials

This project is a collaboration with the University of Cincinnati as part of their NIEHS Worker Health and Safety Training Cooperative Agreement. The University of Cincinnati has received this funding to support the Midwest Consortium for Hazardous Waste Worker Training since 1987. KIPRC joined their efforts in 1999. As part of the Midwest Consortium it is our job to incorporate Advanced Training Technology (ATT) into their existing training programs. This consists of updating old materials as well as creating the latest materials for training using new computer technologies. *Key personnel: Mark Schneider (859) 257-6713, Susan Wojcik, Pam Kidd*

1999-2000 Accomplishments:

- Started development of Midwest Consortium web site
- Conversion of two latent image simulation exercises to web-based exercises
- Developed a multimedia “drag and drop” decontamination exercise
- Conducted a class on advanced training technology at the annual Midwest Consortium Trainer Meeting
- Converted HazMat videos to streaming media

2000-2001 Goals:

- Develop pre-course tool to assess learner’s needs in the area of hazardous waste safety knowledge
- Post the Midwest Consortium policy manual on the web site
- Convert the “Toxic Jeopardy” exercise to a multimedia exercise
- Develop a List Serve to notify training centers of new reports or web modifications
- Add auditory narration to web-based exercises
- Increase access speed to web server
- Develop and make accessible a trainer manual for newly developed products

Loss Education to Reduce Injury in Small Construction Companies

KIPRC’s collaborative efforts with Kentucky Employers’ Mutual Insurance (KEMI) began with this project. Six narrative latent image simulation exercises were developed targeting small construction companies. These exercises focus on the two

most prevalent injuries occurring in the construction industry — back injuries and injuries due to falls. This was the final year of the project. *Key personnel: Pam Kidd, Mark Parshall, Susan Wojcik, Tim Struttmann (859) 257-4955*

Project Completed

Findings:

Although the simulations did not appear to impact injury claims or safety climate of companies, important behavioral risk factors for construction-related injuries were identified:

- being in a hurry;
- not paying attention to the task at hand (performing habitually or in a routinized manner);
- not sizing up a work situation accurately (e.g., the nature of a job and the adequacy of people and equipment available to get it done);
- not taking sufficient time to plan hazardous activities;
- clutter around the worksite;
- exercising poor judgement about people, situations, or the necessity for protective equipment.

We found that in the small construction companies whose owners agreed to participate or were willing to serve as controls, safety climate is a valued and stable characteristic. Simulation evaluations suggested that participants found them realistic and worthwhile. Simulation exercises may provide a reinforcement of good safety practices rather than new knowledge or impetus for behavioral change in highly experienced workers. Workers Compensation Injury Claims experience was far less than expected. Smaller construction companies may actually be safer overall than larger construction companies, despite being relatively less regulated.

1999-2000 Accomplishments:

- All six simulations were translated into web-based format
- Manuscript and Presentations:

Kidd, P. & Parshall, M. (2000) Getting the Focus and the Group: Enhancing Analytical Rigor in Focus Group Research. *Qualitative Health Research*.

Struttmann, T., Wojcik S., Kidd, P., Parshall, M. “Using Web Based Safety Training to Reach Small Construction Firms.” Poster presentation. American Public Health Association Annual Meeting, Chicago, IL. November, 1999.

Kidd, P., Wojcik, S., Parshall, M., Struttmann, T. “Underestimating the Burden of Construction-Related Injury.” Poster presentation. 3rd International Conference on Measuring the Burden of Injury, Baltimore, MD. May 2000.



Agricultural Musculoskeletal Disorders (MSDs)

This project developed a data collection system for MSDs resulting from farm work. The information gathered regarding the incidence and cause of this type of injury was used to improve the implementation of injury surveillance systems in primary care settings and to better understand the relationships between farm tasks and musculoskeletal chronic injury. During the development of the data collection system, a variety of health care providers in two KY agricultural counties were interviewed to determine: 1) the prevalence of these types of injuries in their practice; and 2) the best way to implement a patient assessment process in their health care setting that would allow them to easily identify cases and collect the necessary data to ensure consistent reporting. Fourteen cases were identified and analyzed over a six-month time period.

Key personnel: Pamela Kidd, Lorena Steenbergen (270) 646-4431, Tim Struttmann, Carrie McCoy

Project Completed

Findings:

The primary areas of MSD symptoms reported by patients related to the back (78%), neck (43%) and shoulder (36%), followed by the elbow (21%). The most frequent diagnoses were back strains, back pain, bursitis of the shoulder and neck pain and strain. Of the 54% of the cases reporting primary occupations other than farming, 31% of this work involved driving trucks, tractors or loaders and 31% involved lifting. Thirty-eight percent of the cases indicated they worked 10 hour work days, 31% indicated 12 hour work days and 8% indicated a 14-16 hour work day. For those who listed tasks, farming tobacco was involved in the highest number of cases (n =10 of 13), with 69% farming both tobacco and beef or dairy cattle. Tractor work was reported by 100% of cases. Lifting sacks/bales was the second most frequently listed task at 76%.

1999-2000 Accomplishments:

- Developed an agricultural repetitive strain injury assessment form for primary care providers
- Manuscripts submitted:

McCoy C, Kidd P, Waters T, Steenbergen L, & Struttmann T. Agriculture-related Musculoskeletal Disorders: State of the Science. *American Journal of Public Health*. (Submitted)

Steenbergen L, Kidd P, Struttmann T, & McCoy C. Agriculture-related Musculoskeletal Disorders: Issues Hiding the Problem and Preventing Early Treatment. *Journal of Rural Health*. (Submitted)

Steenbergen L, Kidd P, Struttmann T, & McCoy C. Surveillance in the Clinic Setting: Health Care Provider Preferences *Journal of Primary Care*. (Submitted).

Kidd P, McCoy C, & Steenbergen L. Repetitive Strain Injuries in Youth. *Journal of the American Academy of Nurse Practitioners*. (Submitted)

Struttmann T, Steenbergen L, & Kidd P. Musculoskeletal Disorders: Surveillance in the Clinic Setting. *Journal of Safety Research*. (In Press)

Surveillance System for Shrimping Injuries in Georgia

In collaboration with the Georgia Department of Human Services, Coastal Health District, Glynn County Health Department, we are establishing a surveillance system to identify injuries to shrimp boat workers. Cases will be identified by the community-based nurse and interviews will be conducted to understand circumstances of the injury. Results will be analyzed which will lead to interventions. *Key personnel: Tim Struttmann (859) 257-4955*

1999-2000 Accomplishments:

- A questionnaire was developed and field tested
- Reporting networks were established
- Initial interviews were conducted

2000-2001 Goals:

- Revise the field-tested questionnaire for collecting injury data
- Establish a reporting network at shrimping docks
- Build a data base for tracking injuries
- Communicate the findings through trade organizations as well as health departments and shrimping docks

