

Impact

A quarterly newsletter delivering relevant information from the Kansas Trauma Program.

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- ▶ Trauma Registry: Fall Traumas In Kansas

Spring 2009



Our Vision: "Healthy Kansans living in safe and sustainable environments."

www.kstrauma.org



Chairperson's Corner:

There were many worthy events for the Trauma Program during 2008 which illustrate the program's growth and the mounting constituent support.

During the ACT meeting in August 2008, the program conducted a Benchmark and Indicator Self Assessment (BIS) facilitated by the American College of Surgeons. The BIS assessment is designed to provide a trauma system with a method of conducting an expeditious and economic evaluation. Along with praise for the vital work accomplished by the entire Trauma Program in ensuring a quality trauma system for Kansans, the ACS guided the program in identifying [10 priorities](#) on which to focus for the next two years.

Despite the progress the trauma system has made, the survival of the program is by no means guaranteed. As many of you know, a bill introduced in the Kansas legislature this spring would have jeopardized the Trauma Program's funding. If passed, the bill would have stripped \$500,000 from the program's budget eliminating the program's ability to award grants that provide financial support for level III trauma centers. However, the bill was never brought to the floor for a vote because of the overwhelming support demonstrated by all of the Trauma Program's constituents. It is easy for us to understand, and at times even take for granted, the need for a trauma system, but many community members and leaders are unaware of the safety they enjoy from living in an area with a sound trauma system. With the current economic situation predicted to continue past 2010, it is incumbent upon us to know our community leaders and keep them educated about the trauma system which is actively saving lives everyday.

We appreciate the efforts you have made in communicating the value of the trauma program. We know the program would not be where it is today without the contributions or our partners. Everyone has a part to play and we invite your participation as we move forward.

Paul B. Harrison, MD, FACS
Chairperson, Advisory Committee on Trauma

Comments from the Program Director:

Welcome to the first edition of the Kansas Trauma Program Newsletter. Our intent with this quarterly newsletter is provide a means to communicate news and updated information to agencies and individuals who work with the Kansas trauma system. This first edition has been designed to provide agencies who work with the trauma program an opportunity to know the state trauma program staff as there are several new members this year.

We encourage you to share any news or ideas that would be of benefit to our trauma partners in the state. The newsletter will be distributed by email, and all editions will be archived on the kstrauma.org web site. Contributions should be emailed to Dan Robinson at: d robinson@kdheks.gov

Rosanne Rutkowski, RN, MPH
Trauma Program Director

Program Update

Last year brought about many positive changes for the Kansas Trauma Program. In an effort to improve efficiency, provide better service, and reduce costs, both the trauma registry and the regional trauma council support were merged within KDHE's trauma program. The trauma program is within KDHE's Office of Local and Rural Health. With those changes there are several new faces.

Dan Robinson and Jeanette Shipley both joined the program in January 2008. Dan serves as the Assistant Program Coordinator. He is a native of Pennsylvania and a graduate of Duquesne University in Pittsburgh. Dan's voice is familiar to those calling the trauma program with questions regarding the trauma registry software. Prior to joining KDHE, Dan served seven years with the US Military. He and his wife Cheri are residents of Topeka.

Before joining the trauma program, Jeanette Shipley worked for the Emergency Medical Services for Children program at KDHE. Before coming to KDHE, she worked as a prehospital provider. Jeanette holds a degree from St. Mary's of the Plains, Dodge City.

She and her husband, John are the proud parents of two boys, Lane and Blake.

Dee Vernberg, BSN, MPH, PhD, trauma epidemiologist, joined the program in August 2008. Dee previously worked at KDHE in the Injury and Disability Program before leaving to teach at both KU and K-State. She and her husband Eric are the parents of a teenage driver, Stefan.

The trauma team's newest member is Dan Russell who started in March. Dan is the database coordinator for the program and will assist with both the trauma registry and regional council databases.

