

State: Kentucky

Principal Investigator: Terry Bunn

Contact Information: 333 Waller Ave., Suite 242
Lexington, KY 40504

Program Type: Fundamental- Kentucky Occupational Safety and Health Surveillance (KOSHS) program

MAJOR ACCOMPLISHMENTS AND OUTPUTS:

A. Reports

- a. Kentucky Occupational Safety and Health Surveillance Program- Annual Report, 2010.

B. Presentations

- 1. "The value of a worker safety program", Kentucky Motor Transport Association, Louisville, KY, 2009.
- 2. "Farmer exposure to organic solvents during the maintenance and repair of farm machinery", American Public Health Association, Philadelphia, PA, November 2009.
- 3. "The value of a worker safety program and the KOSHS program", Society of Army Medical Engineers, Louisville, KY, January 2010.
- 4. "The value of a worker safety program and the FACE program", Eastern Kentucky University, Richmond, KY, January 2010.
- 5. "Methadone poisonings in Kentucky and Billing to Workers' Compensation", Center for Drug and Alcohol Research, Lexington, KY, January 2010.
- 6. "The value of a worker safety program", Associated Builders and Contractors Kentuckiana, Frankfort, KY, March 2010.
- 7. "Methadone poisonings in Kentucky and Billing to Workers' Compensation", Safe States meeting, Ann Arbor MI April 2010.
- 8. "The value of a worker safety program", Kentucky Motor Transport Association, Owensboro, KY, May 2010.

C. Hazard Alerts

- a. Workers electrocuted while working in elevated buckets. FACE the facts. 7(2): September 2009.

D. Publications

- Bunn TL, Yu L, Spiller H, Singleton M. 2010. Surveillance of methadone-related poisonings in Kentucky using multiple data sources. *Pharmacoepidemiol Drug Saf.* 2010 Feb;19(2):124-31.
- Bunn TL, Liu Y, Lee K, Robertson M, Yu L. 2009. Farmer Exposure to Organic Solvents During the Maintenance and Repair of Farm Machinery: A Pilot Study. *AJIM* 52(12):973-981.
- Costich J, Bunn TL, Robertson, M. 2009. Worker safety programs make sense and save sense. *KY Bench and Bar* 73(5):45.
- Bunn TL, Robertson M. Safety can make me money? NIOSH e-news November 2009.

E. Partnership building and establishment of an advisory committee.

Partnerships

Department of Workers' Compensation Our partnership originally included the provision of data to us for the generation of worker injury indicators. The Department of Workers' Compensation agreed in July 2009 to provide us with the whole Kentucky workers' compensation data set. We are now exchanging fatality lists as well to increase capture of work-related fatalities.

Transportation sector Important partnerships were formed to collaborate on new projects, to disseminate prevention information, and to raise safety awareness within the trucking community. The KOSHS/FACE program is a stakeholder for a number of Commercial Vehicle Enforcement activities. Second, KOSHS personnel have been members of the Governor's Executive Committee on Highway Safety (GECHS) since 2007 and FACE personnel are members of the Highway Fatality Review Team formed out of the GECHS in January 2009. Emphasis areas include the prevention of commercial vehicle fatalities, and pedestrian fatalities.

A KOSHS personnel member is the co-chair of the Kentucky (KY) Traffic Records Advisory Committee which provides input on the improvement of traffic records systems within KY. Recommended projects for

funding for years 2010-2011 include the expansion of the trauma database and the continuation of funding for the collection of emergency medical services (EMS) run data from the KY Board of EMS.

A partnership was formed with the Kentucky Motor Transport Association (KMTA) in 2006. KOSHS personnel are members of the Safety Council within the KMTA and KOSHS and FACE personnel routinely consult with other members on trucker safety recommendations and intervention development for the Kentucky trucking industry.

Multi-State Collaborations

Of the 15 states currently funded to perform occupational safety and health surveillance (OHI component), six states are interested in fielding a module on work-related dermatitis to be included in the 2011 BRFSS survey. A KOSHS staff member is part of the workgroup who developed the four questions to be included in the 2011 BRFSS survey. An application has been submitted to include four questions. Funds for the inclusion of the dermatitis questions will be requested with no-cost extension money.

