

2010

TRAUMA  
ANNUAL REPORT



 **PARKVIEW**  
ADULT TRAUMA CENTER

 **PARKVIEW**  
PEDIATRIC TRAUMA CENTER



## Table of Contents

Patient Story: Albert McMillan .....	3
Letter from the Medical Director .....	4-5
Highlights of the Parkview Trauma Centers .....	6
Clinical Definitions & Rating Scales .....	7
Our Reach .....	8-9
Quality .....	10-13
Registry .....	14-23
Research .....	24-26
Prevention .....	27-31

Parkview Adult and Pediatric Trauma Centers' Annual Report 2010 was published in December 2010. This publication includes comparison data from 2007 to 2009.

## ALBERT MCMILLAN

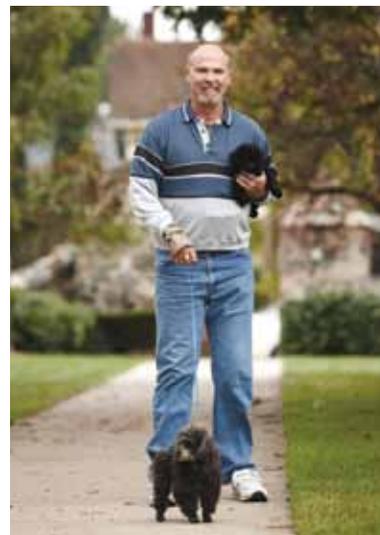
### A Story of Determination

It was 9 p.m. on a summer evening in August 2009, and 50-year-old Albert McMillan was driving home near Wabash, Ind. Suddenly, his car was struck head-on by another vehicle – driven by a distracted driver. The impact of the collision was extreme. By 9:03, first responders were at the scene, assessing his condition and working to free him from his car. Meanwhile, the Wabash Fire Department requested Samaritan helicopter transport to Parkview Trauma Centers. After 55 minutes, Albert was finally extracted and began the 19-minute flight, landing at Parkview Hospital at 10:27 p.m.

For Albert, the worst was yet to come. His condition deteriorated rapidly from extensive multi-system injuries and aggressive bleeding. As Albert clung precariously to life, a trauma surgeon performed multiple procedures to stabilize his condition. Despite new symptoms that emerged during the critical first few days, both patient and caregivers refused to give up. Although Albert didn't know it, a remarkable team of experienced professionals worked around the clock, battling to save Albert's life.

**“The EMT at the scene said he didn't think I would make it. And in my first two days at the hospital, the doctors and nurses didn't expect me to make it.”**

Albert McMillan



In the first week alone, Albert received 91 units of blood and underwent 12 surgeries to save his life, and he ended up spending more time in the ICU than the average patient. He lost a leg and the use of one arm, and required a skin graft to close a significant abdominal wound. Rehab therapy helped him to regain strength and mobility.

Albert praises the care and compassion he received from everyone at Parkview, starting with Raymond A. Cava, MD and Medical Director Mary Aaland, MD. “Each day, Dr. Aaland stopped to say ‘hi’ to me and give me encouragement,” Albert recalls.

In 2009, Parkview admitted 1,048 patients who had suffered major trauma — 871 of whom were involved in motor vehicle collisions. Even though the numbers were never on Albert McMillan's side, thanks to the dedication of first responders, the Samaritan flight crew and the team at Parkview Trauma Centers, he's one grateful survivor.

## Parkview Trauma Centers' YEAR IN REVIEW

The abundance of traumatic injuries in communities throughout the nation is an enormous public health concern. The disease of trauma is a threat to all ages in the communities that we serve and a startling concern for our youth, not only in years of life lost, but also in disability and expense. Because this disease is preventable, the physicians and staff of Parkview Trauma Centers are committed to decreasing the number of injuries in our region and the burden to families and society in general.

This year, we collaborated with the City of Fort Wayne and the Ronald G. Repka Foundation to promote the local Share the Road campaign, a safe cycling and driver awareness program. Parkview's 2-year-old Don't Text & Drive campaign continues to evolve and was the first such awareness campaign to gain local as well as statewide support.

“Our systematic approach to trauma care is critical in caring for the injured patient.”

Mary O. Aaland, MD, FACS  
Medical Director, Trauma Services and Surgical Trauma ICU,  
Parkview Hospital



Our systematic approach to trauma care is critical in caring for the injured patient. Hospital-based providers across the continuum, from prevention through rehab, must function as a well-orchestrated team. Using this model, Parkview's Adult Trauma Center was Indiana's *first* verified trauma center outside Indianapolis, and the *first* such program in Fort Wayne. Parkview's Pediatric Trauma Center holds the same distinction. Verification by the American College of Surgeons recognizes our ongoing commitment and resource collaboration in trauma prevention, quality trauma care, trauma outreach, education and trauma research.

Early in 2010, Parkview joined an elite consortium of 65 trauma centers participating in the Trauma Quality Improvement Program (TQIP) of the American College of Surgeons. Based on the framework provided by the National Trauma Data Bank, TQIP aims to enhance data collection and validation, benchmarking and implementing organizational processes associated with improved patient outcomes. We are honored and excited to participate in TQIP.

Other quality initiatives during this reporting period included:

- Expanded training/continuing education efforts for pre-hospital providers and referring physicians. We hosted our annual trauma symposium, introduced a training mannequin for real-life learning scenarios, presented online classes for pre-hospital and hospital-based personnel, and incorporated an interactive group-learning tool.
- Initiated collection of trauma data at all Parkview-affiliated hospitals to allow for benchmarking of patient outcomes and injury epidemiological studies.

Parkview Trauma Centers have been heavily involved in the ongoing development of a state trauma system, and participated in various statewide committees to improve the delivery of trauma care. Our outreach efforts impact 32 counties in Indiana, Ohio and Michigan. As a leader in trauma care, it is our duty to serve as a regional resource to our referral hospital providers to promote collaboration among members of the trauma system and to enhance quality of care.

The trauma research conducted by Parkview is essential to the optimization of care for injured patients. Over the years, areas of study have been diverse: data validation, treatment of injuries from Amish buggy crashes, pediatric injuries, orthopedic injuries, bicycle helmet usage, unplanned patient re-admission and trauma clinic follow-up.

In May 2010, Parkview completed 10 years of public service as a verified trauma center. Our physicians and personnel have worked together with a team of pre-hospital providers to provide care for more than 30,000 injured patients in our region. As we look ahead, our single focus will continue to be providing the best treatment to each patient, each time injuries occur.



Mary O. Aaland, MD, FACS

Medical Director, Trauma Services and Surgical Trauma ICU,  
Parkview Hospital

## Highlights of the PARKVIEW TRAUMA CENTERS

In May 2010, Parkview completed 10 years as a verified trauma center. These are some of the program highlights during this period of public service.

- In 1989, the **Trauma Services Department** was created at Parkview Hospital with the goal of achieving verification by the American College of Surgeons as a level II trauma center. Trauma prevention efforts began with the “*Helmets — All the Pros Wear Them*” poster campaign.
- In 1997, **Mary O. Aaland, MD, FACS**, was appointed medical director of Trauma Services and the Surgical Trauma Intensive Care Unit. Dr. Aaland was the *first* fellowship-trained trauma surgeon to practice in Fort Wayne.
- In 1997, **David A. Goertzen, MD**, joined Ortho NorthEast, becoming the *first* orthopedic surgeon fellowship trained in orthopedic trauma to practice in Fort Wayne.
- **Thein Hlaing Zhu, MB BS, DPTM, FRCP, FACE**, joined Parkview Trauma Centers in June 1999, as a trauma epidemiologist dedicated to research, data validation and tracking trends related to traumatic injury.
- Parkview Hospital was initially verified as a **level II trauma center** in May 2000, becoming the *first* Indiana verified trauma center outside Indianapolis.
- **Raymond A. Cava, MD, FACS**, joined Indiana Surgical Specialists in 2003. He was the second fellowship-trained trauma surgeon to practice in Fort Wayne.
- With re-verification in June 2003, Parkview gained recognition by the American College of Surgeons as a **verified level II pediatric trauma center** — the *first* such program in Fort Wayne.
- Re-verification as **adult and pediatric trauma centers** occurred in 2006.
- Outreach services were expanded in 2008 when **Chris Scheumann, RN, CCRN, CEN, NREMT-P, PI**, joined Parkview Trauma Centers in a newly created position to support and strengthen the regional trauma system.
- In 2008, **Jason Heisler, DO**, became Fort Wayne’s second orthopedic surgeon with fellowship training in orthopedic trauma. Dr. Heisler practices with Ortho NorthEast.
- In early 2009, Parkview launched its trauma prevention effort, **Don’t Text & Drive**. Embraced by teenage drivers and adults alike, the Don’t Text & Drive message has been seen or heard by thousands of people in northeast Indiana.
- A **hospital-based Trauma Clinic** opened in 2009 to bring discharged patients back for evaluation by Medical Director Mary O. Aaland.
- Re-verification in 2009 created separate identities for the **Parkview Adult Trauma Center** and the **Parkview Pediatric Trauma Center**.