In addition to new faces, the Advisory Committee on Trauma appointed a new committee called the Kansas Trauma Medical Directors. This committee is charged with providing "best practice" guidelines that can be utilized by Kansas hospitals. Their first charge was to review CDC's Field Triage Guidelines which was discussed at the February ACT meeting.

[Click here to view the CDC Field Triage Guidelines.](#)

Thank you to everyone who works with the program. Success of this program would not be possible without your support.

Regional Update

The regional trauma councils were established to act as a local resource for input to and support of the Kansas Trauma System. One of the ways in which they do this is through regular meetings of the regional councils. Meeting dates, times and locations can be found on the [Kansas Trauma](#) web site. We encourage anyone with an interest in trauma system development to attend your regional meeting.

All six of the regional councils have been working on updating their respective regional trauma plans. These plans will be sent out to all general council members this spring. The plans will be reviewed and approved at the spring executive committee meetings. We invite your participation and feedback. In addition to the business meeting, several of the regions will be providing continuing education for those attending the spring meetings. The dates and locations are listed to the right in the shaded area.

The regional trauma councils in Kansas have done an excellent job in providing trauma education throughout the state. In 2008, the regional trauma councils provided 28 trauma related education classes. The number of individuals participating and type of classes provided are as follows:

Prehospital Trauma Life Support (PHTLS)-151 PHTLS Instructor Course-9
 Trauma Nurse Core Course (TNCC)-128
 Rural Trauma Team Development Course (RTTDC)-20
 Advanced Trauma Life Support (ATLS)-52

If you are interested in participating or in sponsoring in a trauma education program, contact your regional council.

Schedule of Regional General Membership Meetings, ACT meetings, and other meetings of interest:

Northeast April 27, 2009 - Stormont Vail Healthcare, Topeka @ 1:30pm - 4:00pm

Northwest May 6, 2009 - Hays Medical Center, Hays @ 10:00am - 2:00pm

North Central May 20, 2009 - Salina Regional Health Center, Salina @ 1:00pm-3:00pm

Southwest June 17, 2009 - Lee Richardson Zoo, Garden City @ 1:00pm-3:00pm

Southeast September 3, 2009 - Labette Health, Parsons @ 1:00pm -3:30pm

ACT Meetings for 2009

- May 13 - Stormont-Vail
- August 26 - Kansas Medical Society
- November 18 - Kansas Medical Society

Older Adult Fall Prevention Symposium June 24, 2009

Regional Update Continued



The **North East** Regional Trauma Council was busy this past fall with trauma education classes. Health Innovations Network of Kansas (HINK) was awarded funding from both the Regional Trauma Council and Kansas Rural Health Options Project (KRHOP) to host two Trauma Nurse Core Courses; one in Horton and one in St. Marys. Members of the regional trauma council executive committee assisted with the instruction of both classes. HINK originally intended to host one class in Horton but with an overwhelming response the waiting list was so long they decided to host a second class in St. Marys. There were a total of 38 nurses that successfully completed the course. HINK is a coalition of 16 hospitals in the northeast region whose mission is to improve the health status of the populations the hospitals individually and collectively serve.



The **North Central** Regional Trauma Council sponsored a dinner meeting with county commissioners, EMS directors, dispatch center directors and hospital administrations to discuss the importance of emergency medical dispatching and the relationship to outcomes in patient care. The event was held on February 17th at the Beloit Country Club. The agenda included discussion on how medical emergency 911 calls are handled in the region and what opportunities currently exist that can help prepare dispatchers to assist the 911 caller when a life-threatening medical situation exists.



The **North West** Regional Trauma Council in collaboration with Hays Medical Center hosted an Advanced Trauma Life Support (ATLS) Course on October 10 and 11. Wesley Medical Center facilitated instruction for the course. Fifteen physicians and physician assistants completed the course.