Engineering Controls for Rotary Mowers

Rotary mowers on Kentucky farms present hazards to farmers. Injuries sustained while mowing can be severe and sometimes fatal. In collaboration with the UK College of Biosystems and Agricultural Engineering, a scale model of a hydraulic powered mower has been built and tested. Hydraulics will allow the swinging mower blades to stop when the operator leaves the driver seat. *Key personnel: Tim Struttmann (859) 257-4955, Larry Wells, Larry Piercy*

1999-2000 Accomplishments:

- Scale model was constructed
- Preliminary drawings of the full scale model were made

2000-2001 Goals:

- Build and test a full scale model of the system
- Evaluate the costs of modifying existing mowers



Regional Injury Surveillance Project-Barren River District

The Barren River District Health Department has taken an active role in injury prevention. KIPRC was asked to assist in establishing a regional injury surveillance system to identify cases of injury presenting at local emergency departments. *Key personnel: Vickie Brandt (270) 782-9593, Tim Struttman, Donna Reed*

1999-2000 Accomplishments:

- Two health care agencies began reporting electronically
- A data collection instrument was drafted
- All local emergency departments were made aware of the project

2000-2001 Goals:

- Establish a regional injury surveillance system
- Develop and field test data collection instruments for specific injuries
- Analyze and communicate findings

Sentinel Event Notification System for Occupational Risk (SENSOR) - Occupational Burn Surveillance

This SENSOR project began in October 1997. The purpose is to develop a surveillance system to collect data about occupational burn injuries in Kentucky and use the information to monitor trends and develop prevention strategies. A statewide network of reporting facilities provides notification of work-related burn injuries. Follow-up phone interviews are conducted with injured workers and employers to gather data about the injury event. Data are confidential and reports and other distributed materials do not include personal identifiers of workers or businesses. To address the high number of cases which occur in food service workers, we are collaborating with the Fayette County Health Department to disseminate safety information to restaurant



managers and workers as they attend required courses and testing. *Key personnel: Amy Scheerer (859) 257-6712, Donna Reed*

No one should have to miss a month of school because of work but that is exactly what happened to one of our KY children. A 16-year-old male was burned by hot grease while working in a fast food restaurant, causing him to miss nearly one month of school and part-time work. He worked as a cook, coating pieces of frozen food in batter then putting them in a deep fryer vat. A metal strainer was used to scoop out the leftover bits of food after each batch. The strainer had become greasy and it slipped out of his hand causing the 350 degree grease to splash on his arm and hand. Although he wore a protective sleeve, the sleeve allowed some of the liquid to soak through and he suffered severe second degree burns. His injury required several follow-up treatments at the hospital as well as exercises to re-gain strength in his fingers and hand. As a result of this injury, OIPP staff issued a Hazard Alert bulletin that was distributed throughout the fast food industry in KY to raise awareness about the hazards of working with hot grease and to suggest actions to prevent grease-related injuries.

1999-2000 Accomplishments:

- Developed working relationship with the Fayette County Health Department to distribute prevention materials to workers in the restaurant industry
- Developed a hazard alert regarding prevention of grease burns
- Developed a poster concerning proper first aid treatment for minor thermal burn injuries to be distributed to the restaurant industry

2000-2001 Goals:

- Continue to identify cases of work-related burn injuries through the reporting network
- Identify and pursue avenues for dissemination of materials
- Conduct in-depth investigations of selected cases
- Develop and disseminate an annual report and newsletter

Application of the Workcrew Performance Model in the Construction Industry

The dangers of the construction industry are a source of constant worry for employers and employees. Falls result in costly injuries for construction workers. The correct use of extension ladders may prevent falls and their associated injuries. The goal of this project is to create and verify safety guidelines based on the practical experiences of veteran workers who use extension



ladders in construction trades. This project is a collaborative effort with KY Employers' Mutual Insurance. *Key personnel: G.T. Lineberry (859) 257-2833, Pam Kidd, Karen McClanahan, Steve Isaacs*

1999-2000 Accomplishments:

- Through focus groups held with experienced construction workers, guidelines were developed for safe use of an extension ladder in construction

2000-2001 Goals:

- Revise guidelines after examining injury claims for ladder falls
- Validate the guidelines with experienced construction workers
- Develop a checklist from the guidelines to use in promoting job site safety and in investigating ladder falls

Agricultural Disability Awareness and Risk Education Project (AgDARE)

This three-state (Mississippi, Iowa, and Kentucky) project targets freshman and sophomore high school agriculture students. Students participate by completing four narrative, latent-image and four physical simulation exercises that address prevention of hearing loss, hypersensitivity pneumonitis, spinal cord injury, and amputation. Students complete two questionnaires pre- and post- intervention that measure safety attitude and safety behavior change. *Key personnel: Deborah Reed (859) 323-6396, Pamela Kidd, Tim Struttman, Susan Westneat, Susan Pollack, Mary Kay Rayens*

“After participating in AgDARE I always wear ear plugs when working around noisy machinery or performing noisy tasks. I got my whole family to wear them!”

Project Completed Findings:

Of the sample, 861 students reported working on farms. Only 53% had ever driven a tractor with a roll-over protection structure, 4.9% had overturned a tractor, and 42% had used Power Take Off equipment with missing or damaged shields. Seventy-two percent worked in dusty environments; 85% in noisy surroundings. There were significant differences ($p < .05$) in safety attitude and safety behaviors between the treatment and control groups.

1999-2000 Accomplishments:

- Presentations:

Kidd, P. & Reed, D.B. “Agricultural Disability and Risk Education for Farm Youth” 5th World Conference on Injury Prevention and Control. Paper presentation. New Delhi, India, March 2000.

Kidd, P. & Reed, D.B. “Using Latent-Image Simulations to Influence Safety Behavior.” Paper presentation. 35th Biennial Convention, Sigma Theta Tau International. San Diego, CA, November 1999.

Reed, D.B. & Kidd, P. “Agricultural Disability and Risk Awareness Project”. Paper presentation. National Institute for Occupational Safety and Health annual conference. St. Louis, MO, October, 1999.

2000-2001 Goals:

- A proposal was submitted to implement the project with both community-based Hispanic youth farm workers and with high school agriculture students in three additional states

Training Coordinators' Perceptions of Disease, Injury, and Stress Risks and Prevention Efforts in Sheet Metal Work

This report is an analysis of transcripts from eight focus groups of apprenticeship training coordinators in the sheet-metal industry. Workers were asked to discuss disease, injury and stress-related issues in their trade. *Key personnel: Pam Kidd (859) 257-4954, Mark Parshall*

Project Completed Findings:

These workers believed that work-related stress in their trade was very high and often not readily avoidable, preventable, or likely to change (especially pressure to get jobs done and the insecure nature of employment in the trade). A great emphasis is placed on informal kinds of training, guidance, and counseling, especially with regard to how apprentices are socialized into the trade and dealing with its various stresses. With respect to workplace hazards and conflicts, they emphasized the importance of learning when to confront problems (or problem people) directly or indirectly (e.g., via themselves or through a union or employer chain of command), and when, literally or figuratively, to walk away from unacceptable risks or stresses.