Parkview Hospital trauma liaisons include, from left to right:

**David A. Goertzen, MD**

Trauma Orthopedic Surgeon, Ortho NorthEast,  
and Medical Director of Orthopedic Trauma, Parkview Hospital

**James C. Dozier, MD**

Neurosurgeon, Neurospine & Pain Center

**Timothy G. Cloonan, MD**

Radiologist, FWRadiology

**Mary O. Aaland, MD, FACS**

Trauma Surgeon, Indiana Surgical Specialists and Medical Director of  
Trauma Services and Surgical Trauma ICU, Parkview Hospital

**Jeffrey R. Nickel, MD**

Emergency Department Physician, Professional Emergency Physicians

## DEFINITIONS

### What qualifies as a trauma?

Trauma resulting in injury may be characterized by abnormal energy transfer, such as mechanical energy (moving objects), thermal, electrical, chemical and radiation; the catastrophic injuries arising from automobile crashes are the result of transfer of energy between the victim and a stationary object (the ground) or a moving object (another vehicle).

### Trauma patient

Trauma patients include individuals with an injury diagnosis of ICD-9 codes 800.00 – 959.90, excluding ICD-9 codes 905 – 909 (late effects of injuries) and 930 – 939 (foreign bodies entering through orifice).

In 2009, the Parkview Samaritan Flight Program celebrated its 20th anniversary.



## RATING SCALES

### Injury Severity Score (ISS)

Injury Severity Score is an anatomical scoring system designed to provide an overall score for trauma patients with multiple injuries. The Injury Severity Score is the sum of squares of the three highest abbreviated injury scale scores for injuries to different body regions (head/neck, face, thorax, abdomen and pelvic contents, extremities, and external). ISS takes values from 0 to 75 and correlates with mortality, morbidity and hospital length of stay.

### Glasgow Coma Scale (GCS)

The Glasgow Coma Scale is a standard measure to quantify level of consciousness in head injury patients. It is composed of three parameters: best eye response (4), best verbal response (5) and best motor response (6). The lowest GCS total is a 3 and the best score is a 15.

### TRISS Model

TRISS refers to the probability of survival of a trauma patient using revised trauma score, injury severity score, mechanism of injury and age. It is used to assess quality trauma care in a trauma center.

## OUR REACH

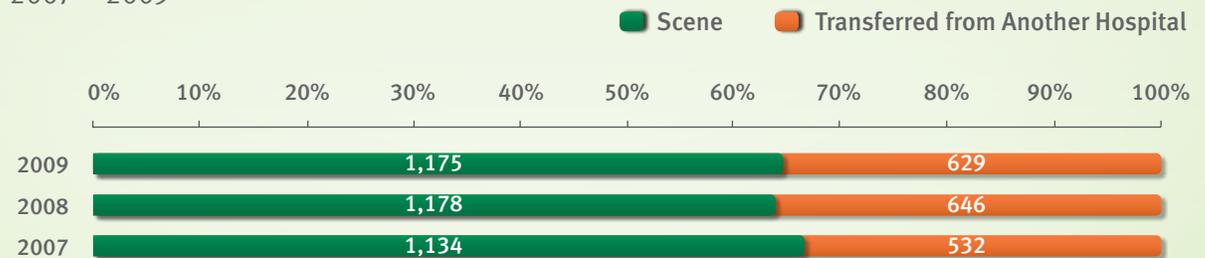
A verified trauma center is one component of a trauma system — the broad network of emergency medical providers, firefighters and law enforcement personnel who care for individuals with life-threatening injuries.

Outreach services by a trauma center are intended to help strengthen the entire system. In July 2008, the Parkview Trauma Center expanded outreach services by creating a dedicated staff position for this purpose. The following outreach goals were adopted from the *Resources for Optimal Care of the Injured Patient* (2006).

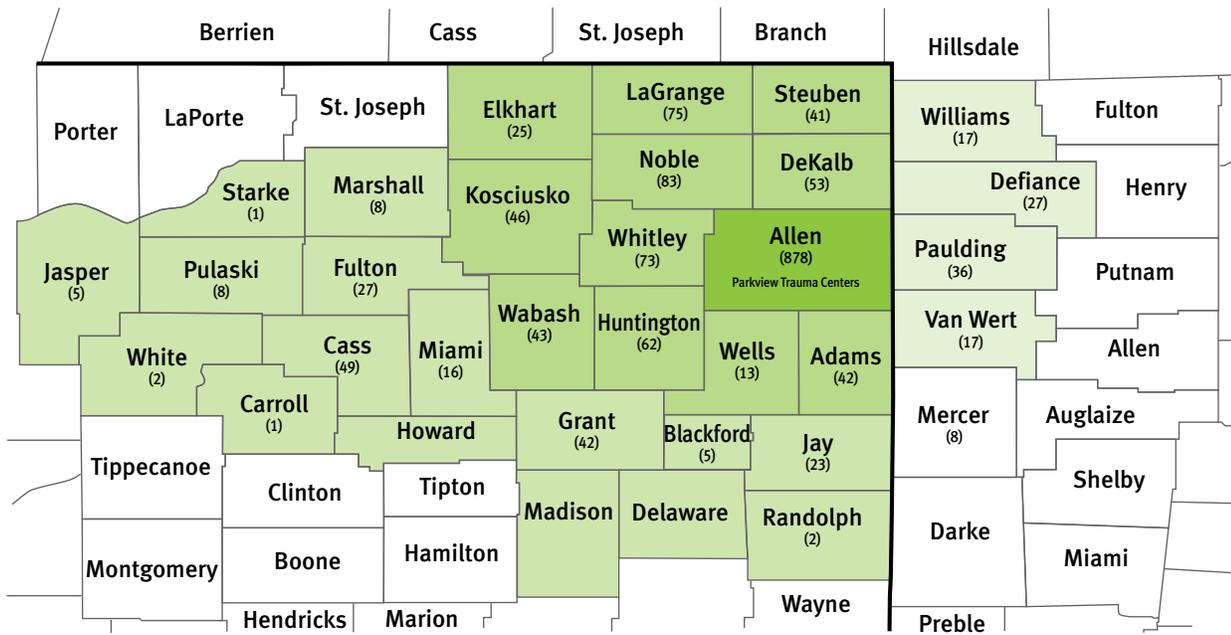
- Improve outcomes for patients with major trauma injuries by sharing knowledge and expertise related to patient care
- Participate with regional agencies, organizations and providers in efforts to continually strengthen the regional trauma care system
- Facilitate access to resources of the Parkview Trauma Centers, such as educational and prevention programs, performance improvement, consultation and referrals
- Support educational programs of regional facilities and trauma healthcare personnel

### Volume (and %) of Patients from Scene or Transferred to Parkview Trauma Centers

2007 – 2009



## County of Injury Occurrence in Catchment Area 2009



Inference: Parkview Adult Trauma Center and Parkview Pediatric Trauma Center are regional referral trauma centers. As such, Parkview Trauma Centers received patients from these counties for treatment.

Chris Scheumann, RN, CCRN, CEN, NREMT-P, PI (right), uses an Ultimate Hurt® training mannequin to demonstrate arterial line leveling to Three Rivers Ambulance Authority personnel Herb Anderson (left), Advanced EMT, and Doug Call, EMT-P.