Advisory Committee

The KOSHS/FACE advisory committee developed a section that was included in the 2010 KY Strategic Plan for Developing Core Capacity for Injury Prevention and Control. A significant need identified by stakeholders was the number of small companies in KY without worker safety programs. A worker safety program presentation, including true stories and statistics, was developed geared to new and established small business owners. The presentation contained information on workers' compensation, basic elements and implementation of a worker safety plan, and how workers' compensation premiums were impacted by the variation in the quality (or even presence) of a worker safety plan. The KOSHS program has partnered with the KY Department for Workers' Claims and KY OSHA to give panel presentations to new and existing small business owners. The first panel presentation was held in Owensboro, KY, in May 2010, with 27 participants.

Potential Outcomes

After the KOSHS worker safety program panel presentation, an insurance representative approached KOSHS personnel and said that the presentation was "dead on and I will tell my regional agents to get trained in workers' compensation".

After the KOSHS program gave a presentation on work-related injury indicators at the 2010 Governor's Safety and Health conference in Louisville, KY, in May, 2010, a company safety person said that the "indicators are new data for safety representatives to use and made me aware of the big picture. Keep up the good work".

The KY state Chamber of Commerce met with KOSH personnel in September 2009 and agreed to begin disseminating KOSHS and FACE reports and haz alerts to their membership.

F. Intermediate Outcomes

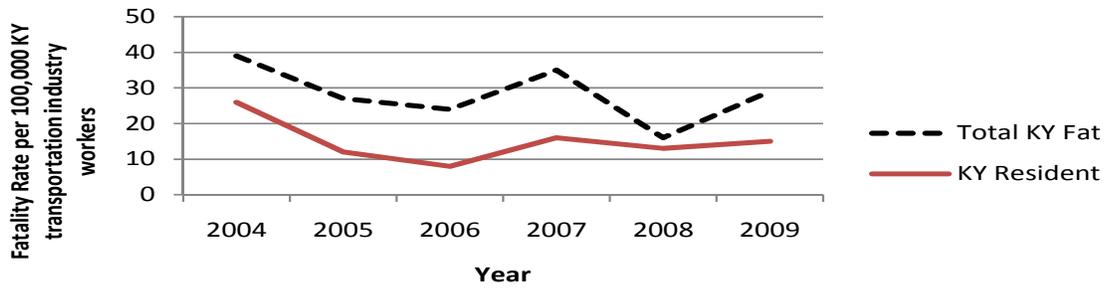
1. KOSHS personnel participated on the KY Commercial Vehicle Committee which provided input for the Commercial Vehicle emphasis area of the 2010 KY Strategic Highway Safety plan developed by the KY Transportation Cabinet. The commercial Vehicle emphasis area contains a number of important elements: a) safety training for small companies; b) increased number of rest havens; c) distribution of KOSHS materials at 24 rest stops and 4 truck havens in KY; and d) a recommendation for a positive drug test law.
2. After the NIOSH e-news article came out, the following response was received from Jeff Camplin, President of Camplin Environmental Service, IL, said "I just reviewed your powerpoint presentation on "Safety can make me money?".The presentation was great. I have asked the American Society of Safety Engineers to post the link to your work on their Business of Safety webpage..... In addition, I am revising my chapter in the ASSE "Safety Professional Handbook" on safety management, and would like to add a link to your work in the book.....Great job! You have made a great contribution to the field of safety".

G. End Outcomes

Between 1994 and 2009, occupational fatalities significantly decreased in both number and rate. It is impossible to eliminate or take into account all the possible influences on the burden of fatal occupational injuries, but KY FACE decided to evaluate the burden of transportation industry injuries. Since 2005, the

Kentucky transportation and warehousing industry has been a state target priority area for surveillance and interventions. Kentucky transportation and warehousing industry fatality rates have decreased since 2004 (Figure 1), although the trend is not significant ($p= 0.224$). The transportation and warehousing fatality rate for KY residents only also decreased, although the trend was not significant ($p= 0.225$).

Figure 1. Crude Fatality Rates for Transportation and Warehousing Industry Workers, 2004-2009.



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Program Type: Fatality Assessment and Control Evaluation (FACE) program

MAJOR ACCOMPLISHMENTS AND OUTPUTS:

A. Presentations

- *"The Kentucky FACE program"*, Kentucky Coroners Conference, Louisville, KY, April 2010.
- *"The KOSHS and FACE programs"*, NIOSH, Cincinnati, OH, April 2010.
- *"The KOSHS and FACE programs"*, Governor's Safety and Health Conference, Louisville, KY, May 2010.
- *"Kentucky state worker injuries"*, KY Personnel Cabinet, Frankfort, KY, May 2010.