Pediatric and Adolescent Injury Prevention Program

The Pediatric and Adolescent Injury Prevention Program (PAIPP) consists of six projects united by their emphasis on improving injury surveillance and prevention of injury to youth in Kentucky. Seventy percent of deaths to children between ages one and 18 are caused by injury. Implementation of appropriate prevention programs could save many of these lives. More accurate and complete data on the cause of death and injury is essential for the design of effective prevention programs.

Children's Agricultural Tasks and Risk Assessment

The aim of this project is to review the literature, national guidelines, and federal agency reports in relation to children working in agriculture. The purpose of this review is to identify how risk taking may interact with agricultural task performance and to make recommendations as to how to study this interaction. *Key personnel: Pam Kidd (859) 257-4954, Carrie McCoy*

1999-2000: Accomplishments:

- An annotated bibliography was developed

2000-2001 Goals:

- Develop a list of recommendations with implications for the North American Guidelines for Children's Agricultural Tasks APHA/ AMA/ NHTSA

Promotional Campaign for Booster Seats in a Community Setting

This promotional campaign is a one year federally funded project that focuses on 1) creating collaborative and sustainable relationships between state level agencies that promote child passenger safety and 2) decreasing motor vehicle crash related deaths and injuries to children by increasing booster seat use. *Key personnel: Kathy Adams (859) 323-6194, Susan Pollack*



1999-2000: Accomplishments:

- Coordinated key players from state level agencies to improve advocacy and education about child passenger safety
- Established local project teams in four counties (Fayette, Jefferson, Bullitt, and Warren) to develop and implement public campaigns and school-based education programs

- Designed and field-tested a survey to assess knowledge about proper use of booster seats
- Developed an educational intervention for pediatric residents
- Instigated change in nationally-disseminated booster information sheets from Safe Ride News based on a technical issue involving 2-4 year olds, for whom no actual advising material has previously existed

2000-2001 Goals:

- Expand the team of participating state agencies to enhance child passenger safety in the state
- Establish project teams in two additional counties, including Family Resource Centers as new local partners in injury prevention
- Educate professionals from participating agencies about the need for booster seats and policy changes

Emergency Medical Services for Children (EMSC) Project

This is a federally-funded project which began 8 years ago as a Tri-state (KY, WV, OH) Appalachian initiative emphasizing training in pediatric emergency care for prehospital providers in Kentucky. One of the goals is to conduct surveillance of Kentucky children with severe injuries, spinal cord injury and/or traumatic brain injury. The best mechanism for identifying these cases is to use trauma registry data. All trauma registries in Kentucky plus Cincinnati, Knoxville and Huntington currently report cases. Once these children were identified, 6 month and 1 year post-event interviews were conducted to assess follow-up care. In most cases, the interview is the first chance the families have to talk about the injury event and the impact it has had on the family. *Key personnel: Susan Pollack (859) 257-6749, Mary E. Fallat (Kosair Children's Hospital), James Svenson (University of Wisconsin, Department of Emergency Medicine), Julia Martin (UK Department of Emergency Medicine), Coy Harris, Vince Cecil, Thesesa Elza, Jeanne Drapeau*

1999-2000 Accomplishments:

- Maintained statewide surveillance of traumatic injury to Kentucky children
- Utilized surveillance data for collaborative effort with UK Pediatric Intensivists to respond to an epidemic of severe all-terrain vehicle (ATV) injuries with public education through the media



- Responded to requests for assistance on 2000 Kentucky General Assembly bills concerning bicycle injuries, gun-related injuries, spinal cord injuries (SCI) and adolescent driving injuries/graduated drivers' licensing; provided data to support efforts of state Traumatic Brain Injury (TBI) Trust Planning Grant for both TBI and SCI
- Advocated successfully for permissive EMSC language and expansion of medical input on the new EMS Board created by 2000 KY State Legislature
- Co-supported Advanced Pediatric Life Support (APLS) course offered to physicians through the UK Department of Emergency Medicine
- Provided Pediatric Advanced Life Support (PALS) courses to prehospital and emergency department personnel throughout Kentucky; 59 persons participated and 32 persons obtained certification as PALS instructors.
- Manuscripts and presentations:
 - Svenson, J., Pollack, S., Fallat, M., Elza T. Limitations of Electronic Databases-A Caution. Poster presented at the 5th World Conference on Injury Prevention and Control in New Delhi, India, March 2000; manuscript submitted for publication
 - Pollack, S., Drapeau, J., Elza, T., Werner, H., Fallat, M., Svenson, J. and Kelly, C. EMSC and PICU - Partners in Prevention Poster presented at the National Congress on Childhood Emergencies, Baltimore, March 2000

2000-2001 Goals:

- Complete analysis of both quantitative and qualitative data from initial surveillance and publish results
- Provide leadership for the planning process to identify needs and directions for EMSC in Kentucky
- Develop and write EMSC Partnership Grant for Kentucky
- Bring new American Academy of Pediatrics version of Pediatric Education for Prehospital Providers (PEPP) to Kentucky

Support Group Network Utilizing Telemedicine

The purpose of this project is to implement and evaluate a support group network for the families of severely injured children utilizing telemedicine at regional sites in a rural state. Surveillance of more than 120 Kentucky families in the original EMSC implementation grant revealed secondary morbidities in the areas of home, school, work, and family functioning. More than 25% of the families felt that they had unmet psychological and informational needs related to the injury of their child and its sequelae. Our objective is to prevent or ameliorate these secondary morbidities by addressing the identified unmet needs. Participants will be placed in one of two interventions, one

intervention consisting of an educational group and the other consisting of an educational group plus a psychological group. Using validated psychological measures, the impact of these interventions will be evaluated. *Key personnel: Vince Cecil (859) 323-6197, Susan H. Pollack, Kate Chard, Mary E. Fallat (Kosair Children's Hospital), James Svenson (University of Wisconsin, Department of Emergency Medicine), Jeanie Drapeau, Beth McBrayer, Thersesa Elza, Amy Balantine, Rob Sprang*

Being a parent of a child who has experienced a traumatic brain injury is not easy. There is anxiety over everything the child does and a constant worry if a behavior is normal or a result of the previous injury. When the child falls or sustains a new injury the anxiety increases. There is the perception the child might be more "fragile" than another child just because of the previous injury. One of the roles of the PAIPP staff is to educate and support these parents, families, and caregivers. Recently during a post-event interview with a parent, the mother said "I am so scared that when my daughter falls down, she's gonna be hurt really bad. I scoop her up and take her to the Emergency Department, just to have her checked out. I don't know what else to do." The research nurse of the EMSC project gave the mother a pamphlet on Minor Head Injuries in Children produced by the American Academy of Pediatrics and asked her to follow-up with her MD. The nurse followed-up with the mother to discuss the information and to offer support. "It has really helped. Now I can check my daughter out and I know when I need to go to the ER." This interaction not only educated and comforted a parent within the framework of her medical home, but potentially saved money needlessly spent on emergency services.