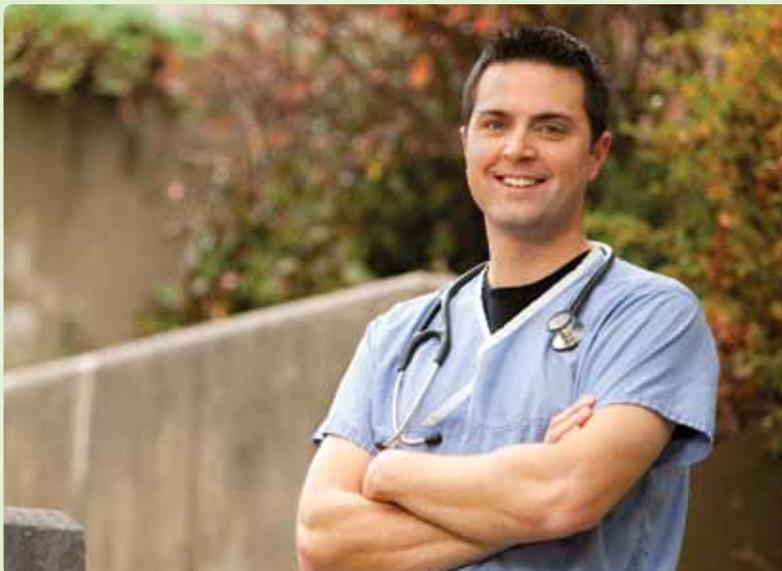
## QUALITY

For trauma centers nationwide, patient outcomes are the measure that indicates quality. American College of Surgeons-verified trauma centers continually monitor, evaluate and improve their processes in order to achieve the best outcomes for their patients. Early in 2010, Parkview Trauma Centers joined the Trauma Quality Improvement Project (TQIP), in cooperation with the American College of Surgeons, to enhance processes of collecting patient data. Parkview is among an elite group of 65 hospitals participating in TQIP.

In 2009, Parkview introduced a Trauma Clinic that serves as another measure for continuous quality improvement. When trauma patients return to the trauma clinic for follow-up within three weeks of discharge, their current health status is assessed by Medical Director Mary O. Aaland, MD. On average, 20 former trauma patients are examined each day in the Parkview Trauma Clinic.

A remarkable level of trauma care is possible thanks to the expertise and level of coordination among the trauma team members – including those responsible for bedside care, case management, registry, outreach, education, prevention and research.

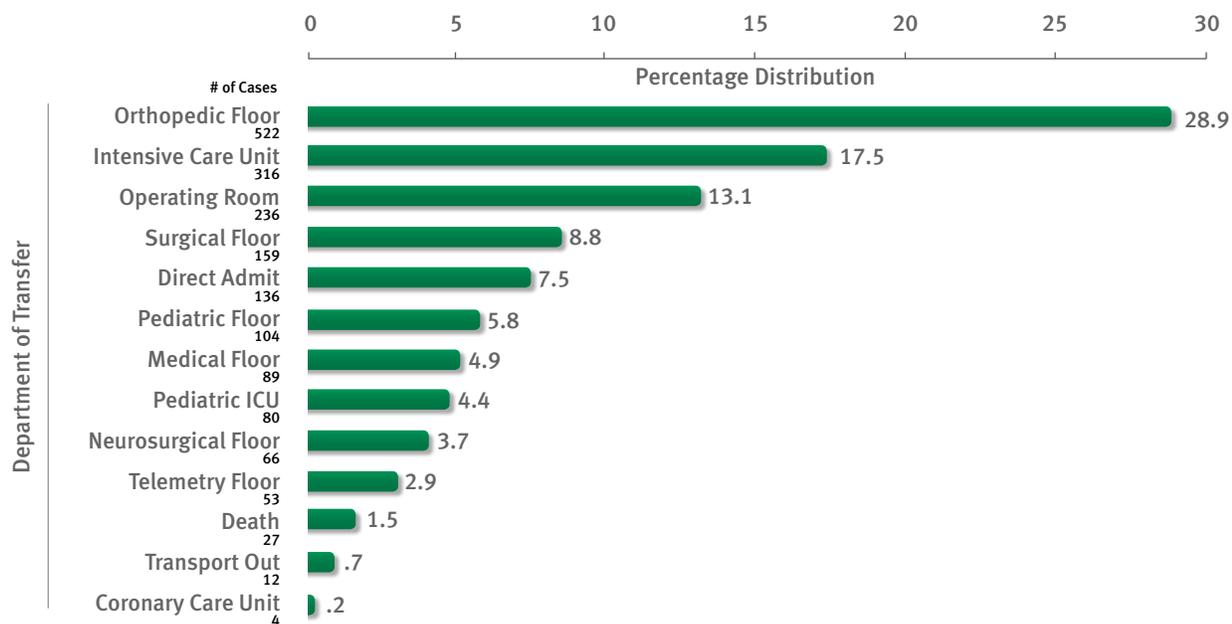
Source: Resources for Optimal Care of the Injured Patient, 2006



**Bryan Mathieson, MSN, FNPC**  
Trauma Nurse Practitioner,  
Trauma Services, Parkview Hospital

## ER Disposition, All Ages

2009



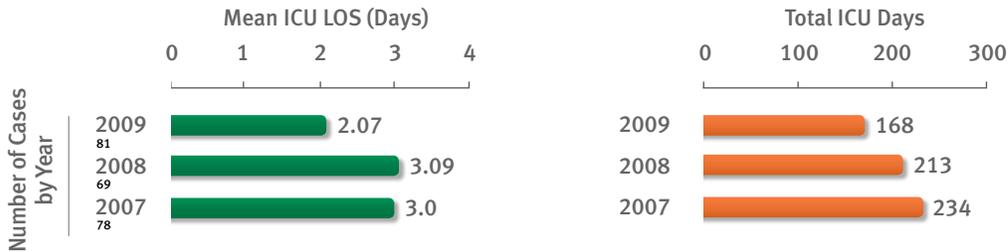
Raymond A. Cava, MD, FACS  
 Trauma Surgeon,  
 Indiana Surgical Specialists

### ICU Length of Stay (LOS), All Ages 2007 – 2009



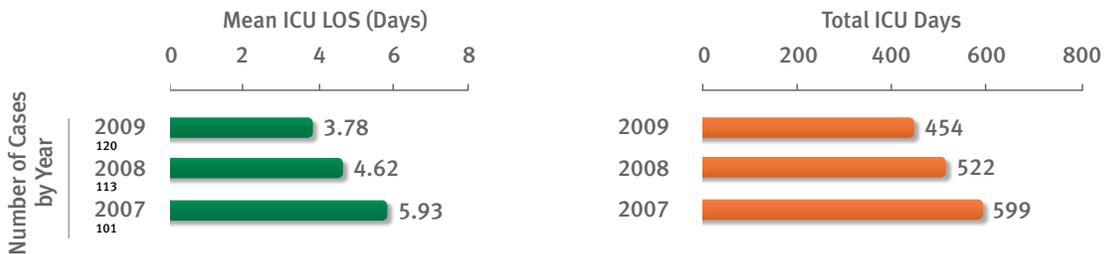
Inference: The Parkview Adult Trauma Center and Parkview Pediatric Trauma Center report lengths of stay in the ICU that are better than the national benchmark for trauma patients.

### ICU Length of Stay (LOS), Pediatric Trauma (Ages 0-14) 2007 – 2009



Inference: The Parkview Pediatric Trauma Center reports lengths of stay in the ICU that are better than the national benchmark for trauma patients.

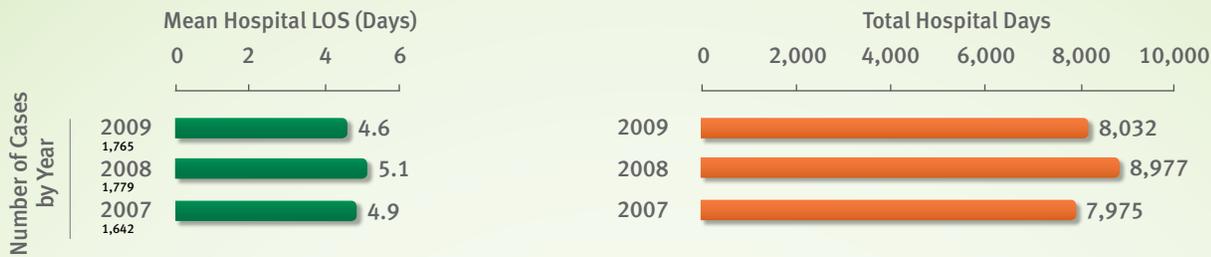
### ICU Length of Stay (LOS), Geriatric Trauma (Age ≥ 65) 2007 – 2009



Inference: The Parkview Adult Trauma Center reports lengths of stay in the ICU that are better than the national benchmark for trauma patients.

### Hospital Length of Stay (LOS), All Ages

2007 – 2009



Note: Excludes patients who expired in the Emergency Department or who transferred out of the Emergency Department.

### Hospital Length of Stay (LOS), Pediatric Trauma (Ages 0-14)

2007 – 2009



Note: Excludes patients who expired in the Emergency Department or who transferred out of the Emergency Department.

### Hospital Length of Stay (LOS), Geriatric Trauma (Age ≥ 65)

2007 – 2009



Note: Excludes patients who expired in the Emergency Department or who transferred out of the Emergency Department.

## REGISTRY

A trauma registry is an electronic database that is essential to providing trauma service. This database is used to collect, organize and analyze information on trauma patients. The data have many uses, but are primarily used to monitor the continuum of care, from injury prevention to outcomes measurement. Currently, the Parkview trauma registry manages data for more than 30,000 patients.