The Advanced Life Support Trauma Course is designed to assist physicians in providing the first hour of emergency care of the trauma patient. The patterns of severe trauma, as with acute critical illness, are greatly influenced by the judgments exercised on initial contact with the patient. Knowledge of the type and nature of injury and organ involvement will facilitate initial assessment of the patient. The primary assessment may be futile if measures are not immediately instituted to prevent further injury. Hays Medical Center has scheduled its 2009 ATLS class for October 9 and 10.



The **South West** Regional Trauma Council used Interactive Television (ITV) for their regional trauma council meetings in 2008. Jerry Jo Deckert, Grant County EMS Director said it is a very cost effective way to hold meetings and the executive committee starting using ITV to increase member participation and reduce travel time cost. In addition to holding the executive committee meetings by ITV, the committee has been providing a monthly trauma education series by ITV. The ITV trauma education series has allowed health care professionals to participate in trauma education without traveling great distances. The ITV Trauma Education Series has included the following topics and speakers:

- “The Rural Community Hospital and the Trauma System” by Dr. James Longabaugh and Darlene Whitlock,
- “The Role of a Level III Trauma Center in the Community and the Impact on Patient Care” by Dr. Chris Bandy,
- “Trauma Patient Assessment-The First Few Minutes” by Dr. James Haan
- “The Things You Need to Know in the Field, Field Triage Guidelines-The challenges and successes of implementing change” by Mark Willis
- “Quality Improvement Program-What should it look like?” by Liz Carlton

CME and CE have been provided by St. Catherine's Hospital in Garden City. EMS continuing education hours have been provided courtesy of Lane County EMS. The evaluations have been positive and plans are currently underway for the 2009 Trauma Education ITV Series. ITV technology is available in each southwest hospital and is coordinated by Mary Adams of Pioneer Health Network in Garden City. Please follow the given link to view the upcoming ITV training classes. http://www.kstrama.org/sw_training.htm



The **South Central** Regional Trauma Council held a strategic planning meeting on December 3 at McPherson Hospital. Dr. Paul Uhlig, Wichita cardiac surgeon and system development expert, helped facilitate the session. As part of the strategic planning meeting, Dr Uhlig's son, Paul Jr., facilitated a mock trauma. Dr. Uhlig arranged the skit as part of the planning session to allow the executive committee an opportunity to see the trauma system in action from a community hospital perspective. Many members indicated that it was an eye-opening experience. Goals recommended by the committee included holding regional meetings in different locations and highlighting the trauma registry data, education, prevention and professional trauma education. The committee discussed increasing participation in the council. It was suggested that one way to increase awareness of the trauma system is to put a face on trauma and highlight the success stories of the trauma system. One recommendation was to make a quilt with a picture of a trauma system survivor from each of the hospitals in the region. This will be displayed at various locations to increase the awareness of the system and showcase success.



The **Southeast** Regional Trauma Council has three hospitals that are pursuing Level III trauma designation, Labette Health, Mount Carmel Regional Medical Center and Coffeyville Regional Medical Center. One requirement of trauma center verification is utilization of trauma registry data for performance improvement and injury prevention. In an effort to help hospitals in the region better understand and utilize data collected in the registry, a trauma registry sharing session was held in Parsons on January 9. There were eight participants in the class representing eight hospitals in the region.

"Falls are the leading cause of injury-related deaths among older adults (NSC)."

Fall Prevention

Falls continue to be the leading cause of trauma nation wide. An understanding of the problem and development of prevention models are paramount in effectively addressing the public health issue of falls. Please view the following links to the Center for Disease Control (CDC) and National Safety Council (NSC) for a thorough assessment of falls in the community and methods for prevention.

<http://www.cdc.gov/ncipc/duip/preventadultfalls.htm>

<http://www.nsc.org/resources/issues/fallstop.aspx>

Graduated Driver Licensing

Teenage drivers comprise roughly 14% of the population but account for 28% of the total costs of motor vehicle injuries (CDC). Kansas has taken steps to address the risks associated with teen driving by implementing a graduated drivers licensing law.