1999-2000 Accomplishments:

- Team established to implement study
- Enrollment of families interested in participation and collection of baseline psychological measures
- Established network of local mental health centers to host the interactive sessions through telemedicine
- Established a statewide advisory board

2000-2001 Goals:

- Complete intervention groups in six months
- Increase the capacity of local community mental health centers to address injury related psychological and behavioral health issues through training and sharing of relevant materials
- Administer post-intervention psychological measures



General Injury Prevention Project

This project addresses a broad variety of children's injury topics including motor vehicle safety, fire and drowning prevention, infant sleep conditions, and suicide. Injury prevention activities are conducted directly with the public, but emphasis has been placed on our role in providing support to empower health department personnel, nurses, physicians, school personnel and child care providers to improve prevention in their own communities. A series of learning modules on injury topics has been produced. *Key personnel: Kathy Adams (859) 323-6194, Susan Pollack, Jeanne Drapeu*

1999-2000 Accomplishments:

- Completed statewide survey of local health departments to understand their injury prevention material needs (pamphlets, posters, videos). Identified the best existing materials available from national, state and private sources.
- Developed train-the-trainer modules on child passenger safety, fire, and drowning; provided training to local health departments, physicians and other health and child care professionals
- Conducted child passenger safety seat check-ups
- Participated in SAFE KIDS community injury prevention efforts, including Battle of the Belts, a seat belt contest for teens in Fayette County schools
- Participated in the development of a two-day child passenger safety course based on the 4-day NHTSA course

2000-2001 Goals:

- Continue to provide training for health department personnel using the injury prevention modules regarding fire, drowning, and child passenger safety seats
- Educate physicians and other health care providers in areas of epidemiology and injury prevention through presentations and articles

Evaluation of Kentucky's Graduate Drivers License (GDL) Program

To evaluate the impact of the recently implemented GDL program, this project includes both a quantitative assessment of teen motor vehicle crashes (MVC), deaths and injuries and a qualitative assessment of the GDL program and its implementation. For the latter, interviews with youth and their parents, judicial staff, law enforcement, insurance agents, circuit clerks, driving instructors, and teen employers were conducted to investigate attitudes toward GDL, parental enforcement of its requirements, and obstacles to its implementation. *Key personnel: Susan Pollack (859) 257-6749, Pam Kidd, Jerry Pigman, Ken Agent, Lorena Steenbergen, Carrie McCoy*

1999-2000 Accomplishments:

- Performed analysis of pre-GDL and post-GDL MVC data
- Issued a policy brief on the effects of GDL that was used by KY General Assembly when considering modifications to the law

2000-2001 Goals:

- Analyze longitudinal trends in post-GDL teen MVC data
- Suggest data-based modifications to existing law



State Injury Prevention Program

The State Injury Prevention Program (SIPP) is a contractual extension of the Kentucky Department for Public Health (KDPH) that is located at the Kentucky Injury Prevention and Research Center (KIPRC), Kentucky School of Public Health. This collaborative relationship between two state institutions supports both research (as reflected in the UK mission) and public health (as reflected in the KDPH mission). SIPP has two major programmatic objectives. One is to maintain a state-of-the-art, population-based, injury surveillance system for collection and analysis of injury data from several sources, plus conduct detailed surveillance of specific types of injury. The second objective is to operate a community-based injury prevention program that focuses on the major causes of injury among Kentuckians and the regions of the Commonwealth where the injury problems are most prevalent. Directed by Carl Spurlock, PhD, SIPP is organized in two sections which reflect the program's mission: 1) Injury Surveillance and 2) Community Injury Prevention. State contracts and federal grants support sixteen full-time positions to accomplish the mission. During FY 2000, SIPP had a budget of \$1,003,108.

Injury Surveillance Sections

The Injury Surveillance Division is responsible for: 1) general injury case identification from death certificates and hospital discharge records; 2) emergency medical services (EMS) data collection and analysis; 3) computer data linking of these and other data sets using probabilistic linking software; 4) in-depth surveillance of traumatic brain injuries, domestic violence-related injuries, and firearm fatalities; and, 5) descriptive and analytical injury epidemiologic studies. In addition to the KDPH support, there are three other grant or contract surveillance projects that are described below. *Key personnel: David Reichel, (859) 257-5809*

1999-2000 Accomplishments:

- Published the report "Injury Deaths in Kentucky, 1993-1997," the first detailed analysis of Kentucky injury deaths
- Initiated the first Kentucky firearm death and injury registry with the first report, "Firearm Deaths Among Kentucky Children, 1998" (under review)
- Began serving as the Kentucky Trauma Registry Coordinator by receiving, aggregating, and analyzing hospital-based trauma data from Kentucky's level-one trauma centers, as well as neighboring state trauma centers that provided medical services to Kentucky residents
- Developed the "Kentucky EMS Report" for the 1999 fiscal year (in press)

2000-2001 Goals:

- Continue analysis of Kentucky's hospital discharge injury data, with the final report projected for Fall, 2000

Crash Outcome Data Evaluation System (CODES) Project

The CODES mission is to computer link, using probabilistic data linking software, police crash reports from the Kentucky Accident Reporting System (KARS) with medical data. *Key personnel: Mike Singleton (859) 323-4750*

1999-2000 Accomplishments:

- Completed linkage of 1996 KARS, EMS, and hospital discharge data sets. We linked almost 26,000 EMS reports, and over 1,600 hospital inpatient reports, to crash reports
- Validated the accuracy of the 1996 linkages
- Developed an initial draft of a CODES Data Linkage Manual
- Completed data entry of 14,000 motor vehicle related EMS runs for 1997
- Completed first pass of data linkage of KARS, EMS, and hospital discharge data sets for 1997

2000-2001 Goals:

- Publish a case-control study of the factors related to the occurrence of traumatic brain injury among drivers in 1997 motor vehicle crashes in Kentucky
- Disseminate CODES findings via public-use CD, fact sheets, management reports and a CODES web site
- Collaborate with Safe Communities coalitions to develop community injury profiles, and to assist them in their collection and analysis of local emergency department injury data



- Link 1998 motor vehicle crash, EMS, and hospital data
- Link additional data sets, including death certificates and Medicaid
- Develop a report which describes the challenges experienced and other issues that must be addressed in continuing CODES in Kentucky

Intimate Partner Violence Surveillance Project (IPVS)