Parkview trauma registry also contributes information to the National Trauma Data Bank. This contribution to larger databases allows Parkview physicians and staff to identify trends in quality measurements, to shape public policy and to benchmark at national, state and regional levels.

The data included in this report were collected from 2007 to 2009.

Source: Resources for Optimal Care of the Injured Patient, 2006

Parkview Hospital emergency room physicians include, from left to right: **Jeffrey R. Nickel, MD**, Emergency Department Physician, Professional Emergency Physicians; **Alex D. Antalis, MD**, Emergency Department Physician, Professional Emergency Physicians; **Christian Bridgwater, MD**, Emergency Department Physician, Professional Emergency Physicians, and Medical Director of the Samaritan Air and Ground Transport Program, Parkview Hospital.



**Timothy G. Cloonan, MD**  
Radiologist, FWRadiology

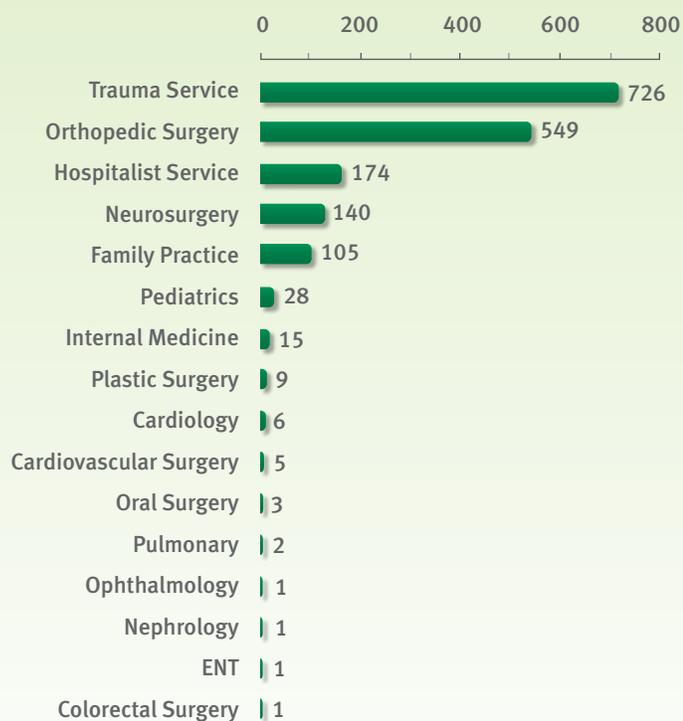
**Lisa Hollister, RN**  
Trauma Program Manager,  
Trauma Services, Parkview Hospital

Parkview Samaritan and Parkview Trauma Centers' patient **Tim Pease** and his wife, **Julie**.



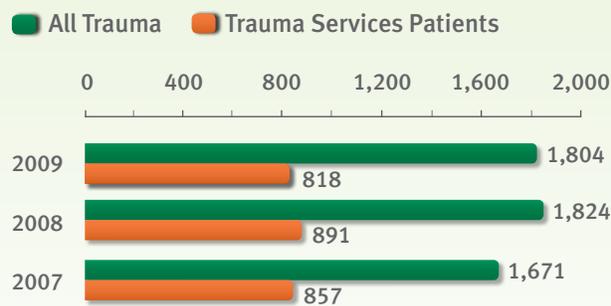
### Admission Service, All Ages

2009 (n=1804)



### Trend of Trauma Admission by Type

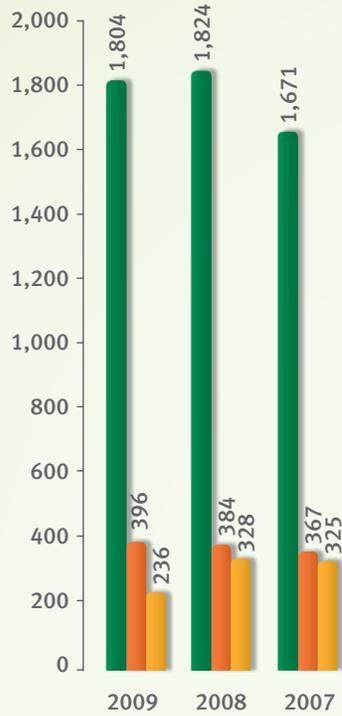
2007 – 2009



Note: Excludes patients who expired in the Emergency Department or who transferred out of the Emergency Department.

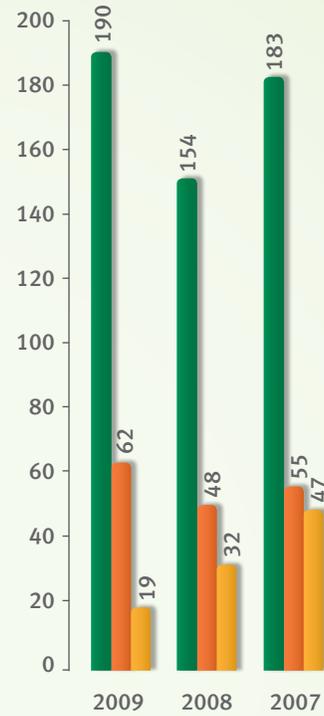
Volume of All Ages Admitted from ER to ICU or Surgery 2007 – 2009

■ All Trauma ■ ER-ICU/PICU ■ ER-Surgery



Volume of Pediatric Patients (Ages 0 -14) Admitted from ER to ICU or Surgery 2007 – 2009

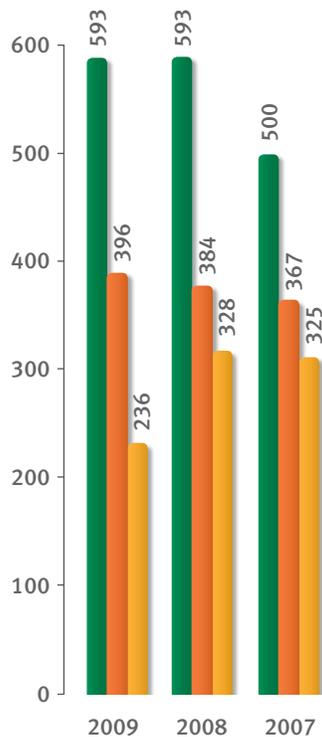
■ All Trauma ■ ER-ICU/PICU ■ ER-Surgery



Parkview's Trauma registry team includes, from left to right: Cherie Braun, RN; Brenda Morgan; and Debbie Hawkins, BSN, RN.

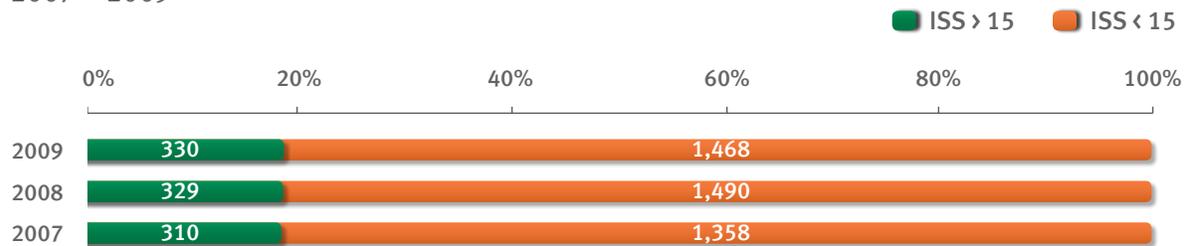
### Volume of Geriatric Patients (Age ≥ 65) Admitted from ER to ICU or Surgery 2007 – 2009

■ All Trauma ■ ER-ICU/PICU ■ ER-Surgery



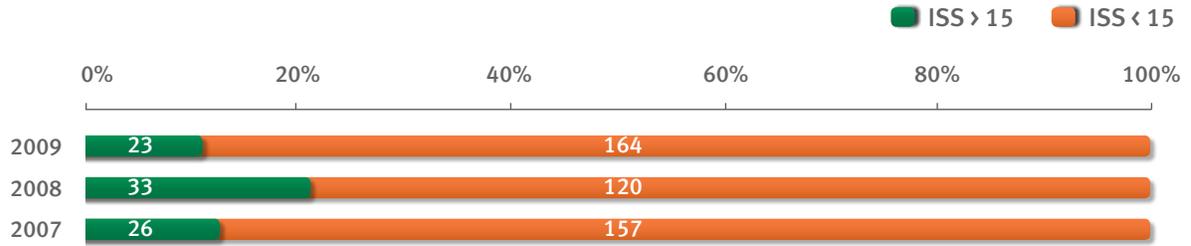
**Chad Owens, RN**  
 Trauma Program Coordinator,  
 Trauma Services, Parkview Hospital

### Volume (and %) of All Ages by Injury Severity Score (ISS) Value 2007 – 2009



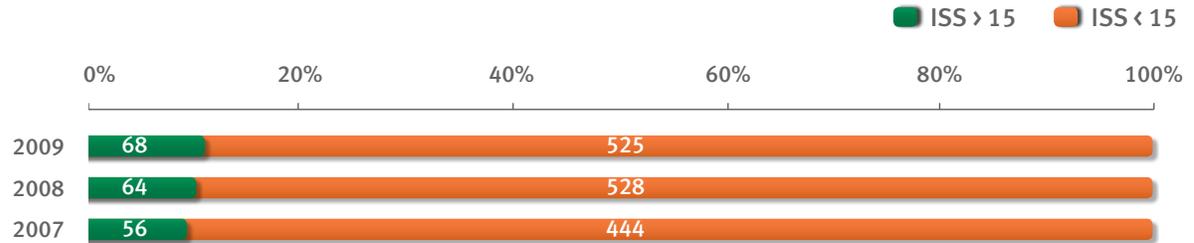
ISS > 15 can include life-threatening, critical or fatal injuries.