[Report on Kansas GDL Law](#)

[CDC Items on GDL:](#)

[Facts about teen drivers](#)

[Graduated Driver Licensing Tool Kit](#)

Cell Phone Usage While Driving

A Harvard Center of Risk Analysis study estimates individuals using a cell phone while driving contribute to 6% of motor vehicle crashes. To help mitigate the risk posed by cell phone usage while driving, the NSC is calling for a cell phone ban.

http://www.nsc.org/news/cellphone_ban.aspx

"Grand-Proofing" Ideas

The home harbors many dangers for small children, especially homes which are not used to the company of small children. *Grand Magazine* presents a list to help grand parents "Grand-Proof" their homes for their grandchildren's visit.

<http://www.grandmagazine.com/article.asp?id=125>

A call for Safer EMS Flights

The NTSB has set flight safety as a goal for 2009. Safety recommendations were made by the NTSB in 2006, however, the FAA has failed to mandate the recommended flight safety guidelines. The NTSB describes the need for flight safety regulations as essential in light of nine EMS accidents that have killed 35 people within a 10 month period. The NTSB states the areas in most need of attention are runway safety, safety in icy conditions, requirements for flight image recorders, and Crew Resource Management training.

http://www.nts.gov/recs/mostwanted/aviation_improvesafety_ems_flights.html



The South Central General membership meeting on April 9, 2009 held at Central Kansas Medical Center in Great Bend was well attended.

Comments Invited

The Kansas Trauma Program welcomes your comments.

Send them to: Dan Robinson
1000 SW Jackson St., Suite 340
Topeka, KS 66612
Phone: 785-296-3180
Email: d robinson@kdheks.gov

["Using a cell phone while driving contributes to 2,600 deaths yearly \(NSC\)."](#)



Overview of Fall Traumas in Kansas

Falls are the most common cause of trauma in Kansas. In 2006, 2,721 unintentional fall-related traumas (ICD9 E-codes 880-888) were reported to the State Trauma Registry. Injury severity was minor (ISS 1-8) for approximately half (53.25%) of patients, moderate (ISS 9-14) for 31% of patients, and severe (ISS ≥ 15) for 15.7% of patients. The average length of stay across all ages was 5.68 days. Twelve percent of patients stayed in the hospital one day, 58% stayed for 2-5 days, 23% stayed 6-10 days, and 7% stayed for more than 10 days.

Traumas due to falls result in a significant amount of morbidity. Discharge disposition for 41.3% of patients was either to a skilled nursing facility, a nursing home, or rehabilitation facility (24%, 6.4%, 11% respectively). Half of patients who fell were discharged to home or to home with health care. Death was the outcome for 4.37% of patients.

Who is injured by falls?

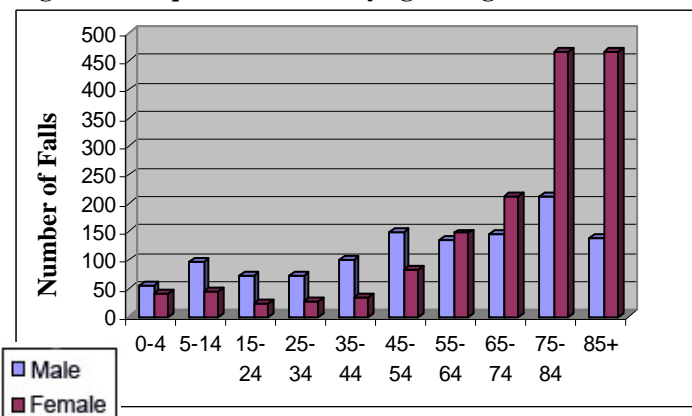
Although a preponderance of falls occur in older individuals, falls occur in all age groups (Figure 1). On average, male fall patients are younger (Mean=53.8 years) than females (Mean age 71.26). Half of all male patients are older than 57 years old, whereas half of female patients are older than 79 years old.