This project began in October 1999. The main objective of the IPVS project is to establish a statewide surveillance system to monitor the incidence and prevalence of IPV in Kentucky. *Key personnel: Melissa O'Toole (859) 323-4747.*

1999-2000 Accomplishments:

- The Cabinet for Families and Children, Department of Community Based Services Adult Protective Services data set for 1998 was obtained and is currently being edited, cleaned and standardized
- The Intimate Partner Violence Self-Report Survey instrument was developed to collect data regarding intimate partner violence experiences among women in Kentucky

2000-2001 Goals:

- The Justice Cabinet, Administrative Office of the Courts, Protective Order data set for 1998 will be transferred to the IPVS project
- The Self-Report Survey will be conducted via random telephone survey by the UK Survey Research Center

Traumatic Brain Injury/Spinal Cord Injury (TBI/SCI) Surveillance Project

Funded by the Kentucky TBI Trust Fund Advisory Board, a pilot study was conducted during FY'00. Based on the results of the pilot study, a contract has been given to the State Injury Prevention Program to conduct TBI/SCI surveillance during FY'01. *Key personnel: Jay Christian (859) 323-4750.*

1999-2000 Accomplishments:

- Used probabilistic computer linkage of trauma registry data, hospital discharge data, and the National Center for Health Statistics' "Multiple Cause of Death" data to create a TBI data set for 1997.

2000-2001 Goals:

- Conduct a case-control study of the factors related to the occurrence of TBI among drivers in 1997 motor vehicle crashes in Kentucky
- Produce TBI & SCI data sets for 1998, also through probabilistic data linkage
- Improve relationships with out-of-state trauma centers to facilitate more accurate estimation of TBI & SCI incidence rates.
- Abstract a 10% sample of TBI & SCI hospital records in order to more fully describe causes, treatment, and outcomes
- Improve overall quality of TBI & SCI data, thereby increasing its utility

Community Injury Prevention Program

The Community Injury Prevention Program (CIPP) is the section of the SIPP dedicated to the provision of injury preventive services. This program provides services to 60 of Kentucky's 120 counties. Additional services, such as the provision of data to local health departments and others engaged in injury prevention, are provided on a statewide basis. Unlike many of the other programs at KIPRC, which are oriented toward research or data collection and surveillance, the primary mission of the CIPP is the provision of public health services, in the form of injury prevention programs, to Kentuckians.

Injuries cover a broad spectrum, and it is impractical for the CIPP to try to address all injury problems at once. Instead, using data generated by other programs at KIPRC and by other governmental agencies, the CIPP has identified the types of injuries that are most prevalent in Kentucky. Based upon this information, and the resources available to address the problem, the CIPP currently concentrates on two broad areas of injury prevention. These areas are motor vehicle crash (MVC) reduction and traffic safety, with a particular emphasis on child passenger safety, and residential fire injury prevention.



Residential Fire Injury Prevention Project

The goals of this project are to provide fire safety education and install smoke alarms in homes that do not currently have functional smoke alarms. This project has brought together federal, state and local governments, volunteer agencies and organizations, private industry and advocacy groups in an effort to improve fire safety in rural Kentucky. Services are provided to three Kentucky counties each year of the 3-year project. The project is now in its second year, with Johnson, Pike and Russell counties participating. CIPP regional coordinators work with local health departments to enroll households that do not have a smoke alarm. Local volunteers, principally firefighters, then install lithium battery-powered 10-year smoke alarms in the home and provide fire safety education to the residents. Additional fire safety awareness and education activities are conducted at the community level. More than 2,800 smoke alarms have been installed already during the current project year, and the CIPP expects to install a total of over 5,500 alarms during the current year. Combined with the alarms installed during the first year of the project, this will raise the total to approximately 11,000. An additional 6,000 alarms were installed during the first year of the project through support from the Radio Shack® Corporation. *Key personnel: Robert McCool (859) 257-6741, Ron Clatos, Tom Haynes, Amy Tomlinson*

1999-2000 Accomplishments:

- Trained personnel from 39 fire departments and several other organizations in smoke alarm installation procedures
- Provided fire safety education and smoke alarm installer training materials to five local health departments
- Installed 2,800 smoke alarms in rural Kentucky homes which did not previously have working smoke alarms; a total of 5,500 alarms will be installed this year
- Developed a cooperative effort between public health, the fire service, the private sector and service organizations to implement this project

2000-2001 Goals:

- Develop locally sustainable programs for fire safety in the counties receiving the smoke detectors
- Train at least 15 additional fire departments in smoke alarm installation procedures

- Install at least 5,000 smoke alarms in Kentucky homes
- Continue to build upon the existing public-private partnership and expand support for fire safety programs in Kentucky

Alternative Sentencing Program for Child Passenger Restraint Law Violators

This program was designed to offer a constructive alternative to fines for first-time violators of Kentucky's child passenger restraint law. In this program, first-time violators are sentenced to a mandatory 3-4 hour education program in lieu of a monetary fine. Violators receive education in why child safety restraints are critical to protect children riding in motor vehicles, as well as training in how to properly use a child safety restraint. Those violators who do not already have a child restraint are given one as part of the training program.

This program was pilot tested in two counties during 1998-1999, and expanded into four additional counties in 1999-2000. It has been well-received by local law enforcement officials, prosecutors and judges, as well as by child passenger safety advocates, and current data indicate a low recidivism rate among violators. This program has been reviewed by a representative of the Japanese government for possible inclusion in the national child safety restraint program being developed for Japan. *Key personnel: Robert McCool (859)257-6741, Ron Clatos, Amy Tomlinson, Tom Haynes*

1999-2000 Accomplishments:

- Expanded the program into four additional counties; outcome results from these counties are still pending
- The program has gained additional support from local law enforcement agencies, prosecutors and judges
- Additional data has been collected to support further expansion of the program
- Work on a model program for use in other areas has begun

2000-2001 Goals:

- Implement the program in at least six additional counties
- Collect additional data to facilitate program evaluation
- Develop a model program for use statewide

Standardized Child Passenger Safety Training

After taking an early lead in the development of a 2-day child passenger safety (CPS) training program for Kentucky, CIPP representatives have worked with the National Highway Traffic Safety Administration (NHTSA), the Southeastern Regional Injury Control Network (SERICN) and other organizations to help establish regional standards for CPS courses less than four days in length. The CPS curriculum committee that was first brought together by CIPP has been recognized by the Training Branch of KDPH, and procedures for the formal certification of persons who successfully complete the 2-day training course being developed by CIPP and the committee are nearly completed. Pilot classes to test the 2-day curriculum have been held, and revisions are currently being made. These revisions are expected to be completed by mid-summer of 2000. At that time, a standardized 2-day CPS curriculum will be available for Kentuckians who need introductory-level CPS training but who are not able to attend the 4-day NHTSA CPS Technician course. *Key personnel: Robert McCool (859) 257-6741, Tom Haynes, Amy Tomlinson, Ron Clatos*