Volume (and %) of Pediatric Patients (Ages 0-14) by Injury Severity Score (ISS) Value  
2007 – 2009



ISS > 15 can include life-threatening, critical or fatal injuries.

Volume (and %) of Geriatric Patients (Age ≥ 65) by Injury Severity Score (ISS) Value  
2007 – 2009



ISS > 15 can include life-threatening, critical or fatal injuries.



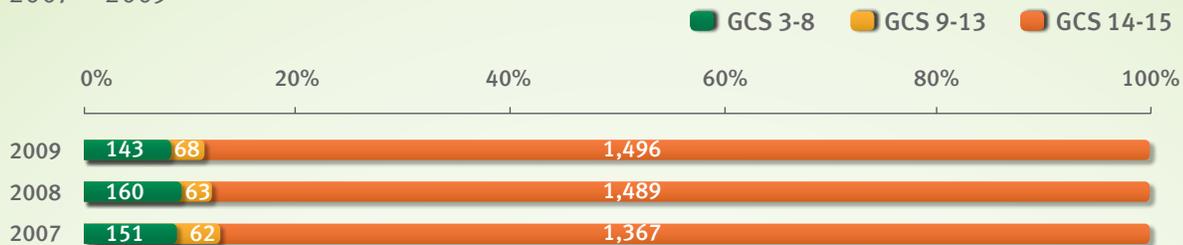
Parkview Hospital pediatric critical care specialists include, from left to right:

**Yalamanchali Chowdary, MD**  
Pediatric Intensivist,  
Pediatric Pulmonary and Critical Care, PC

**Jayesh P. Patel, MD**  
Pediatric Intensivist, Pediatric Specialty Physicians, PC,  
and Medical Director, Pediatric ICU, Parkview Hospital

### Volume (and %) of All Ages by Admit Glasgow Coma Score (GCS) Value

2007 – 2009



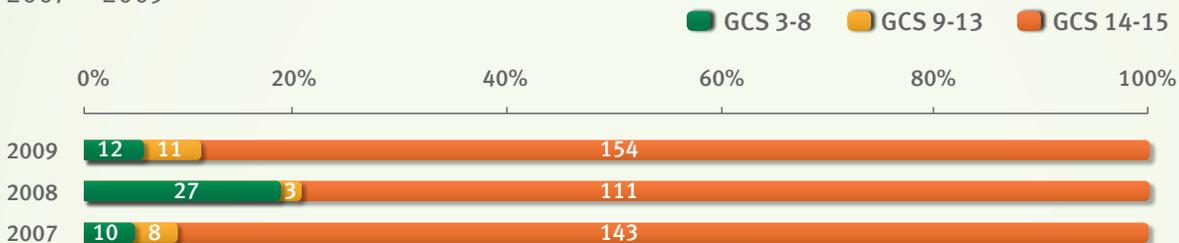
GCS 3-8 = Possible severe head injury.

GCS 9-13 = Possible moderate head injury.

GCS 14-15 = Possible mild head injury.

### Volume (and %) of Pediatric Patients (Ages 0-14) by Admit Glasgow Coma Score (GCS) Value

2007 – 2009



GCS 3-8 = Possible severe head injury.

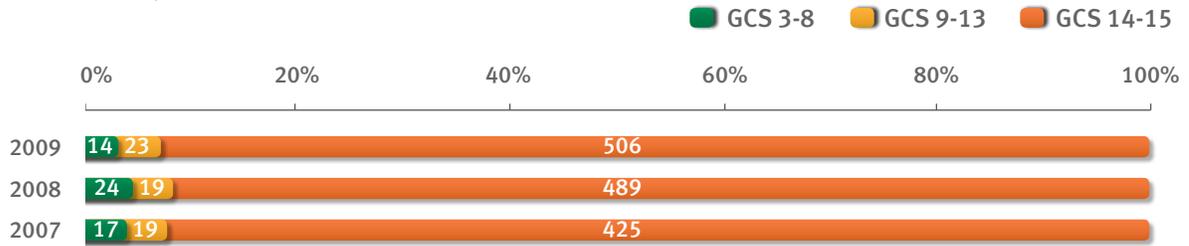
GCS 9-13 = Possible moderate head injury.

GCS 14-15 = Possible mild head injury.



**Abby Massey, MD**  
 Pediatric Emergency Physician,  
 Professional Emergency Physicians

### Volume (and %) of Geriatric Patients (Age ≥ 65) by Admit Glasgow Coma Score (GCS) Value 2007 – 2009

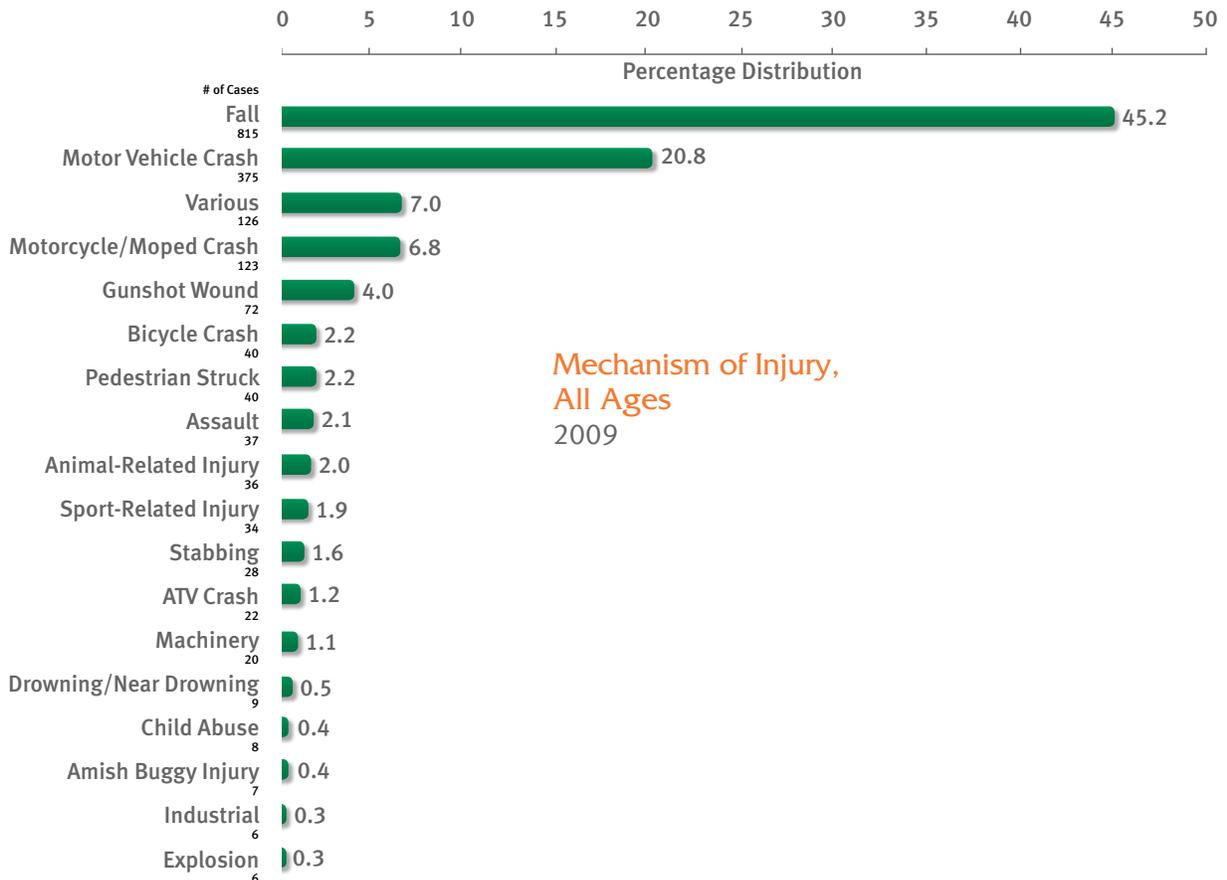
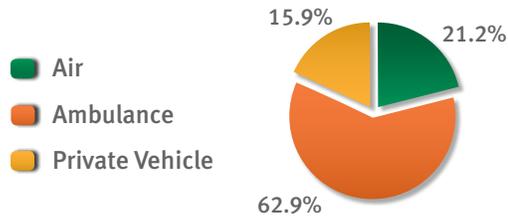


GCS 3-8 = Possible severe head injury.