Where do fall traumas occur?

Many falls (62.92%) included in the trauma registry occur at home. Other places where falls occur include: residential facility (8.59%), public building (7.04%), recreation (3.50%), industry (2.73%), farm (1.29%), and other/unspecified place (10.55%).

For adults >55 years old and children 0-4 years old, more than half of all falls occur at home. Recreation accounts for 22.3% of all falls in 5-14 year olds and 17.89% of 15-24 year olds. For 85+ year olds, 20.96% of falls occur in residential facilities.

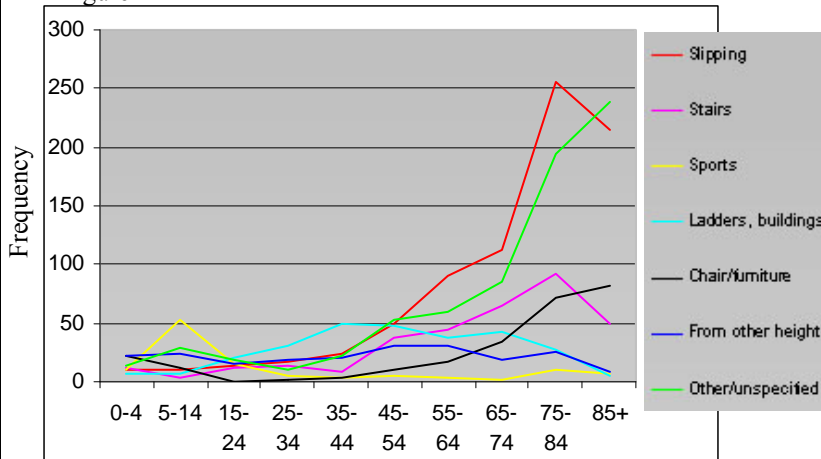
Figure 1. Frequencies of falls by age and gender



How do fall traumas occur? A relatively large number of falls (30%) occur from slipping or tripping², followed by falls from stairs (12%), ladders, scaffolding or buildings (10%), chairs/furniture (9%), and other heights (8%). The cause of over ¼ (27%) of falls is unspecified.

The number of fall traumas due to slipping increases dramatically with age. Similarly, the number of falls on steps increases with age. The number of sports-related injuries peaks at 5-14 years old and falls from ladders and buildings are highest in the 35-54 year age groups (See Figure 2).

Figure 2



Discussion. These data do not represent all hospitalized fall injuries in Kansas. One large group excluded from the trauma registry are patients who sustain isolated hip fractures from falling from the same level (slipping, tripping or unspecified fall). For other types of falls, trauma registry data represent the most serious fall injuries and patients transferred to another acute care facility. Nevertheless, these data are useful for thinking about injury prevention

Preventing falls.

Half of fall traumas in Kansas are people ≥ 65 years old who are injured at home or in residential facilities. CDC recommends that older adults can take several steps to prevent falls in their homes:

- Exercise regularly to increase strength and improve balance.
- Review prescription and over-the-counter medicines with physician or pharmacist to reduce side effects and interactions.
- Improve lighting in home.
- Reduce other hazards that can lead to falls.

[More CDC recommendations.](#)

Nursing home interventions include:

- Assess patients after a fall to identify risk factors.
- Educate staff about fall prevention strategies.
- Review patient medications to reduce side effects and interactions.
- Make environment safer by putting in grab bars and raised toilet seats, lowering bed heights, and installing handrails.
- Provide patients with hip pads.
- Use alarms to identify patients who may need help if they get out of bed or try to move without help.

[More CDC recommendations.](#)

1. Cases included met trauma criteria for the Kansas Trauma Registry. Duplicate transfer cases were excluded.
2. Same level falls that result in isolated hip fractures do not meet Trauma Criteria.