1999-2000 Accomplishments:

- Assisted in the development of regional standards for CPS courses less than four days in length
- Reviewed the proposed Kentucky curriculum to insure compliance with the newly-developed regional standards
- Expanded the state-level CPS curriculum committee and achieved formal recognition by KDPH for the committee
- Developed certification standards for the graduates of the 2-day course
- Conducted pilot testing and revision of the 2-day curriculum and trained 32 individuals

2000-2001 Goals:

- Finalize the trainer curriculum and all course materials by July 31, 2000
- Begin offering trainer courses and certification by August 15, 2000
- Train at least 200 individuals by December 31, 2000

Other CIPP Activities

In addition to the major activities already mentioned, CIPP personnel have been very active in conducting child passenger safety (CPS) activities such as child restraint system training and CPS checkup events. During the 1999-2000 year CIPP staff members continued to serve as members of regional and state traffic safety and injury prevention coalitions; provided injury data and injury prevention assistance to local governments and organizations; presented safety programs and information at schools, health fairs and conferences; and served as community advocates for safety and injury prevention. The CIPP provided and coordinated the distribution of more than 400 child safety seats to low income Kentucky families, conducted recall programs to collect and dispose of recalled or unsafe child safety seats, and trained emergency services providers in injury prevention.

In addition to serving Kentuckians within the state, the CIPP is also active at the regional and national levels. The CIPP provides Kentucky's public health representative to the Southeast Regional Injury Control Network (SERICN) and manages an electronic mail communication list for that organization. CIPP staff members also represented the program at national meetings and conferences.



KIPRC Staff

KATHY ADAMS - BS, RN from Eastern Kentucky University. Kathy provides outreach support and education with the Pediatric and Adolescent Injury Prevention Program. This includes support for the local health departments, Ky SAFE KIDS coalition and chapters, and the State Child Fatality Review Team. Prior to being an Injury Prevention Specialist, she worked in psychiatric nursing and clinical drug research.

SHANNON BEAVEN - BS, Mathematics, University of Kentucky. Shannon is currently the Surveillance Coordinator for the Intimate Partner Violence Surveillance Project. Her contributions to KIPRC include her freely given (sometimes brilliant) ideas, opinions, and knowledge of the trivial.

VICKIE BRANDT - BS, RN, Western Kentucky University. Vickie is a Farm Safety and Health Coordinator for the Community Partners for Healthy Farming (CPHF) Project. She assists with the Fatality Assessment and Control Evaluation (FACE) Project and the SENSOR Project. Vickie resides in Bowling Green, Kentucky.

STEPHANIE BYERS - BS in Forensic Science from Eastern Kentucky University. She is the Firearm Injury Surveillance Coordinator for the State Injury Prevention Program.

JAY CHRISTIAN - Jay works on the CODES (Crash Outcome Data Evaluation System) project with Mike Singleton, where they are blazing a trail in probabilistic data linkage. He is a somewhat recent addition to the SIPP staff, having returned to Lexington only in the past year. Jay received his bachelor's degree from Washington University in St. Louis in 1998, and hopes to continue his education by entering a master's degree program in the fall of 1999 at UK. He plays in the local amateur soccer league with his team, SuperJuice, and will admit readily that he enjoys watching very poor horror movies.

JEANNE DRAPEAU - PhD candidate in Geography, University of Kentucky, MA Geography, Florida Atlantic University, Boca Raton. Jeanne works as data manager and data analyst for the Pediatric and Adolescent Injury Team (PAIPP). Presently, her major responsibilities are the EMSC Implementation and Targeted Issues projects, analyzing the data for the completed Implementation grant and managing the data and writing front-end applications for the Targeted Issues project.

FREDA FRANCIS - Freda provides invaluable assistance to the Center Director, Associate Director, Administrative Business Officer, Program Managers and all employees of KIPRC. She provides clerical support to all programs, and other business functions. Freda also initiates and processes personnel and payroll documents, as well as having first communication with visitors to the Center.

TOM HAYNES - RN, is the Community Injury Prevention Program's Regional Injury Prevention Coordinator for the Southeast Region. The Southeast regional office is located at the UK Center for Rural Health in Hazard. Tom has been a registered nurse since 1971, served as a combat medic and operating room technician in the United States Army (1966-68) and has over 3 years of ICU-CCU experience. Tom also retired from a career as a benefits specialist UMWA Health & Retirement Funds, a multi-employer pension and health benefits plan, in 1998 before joining the KIPRC staff in December 1998. He is a certified fire service instructor who has served as an adjunct instructor with the KCTCS Fire/Rescue Training Program since 1977. He has been an EMT since 1977 and an active member of the Neon Volunteer Fire Department (where he currently holds the rank of Asst. Chief) since 1975. Tom particularly enjoys working with fire safety projects, and he is also a certified Child Passenger Safety Technician.

PAM KIDD - is a Family Nurse Practitioner with 18 years experience in emergency nursing. She completed her undergraduate studies at University of Kentucky, her masters degree in trauma nursing at University of Cincinnati, and her doctoral degree in nursing at University of Arizona. Pam decided to try to prevent injuries rather than treat the effects of injuries after many long nights in the Emergency Department. Her funded research and publications have been in the area of driving risk taking, adolescent driving behavior, educational interventions to prevent agriculture- and construction-related injuries, and the relationship between economics and safety behavior. Pam combines both qualitative and quantitative methods in her research. She is a skilled moderator of focus groups. She is also the author of several clinical texts. Pam joined KIPRC in 1995 and is currently the Director.

DENISE LANSAW - Denise, as KIPRC's Business Officer, is responsible for financial oversight of the departmental and project budgets. Denise received her undergraduate degree from Transylvania University - a BA in Business Administration with an emphasis in Accounting. She completed her MBA at Morehead State University. Denise's career focus has been in not-for-profit accounting. Her professional experience includes various administrative roles in higher education and community health and social welfare organizations.

KAREN McCLANAHAN - MA in Communications, University of Kentucky, with an emphasis on health communication. Special areas of interest include access to health care for rural residents, issues related to women (e.g. substance abuse, cancer, domestic violence), and messages designed to educate the public on health matters. Karen is the project manager for the Workcrew Performance model as well as principal investigator on the NIOSH contract "Employers' Manual on Occupational Health and Safety Intervention Effectiveness Research."

ROBERT McCOOL - MS in Criminal Justice, Eastern Kentucky University, with emphasis in Police Administration. He is currently enrolled in the Ph.D. program in Sociology at the University of Kentucky. Robert is the manager for the Community Injury Prevention Program, which is the program delivery unit within the State Injury Prevention Program. Robert is an emergency medical technician, a certified police instructor, a rescue instructor and a certified child passenger safety technician. He is also currently enrolled in the Federal Emergency Management Agency's Master Trainer Program, and he serves as the training officer for the Madison County Rescue Squad, Inc.