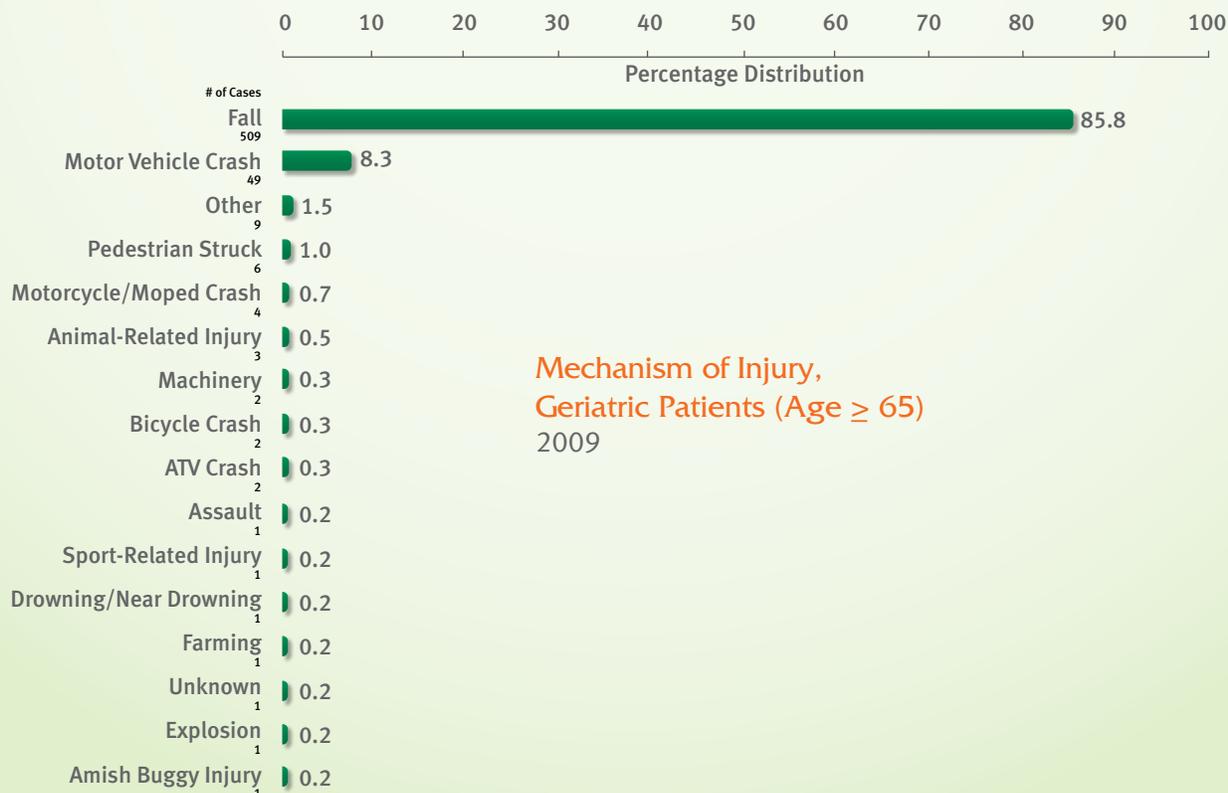
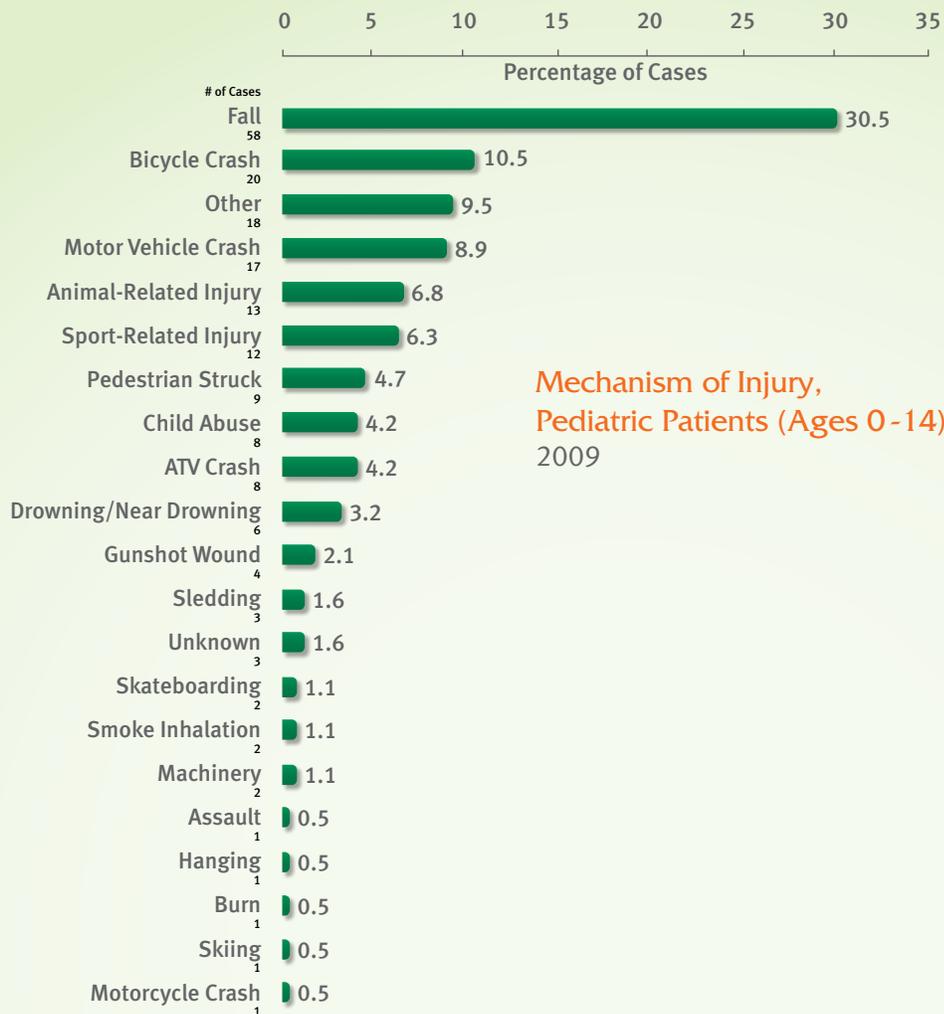
GCS 9-13 = Possible moderate head injury.

GCS 14-15 = Possible mild head injury.

### Mode of Transport for Patients to Parkview Trauma Centers 2009

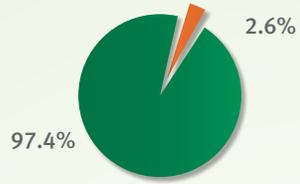


### Mechanism of Injury, All Ages 2009

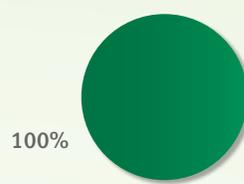


Trauma Type  
2009

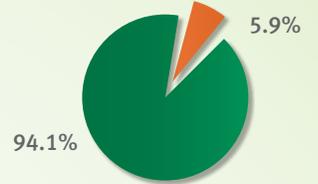
- All Trauma
- Blunt Trauma
  - Penetrating Trauma



0 - 14 Yrs.



≥ 65 Yrs.