B. Hazard alerts

- Workers killed while working with granite, Volume 7, Issue 3, October 2009.
- Truck drivers killed after exiting semi tractor and being struck by other semi tractors in distribution center, Volume 7, Issue 4, November 2009.
- Workers killed while working with forklifts, Volume 8, Issue 2, March 2010.
- Residential tree trimmer killed while working, Volume 8, Issue 1, March 2010.

C. Publications and Reports

Bunn TL, Yu L, Slavova S, Bathke A. 2009. The Effects of Semi Truck Driver Age, and Gender, and the Presence of Passengers on Collisions with Other Vehicles. *Traffic Inj Prev* 10(3):266-72.

Bunn TL, Slavova S, Tang, M. Injuries. 2010. Injuries Among Solid Waste Collectors in the Private vs. Public Sectors (submitted to AJIM).

Kentucky Fatality Assessment and Control Evaluation Program- Annual Report, 2009.

D. Partnerships

Transportation sector

Based on KY FACE report #07KY070, "Semi-Tractor Trailer Driver Hauling Chicken Dies after Striking a Rock Wall", a fuel shut-off valve for refrigerated trailers is being designed. The semi truck driver in this report was incinerated after crashing when diesel fuel dripped onto an exhaust pipe from the refrigerated semi tractor and caused a fire. The fuel line from the refrigeration unit on the trailer was compromised during the collision. Students from the University of Kentucky College of Engineering designed a fuel supply shutoff for refrigeration units when a fuel line is compromised. The shutoff system is being designed with a signal to alert the driver when the fuel flow has been stopped and will have an override switch. The prototype was successful, and the fuel supply shutoff is being tested on a semi refrigeration unit in 2010. Also, the report contained a recommendation to include breaks in concrete median barriers to allow the passage of EMS personnel. The scene of the accident was not reached for approximately 20 minutes because EMS personnel had to drive north approximately ten miles on the interstate, exit, then drive back up to the scene five more miles away. After many conversations the KY Transportation Cabinet, in July 2009, cable barriers and concrete barriers in the median are now being constructed with breaks every two miles to allow passage of emergency personnel.

KY Office of Vital Statistics

KY FACE personnel participated in the workgroup who designed a new A3 electronic file for death records. Beginning in July 2010, all electronic death records will contain a narrative field and expanded fields for race, ethnicity, and education. Also, there will be a new field on transportation injuries.

E. Potential Outcomes:

FACE publications and materials are of interest to industries regarding worker safety, as illustrated in the following example:

1. After our truck driver haz alert was disseminated, the following response was received, “thought it was very useful information. Some things that drivers take for granted and need to be made aware of. Great info!”.
2. After FACE report #07KY091 on a sleeper berth death was disseminated, five online surveys were received and four rated the publication as “good” or “excellent”. Responses included: 1) “I will include sleeper berth safety in all company SOP material”; 2) I will post information for drivers to view, talk about DUIs”- TS Trucking; and 3) “Team drivers will now use sleeper berth restraint system (mandatory)...Gets your attention”.

F. Intermediate Outcomes:

1. Nine electronic evaluations were received pertaining to our forklift haz alert that was disseminated in spring 2010. and all rated the publication as “excellent”. Company responses included: 1) “will incorporate materials into safety program”; 2) “each employee will be shown this FACE report and will receive additional forklift safety training”- Pressure Tech, Inc; 3) “Is it possible to be added to the distribution list for the Haz alerts? A co-worker has been forwarding to me and I find them quite useful”- Papa Johns; 4) “I appreciate the work that you folks do”- Owensboro Municipal Utilities; 5) “Nice review and reminder that equipment used regularly can still be very dangerous if we are not careful to follow safety rules each and every time. Thanks.”- first Class Transportation; and 6) “I will complete an individual audit to ensure the information covered is included in our program”.

G. End Outcomes:

Between 1994 and 2009, occupational fatalities significantly decreased in both number and rate. It is impossible to eliminate or take into account all the possible influences on the burden of fatal occupational injuries, but KY FACE decided to evaluate the burden of transportation and warehousing industry injuries. Since 2005, the Kentucky transportation and warehousing industry has been a state target priority area for surveillance and interventions. Kentucky transportation and warehousing industry fatality rates have decreased since 2004 (Figure 1), although the trend is not significant ($p= 0.224$). The transportation and warehousing fatality rate for KY residents only also decreased, although the trend was not significant ($p= 0.225$).

Figure 1. Crude Fatality Rates for Transportation and Warehousing Industry Workers, 2004-2009.