MELISSA O'TOOLE - M.Sc. Social Research Methods, University of Dublin, Trinity College, Ireland. B.A. Sociology and French, University of Wales, Cardiff. She is currently working on a project for surveillance of violence against women in Kentucky, which involves coordinating data sets from several sources: the Health Department, Community Based Services, State Police, the Courts, Battered Women's shelters and Rape Crisis shelters. Prior to moving to Lexington and KIPRC, she worked for the Center for Applied Social Research at Trinity College. Areas of interest include: Diaspora (cultural/ethnic identities and nationality), Violence in society (physical, sexual, military), Risk behavior/sexually transmitted diseases.

SUSAN POLLACK - MD, is a physician Board Certified in both Pediatrics and Occupational Medicine. She manages the Pediatric and Adolescent Injury Prevention Program at KIPRC, and is also an Assistant Professor in the General Pediatric Division of the UK Department of Pediatrics and in the UK Department of Preventive Medicine. She completed her undergraduate education at Smith College, her MD at Eastern Virginia Medical School, and her postgraduate training at West Virginia University- Morgantown and at Mt. Sinai in New York City. Susan is interested in all aspects of injury epidemiology and prevention for the pediatric and adolescent age group (and in teaching about those things to the public and health professionals), but has had funding, publications and a national role in the issue of occupational injuries among working teens. Major federal funding to her program currently comes from Emergency Medical Services for Children. Other special interests include Child Fatality Review and whitewater river safety.

MIKE POPE - DVM, Auburn University. Mike manages the Kentucky Fatality Assessment and Control Evaluation (FACE) project. Special areas of interest include animal related injuries, other agricultural injuries and the development of prevention strategies.

DONNA REED - BS in Business Administration and Communications from Georgetown College. Donna is a Research Assistant in the Occupational Injury Prevention Program (OIPP) and works with a variety of projects including Community Partners for Healthy Farming (CPHF), KY FACE, and SENSOR. Special interests include agricultural injury issues and health communications.

DAVID REICHEL - Injury Surveillance Manager. David is responsible for managing several large injury data sets including hospital discharge records, death certificates, and trauma center data. His background includes an MPH specializing in epidemiology and biostatistics from the Texas A&M University, School of Rural Public Health, and a DC, Doctor of Chiropractic degree, from Northwestern College of Chiropractic, St. Paul, Minnesota. He also has a BA in English from the University of Minnesota. David worked for Stata Corporation, College Station, Texas, in the areas of technical and statistical software





support. He taught math and science for two years. He supervised student physicians in community outpatient clinics in Dallas, Texas, and Davenport, Iowa, and managed the chiropractic program for a Minneapolis-based HMO. David served as a hospital and field medic in the Army Reserves for six years, and treated a variety of injuries over a 15-year period as a private practice chiropractor in rural Minnesota and Texas.

AMY SCHEERER - MSPH, Industrial Hygiene, University of Kentucky. Amy manages the SENSOR Occupational Burn Injury Surveillance Project. She also assists with KY FACE and Community Partners for Healthy Farming. Special areas of interest include issues related to adolescent workers.

MARK SCHNEIDER - BS in Biology, Chemistry, Transylvania University. Mark is the Network Administrator for KIPRC. His certifications include Novell's CNE and Microsoft's MCP. Mark administers the NT Database Server, Netware File Server and UNIX Web Server to warehouse and disseminate injury surveillance data. Mark is currently working on an Advanced Training Technology (ATT) grant for Hazardous Waste Worker Training.

MICHAEL SINGLETON - MS in Mathematics, Eastern Kentucky University. Michael is the manager for the Kentucky CODES project. Previous responsibilities at KIPRC include administration and analysis of Kentucky hospital discharge and death certificate data sets. Prior to KIPRC, he worked for five years as a computer programmer in the manufacturing and insurance industries.

LORENA STEENBERGEN - BSN, RN, San Diego State University with an emphasis in Community Health. She is currently working on the graduated Driver's License Evaluation Team. Other areas of interest included agricultural/occupational injuries.

TIM STRUTTMANN - MSPH Industrial Hygiene, University of Kentucky. Tim manages the Occupational Injury Prevention Program (OIPP) at KIPRC. Special areas of interest include surveillance of occupational injury, translating surveillance data into interventions and evaluation of occupational injury prevention initiatives.

AMY TOMLINSON - BS, CHES. Graduate of Western Kentucky University in Public Health. She is the South-Central Kentucky Regional Coordinator for the State Injury Prevention Program. She is a Certified Child Passenger Safety Technician. Her office is located in Pulaski County, Kentucky.

ROBERT (BOB) WILLIAMS - Certified EMT-B from Hazard Community College in 1989. He is currently taking course work in computer information systems with options in programming and networking. His primary responsibilities are the collection and cleaning of the data submitted by the Emergency Medical Services (EMS) agencies for the State Injury Prevention Program and preparing and sending reports to the Kentucky State EMS Branch on EMS Activities. His other responsibilities are the distribution, training, and trouble shooting of the "Medic!" software for EMS agencies throughout the state, assisting other projects here at the center when they request data from the EMS Database. Bob is the EMS Data coordinator for the injury surveillance division of the State Injury Prevention Program.

SUSAN WOJCIK - MS in Biomedical Engineering, University of Kentucky, BS in Ceramic Engineering, Alfred University and Certified Athletic Trainer. Susan manages the Loss Education to Reduce Construction Related Injuries and Web Based Training Materials Projects. Special areas of interest include sport and recreation related injury and biomedical implant research.



MEMBERS OF THE EXTERNAL ADVISORY COMMITTEE

Delwood C. Collins, PhD, Vice Chancellor for Research and Graduate Studies, Chandler Medical Center, University of Kentucky

James S. Davis, MD, Director, Division of Adult and Child Health, Kentucky Department for Public Health

J. David Dunn, M.P.H., Sc.D, R. S. Professor of Public Health and Head, Department of Public Health, Western Kentucky University

Mary E. Fallat, MD, Director of Trauma Services, Kosair Children's Hospital and Associate Professor of Surgery, College of Medicine, University of Louisville

Joni L. Jenkins, State Representative, Program Coordinator, Prevention, Education, and Advocacy on Campus and in the Community, University of Louisville

Rice C. Leach, MD, Commissioner, Kentucky Department for Public Health

John W. Poundstone, MD, MPH, Commissioner of Health, Fayette County Health Department

Melinda G. Rowe, MD, MPH, Director of Public Health Services, Jefferson County Health Department

J. Stephan Stapczynski, MD, Chair, Department of Emergency Medicine, College of Medicine, University of Kentucky

R. Prasaad Steiner, MD, PhD, MPH, Director, Community Health Division, College of Medicine, University of Louisville

Carolyn A. Williams, PhD, F.A.A.N. Dean, College of Nursing, University of Kentucky