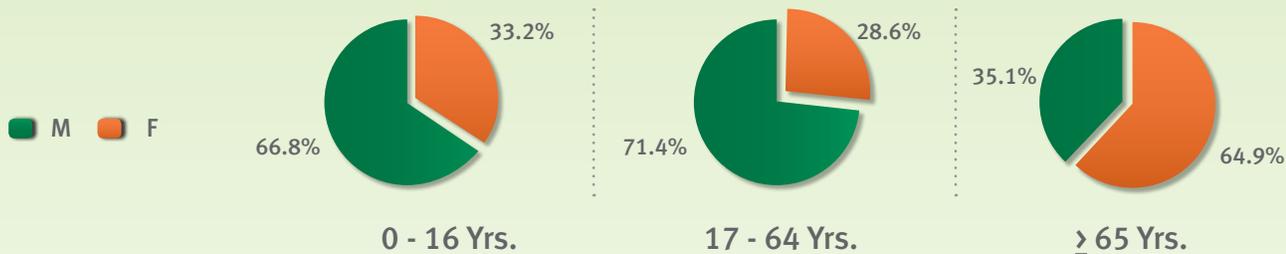
All Ages



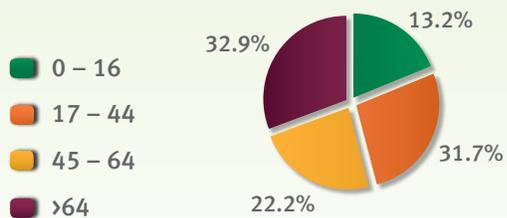
**Albert Morrison, MD**  
Plastic Surgeon, Summit Plastic Surgery,  
and Medical Director, Wound Care Program,  
Parkview Hospital



### Age and Gender 2009



### Age of All Patients 2009



## RESEARCH

Research is a vital component of the Parkview Trauma Centers because of its implications for quality patient care, proper utilization of healthcare services (within the hospital setting), quality registry data and prevention efforts.

Parkview Hospital has engaged in research since it was initially verified as a Level II trauma center in May 2000. Parkview Trauma Centers are among the elite few trauma centers nationwide whose staffs include a trauma epidemiologist dedicated to research, data validation and tracking trends related to traumatic injury.

Research studies draw upon the experiences of epidemiologist Thein Hlaing Zhu, MB BS, DPTM, FRCP, FACE; Mary O. Aaland, MD, FACS, medical director; and Lisa Hollister, RN, trauma program manager, who serve as principal investigators. Other physicians and healthcare personnel serve as co-investigators or collaborators in their respective areas of specialty.

At the time of this publication, the Parkview Adult Trauma Center and Parkview Pediatric Trauma Center were tracking active research projects covering a wide variety of topics, from database research to community-based intervention studies.

Within this publication, we identify research whose findings were reported as poster or podium presentations. Three articles were published in peer-reviewed journals during 2009.



**Thein Hlaing Zhu, MB BS, DPTM, FRCP, FACE**  
Trauma Epidemiologist, Trauma Services,  
Parkview Hospital



**Joseph P. Yurkanin, MD**  
Anesthesiologist,  
Preferred Anesthesia Consultants

*Within this report, we highlight two research studies.*

### Abstract on Unplanned Re-admitted Trauma Patients

Unplanned re-admission of trauma patients is a quality indicator for trauma care. Trauma cases from 2007 to 2009 were queried from Parkview trauma registry to determine the rate and reasons for unplanned re-admissions. Ninety-eight unplanned re-admissions were identified and constituted approximately 2 percent of the total number of cases. The reasons for re-admission were due to complications related to wound (23.5 percent), abdominal (16.3 percent), thrombo-embolic (4.1 percent), CNS (21.4 percent), hematoma (5.1 percent), and pulmonary (7.1 percent). Among all re-admission cases, surgery was performed in 38.8 percent; overall hospital length of stay was  $5.95 \pm 13.03$  days, and days to re-admission was  $19.44 \pm 38.06$ . About 8 percent of the unplanned re-admissions were preventable. Fifty-three percent were re-admitted prior to or at follow-up at Parkview's Trauma Clinic. The findings could help formulation of follow-up protocols and discharge planning to minimize re-admission.

### Abstract on Loss in Follow-up Study at Parkview Trauma Clinic

A total of 234 patient cases deviated from the usual follow-up protocol at Parkview Trauma Clinic in 2009. On analysis of feedback acquired in telephone interviews, the causes of loss in follow-up for 42 patients included distance, financial constraints, no awareness of appointment, mistaken location, etc. On reviewing patient records, 63.1 percent (118) of the remaining 187 patients followed up with other surgical specialty physicians. The findings could have implication for identifying patients to be followed at the Parkview Trauma Clinic.

**Jason Heisler, DO**

Orthopedic Trauma Surgeon,  
Ortho NorthEast

**David A. Goertzen, MD**

Orthopedic Trauma Surgeon,  
Ortho NorthEast



## Regional and National Presentations by Trauma Services Department

Nature	Topic	
<b>Poster Presentations</b>		
Annual Student Poster Display sponsored by the Midwest Alliance for Health Education (MAHE) Summer Research Fellowship Program, August 2010	<ol style="list-style-type: none"> <li>1. Readmission of Trauma Patients in a Non-academic Trauma Center (Vachon CM, Aaland MO, Zhu TH)</li> <li>2. In-Depth Analysis of Loss to Follow-up in a Trauma Clinic at a Non-Academic Trauma Center (Marose K, Aaland MO, Zhu TH)</li> </ol>	
Annual Scientific Meeting at the American College of Epidemiology, Silver Spring, Md., September 2009	<ol style="list-style-type: none"> <li>3. Standardized Mortality Rate Ratio: A New Indicator for Assessing Trauma Center Performance (Zhu TH, Aaland MO, Hollister L)</li> </ol>	
Annual Scientific Meeting at the Southeastern Surgical Congress, Atlanta, Ga., February 2009	<ol style="list-style-type: none"> <li>4. A New Standardization Technique for Benchmarking Trauma Center Performance (Zhu TH, Aaland MO, Orsagh-Yentis DK)</li> </ol>	
Annual Meeting at American Association for the Surgery of Trauma and the Japanese Association for Acute Medicine, Maui, Hawaii, September 2008	<ol style="list-style-type: none"> <li>5. Trauma CT Scan of the Abdomen and Pelvis is a Reliable Screening Tool for Significant Thoracolumbar Injury Resulting from Blunt Trauma (Smith M, Reed JD, Facco R, Hlaing T, Aaland MO, Hicks B)</li> <li>6. Ten-Year Retrospective Study of Delayed Diagnosis of Injury in Pediatric Trauma Patients at a Level II Trauma Center (Aaland MO, Williams B, Hlaing T)</li> </ol>	
Annual Student Poster Display sponsored by the MAHE Summer Research Fellowship Program, August 2007	<ol style="list-style-type: none"> <li>7. A New Method of Mortality Standardization for Comparing Quality of Care in Trauma Centers (Orsagh-Yentis DK, Aaland MO, Hlaing T)</li> <li>8. Outcome of Trauma Patients After Unfavorable Weather for Air Transport (Quinn B, Aaland M)</li> </ol>	
Annual Scientific Meeting at the Southeastern Surgical Congress, Savannah, Ga., February 2007	<ol style="list-style-type: none"> <li>9. Splenic Artery Embolization in Blunt Trauma: High "Failure" Rate Means Success (Hanna JD, Aaland MO, Reed J, Hlaing T)</li> <li>10. The Nursing Home – An Integral Part of the Rehabilitation Team in Motor Vehicle Collision Victims (Staron JS, Aaland MO, Hlaing T)</li> </ol>	
Annual CDM Conference, Breckenridge, Co., June 2007	<ol style="list-style-type: none"> <li>11. The Impact of a Trauma Case Manager on Hospital Length of Stay (Hollister L, Winters J, Aaland MO, Hlaing T)</li> </ol>	
Nature	Topic	Comments
<b>Paper Presentations</b>		
21st Annual Trauma Symposium, Fort Wayne, Ind., May 2010	<ol style="list-style-type: none"> <li>1. Massive Transfusion and Fluid Resuscitation (Aaland MO)</li> </ol>	
AACN-NEIC 12th Annual Critical Care Potpourri Conference, Fort Wayne, Ind., October 2009	<ol style="list-style-type: none"> <li>2. Abdominal Trauma/Surgeries (Aaland MO)</li> </ol>	
Indiana Society for Respiratory Care Annual Seminar, Bloomington, Ind., September 2009	<ol style="list-style-type: none"> <li>3. Respiratory Implications of Abdominal Compartment Syndrome (Aaland MO)</li> </ol>	
ACS Indiana Chapter Annual Meeting at French Lick, Ind., May 2009	<ol style="list-style-type: none"> <li>4. The Impact of Helmet Use in Preschool Children in Northeastern Indiana (Zhu TH, Aaland MO, Kerrigan C, Schiebel R, Henry H, Hollister L)</li> <li>5. Acute Cardiac Events Resulting in Cardiac Procedures in Traumatized Patients: An 11-year Review in a Non-academic Hospital (Hall A, Aaland MO, Zhu TH)</li> </ol>	Dr. Hall won the 2009 Leonard Ensminger Award in trauma surgery paper for Indiana.
Annual Orthopaedic Trauma Association Meeting, Denver, Co., October 2008	<ol style="list-style-type: none"> <li>6. Standard Trauma CT Scan of the Abdomen/Pelvis is a Reliable Screening Tool for Significant TLS Injury Resulting from Blunt Trauma (Smith WM, Aaland MO, Reed JD, Facco R, Hlaing T)</li> </ol>	
American College of Surgeons, Indiana Chapter Meeting, April 2008	<ol style="list-style-type: none"> <li>7. Surgical Clinimetrics – The Time is Now (Aaland MO)</li> <li>8. Ten-Year Retrospective Study of Delayed Diagnosis of Injury in Pediatric Patients at a Level II Trauma Center (Williams B, Aaland MO, Hlaing T)</li> <li>9. Standard Trauma CT Scan of the Abdomen/Pelvis is a Reliable Screening Tool for Significant TLS Injury Resulting from Blunt Trauma (Smith WM, Aaland MO, Reed JD, Facco R, Hlaing T, Hicks BM)</li> </ol>	<p>Presidential Address</p> <p>Dr. Williams won the 2008 R. Morton Bolman II Award in trauma surgery paper for Indiana.</p> <p>Dr. Smith won the 2008 Leonard D. Ensminger Award in trauma surgery paper for Indiana.</p>
ACS Indiana Chapter Annual Meeting at South Bend, Ind., May 2007	<ol style="list-style-type: none"> <li>10. Splenic Artery Embolization in Blunt Trauma: High "Failure" Rate Equals Success (Aaland MO, Hanna JD, Reed J, Hlaing T)</li> <li>11. Trauma Case Manager: The Impact on Hospital Length of Stay (Winters JM, Aaland MO, Hlaing T)</li> <li>12. The Nursing Home – An Integral Part of the Rehabilitation Team in MVC Victims (Staron JS, Aaland MO, Hlaing T)</li> </ol>	Dr. Winters won the 2007 Leonard D. Ensminger Award in trauma surgery paper for Indiana.
Annual CDM Conference, Breckenridge, Co., June 2007	<ol style="list-style-type: none"> <li>13. Trauma Death Analysis: Fair and Balanced (Aaland MO, Hlaing T)</li> </ol>	
ACS/COT Region V Resident Trauma Paper Competition, November 2007	<ol style="list-style-type: none"> <li>14. Trauma Case Manager: The Key to Decreasing Length of Stay (Winters JM)</li> </ol>	Dr. Winters competed in the competition.
<b>Paper Publications</b>		
	<ol style="list-style-type: none"> <li>1. Delayed Diagnosis of Injury in Pediatric Patients [Williams BG, Hlaing T (Zhu TH), Aaland MO]</li> <li>2. The Reliability of Non-reconstructed Computerized Tomographic Scans of the Abdomen and Pelvis in Detecting Thoracolumbar Spine Injuries in Blunt Trauma Patients with Altered Mental Status [Smith M, Reed JD, Facco R, Hlaing T (Zhu TH), McGee A, Hicks BM, Aaland MO]</li> <li>3. Standardized Mortality Rate: A New Indicator for Assessing Trauma Center Performance (Zhu TH, Aaland MO, Hollister L)</li> </ol>	<p>Pediatric Emergency Care. 2009 Aug; 25(8): 489-93</p> <p>The Journey of Bone &amp; Joint Surgery Am. 2009 Oct; 91:2342-9</p> <p>Abstract in Annals of Epidemiology. 2009 Sept; 19(9):673-4</p>