A. Byron Young, MD, Chief, Neurosurgery Division, Department of Surgery, College of Medicine, University of Kentucky

RESEARCH ASSOCIATES

Philip Berger, PhD, Professor Emeritus, Martin School of Public Policy and Administration, University of Kentucky

Kathleen Chard, PhD, Assistant Professor, Department of Educational and Counseling Psychology, College of Education, University of Kentucky

Frederick W. Danner, PhD, Chair, Department of Educational and Counseling Psychology, College of Education, University of Kentucky

Robert Hosey, MD, Department of Family Practice, College of Medicine, University of Kentucky

Margaret Love, PhD, Department of Family Practice, College of Medicine, University of Kentucky

Carrie McCoy, MSN,CEN, PhD, School of Nursing, Northern Kentucky University

Andrea Milan, M.S.E.d., P.T., Division of Physical Therapy, College of Allied Health, University of Kentucky

Mark Parshall, PhD, CEN, Assistant Professor, College of Nursing, University of New Mexico

Kevin Pearce, MD, MPH, Department of Family Practice, College of Medicine, University of Kentucky

Susan Morgan, PhD, Assistant Professor, Department of Communication, College of Arts and Sciences, University of Kentucky

Christin Rolf, MD, Deputy Medical Examiner, State Medical Examiner's Office

Sharon Sheahan, ARNP, PhD, Professor, College of Nursing, University of Kentucky

Nikiforos Stamatiadis, PhD, P.E., Civil Engineering, Kentucky Transportation Center, University of Kentucky



Policy Brief:

Graduated Drivers' License for Youth Program

Teen Motor Vehicle Crashes: A Statewide Problem

The disproportionate involvement of teenaged drivers (16-19 years old) in motor vehicle crashes (MVCs) continues to be a serious problem in Kentucky as well as throughout the United States. Kentucky has previously ranked among the top ten states for teen death rates from MVCs.⁵ In 1995, the Commonwealth's teenage death rate was twice that for other licensed drivers.⁶ During 1993-1995, teen drivers were associated with 23% of Kentucky injury MVCs despite representing only 6.5% of licensed drivers.³ The total cost for fatalities, injuries, and property damage was \$410 million in 1994 for all MVC's involving a teenaged driver.² Many of these MVCs are preventable and, therefore, the associated costs are also preventable.

driving experience in a low-risk setting and that 2) young drivers respond to driving sanctions (removal of driving privileges for driving offenses). The impact of this legislation can not be truly evaluated at this early date. However, preliminary data from the GDL evaluation team at the Kentucky Injury Prevention and Research Center and Kentucky Transportation Center are encouraging.

Summary of Kentucky's GDL Program

The novice driver receives a 6 month driving permit requiring a licensed driver over 21 in the vehicle while the novice is driving. The permit driver is not allowed to drive between midnight and 6 am (with exceptions). Additionally, the permit driver must complete a state approved driver



Kentucky Injury Prevention
And Research Center

Kentucky Injury
Prevention and
Research Center
<http://www.kiprc.uky.edu>



A monthly newsletter provided by the
Kentucky Employers' Mutual Insurance Company's
Loss Education Department and the
KY Injury Prevention and Research Center.
<http://www.KEM1.com>

SAFE SITE

Kentucky

CABINET FOR HEALTH SERVICES
DEPARTMENT FOR PUBLIC HEALTH
DIVISION OF EPIDEMIOLOGY
& HEALTH PLANNING

Epidemiologic Notes & Reports



Volume 35 Number 4

April 2000

FIRE INJURY PREVENTION IN KENTUCKY

Robert H. McCool, MS, EMT-B
and Carl W. Spurlock, Ph.D.
State Injury Prevention Program

Residential house fires have been a major cause of mortality in Kentucky for many years. In 1995, 91 people died in residential fires in Kentucky. This was more than the number (73) who died from unintentional firearms incidents and drownings combined. While the number of fire deaths has decreased, to 48 in 1999, fire is still a leading cause

Inside This Issue

Fire Injury Prevention in Kentucky.....	1-4
Fire Safety Tips.....	Insert
Kentucky Child Passenger Safety Curriculum.....	4-6
Kentucky CPS Curriculum Committee.....	6
Select Reportable Diseases in Kentucky YTD.....	7
National Infant Immunization Week.....	8
Interpretation of the Hepatitis B Panel.....	8

availability of SIPP field staff. The counties selected for the initial project year were Lawrence, McCreary, and Pike.

Potentially Productive Years of Life Lost (PPYLL) in Kentucky Due to Occupational Fatalities, 1994-1996

Tim W. Struttman, MSPH; Amy Scheerer, MSPH; Elyn Moon, MA

A population-based occupational fatality surveillance system was used to identify 452 work-related fatalities in Kentucky over a 3-year period. Three hundred eighty-six workers less than 65 years old were included in this analysis of potentially productive years of life lost (PPYLL). A total of 9,275 years of potentially productive life were lost due to these occupational fatalities, costing the state economy \$148 million in lost wages. Most of this loss (70%) was in the industries of transportation/communication/public utilities, manufacturing, mining and construction. The transportation/communication/public utilities division alone accounted for 21.4% of the total lost earnings. The agriculture/forestry/


achieving the goal of *Healthy Kentuckians 2000*.

Evaluation of the enormous impact workplace fatalities have on the economy allows prevention resources to be allotted appropriately. One tool for evaluation is Years of Potential Life Lost (YPLL).^{3,4} which is calculated by subtracting the age at death from an expected lifespan. The result is the number of life years lost as the result of premature death.

YPLL has been used to study preventable deaths due to disease and injury.^{3,4} Because it uses the age at which death occurs, not simply the number of deaths,^{4,5,6} YPLL can be used to rank the societal impact in terms of years lost due to different causes of death. Researchers have used YPLL

Mr Struttman is affiliated with the Kentucky Injury Prevention and Research Center, Southeast Center for Agricultural Health and Injury Prevention.

Source of support: National Institute for Occupational Safety and Health (NIOSH) Cooperative Agreement Number U60/CCU409879-04 to the Kentucky Department of Public Health.



KENTUCKY INJURY PREVENTION AND RESEARCH CENTER'S COMMUNITY INJURY PREVENTION PROGRAM

"Court-Mandated Child Safety Seat Training Program - An Alternative Sentence"



University of Kentucky
Kentucky Injury Prevention & Research Center
333 Waller Avenue
Suite 202
Lexington, KY 40504
859-257-4954
FAX 859-257-3909
www.kiprc.uky.edu



1999-2000 Report Contents

Funding 2-3

Occupational Injury Prevention Program 4-9

Pediatric and Adolescent Injury Prevention Program 10-12

State Injury Prevention Program 13-16

Center Staff 17-19

Advisory Panel 20

Research Associates 20