## PREVENTION

Trauma prevention programs of the Parkview Adult Trauma Center and Parkview Pediatric Trauma Center reflect Parkview’s commitment to reducing the number of individuals who suffer life-threatening injuries.

Educators and health personnel are available to provide education or services related to these safety topics:

- Texting while driving
- Drinking and driving
- Teen driver safety
- ATV safety
- Bike helmet safety
- Infant car seat safety
- Share the Road, in support of the national cyclist – motorist safety initiative

The Parkview Safety Store offers merchandise and services to help protect local families from injuries. Bicycle and all-sport helmets for infants, children and adults are sold at discounted prices. Trained personnel provide helmet fittings to ensure the proper fit for each individual.

Parkview’s Safety Store also serves as a retail location for apparel and other merchandise bearing graphics related to Don’t Text & Drive and Share the Road campaigns. In addition, infant car seat fittings by certified technicians are offered without appointment.

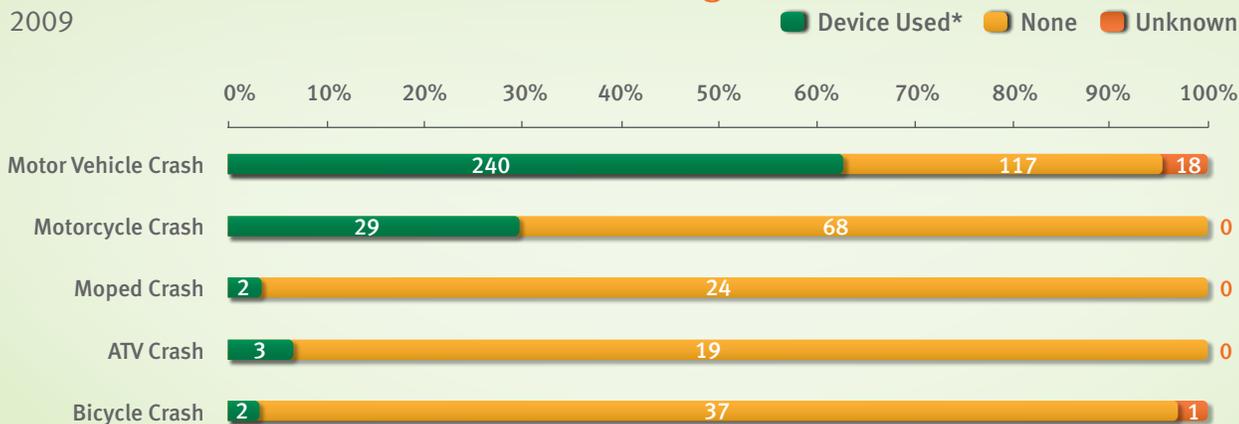
**Parkview Safety Store** — Carew Medical Park, 1818 Carew St., Suite 140

Winter Hours (November 1 – May 31)  
Wednesday, 4 – 7 p.m.

Summer Hours (June 1 – October 31)  
Tuesday and Wednesday, 4 – 7 p.m.

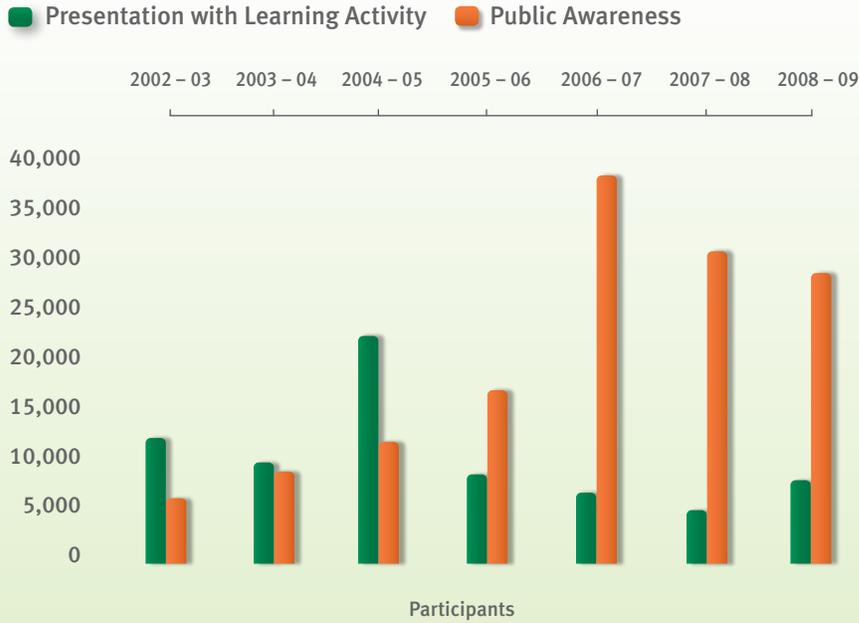
### Protective Devices Used in Selected Crashes, All Ages

2009



\* Multiple devices used in a single vehicle are counted as one.

## Bicycle Safety Program Participants School Years 2002-03 through 2008-09

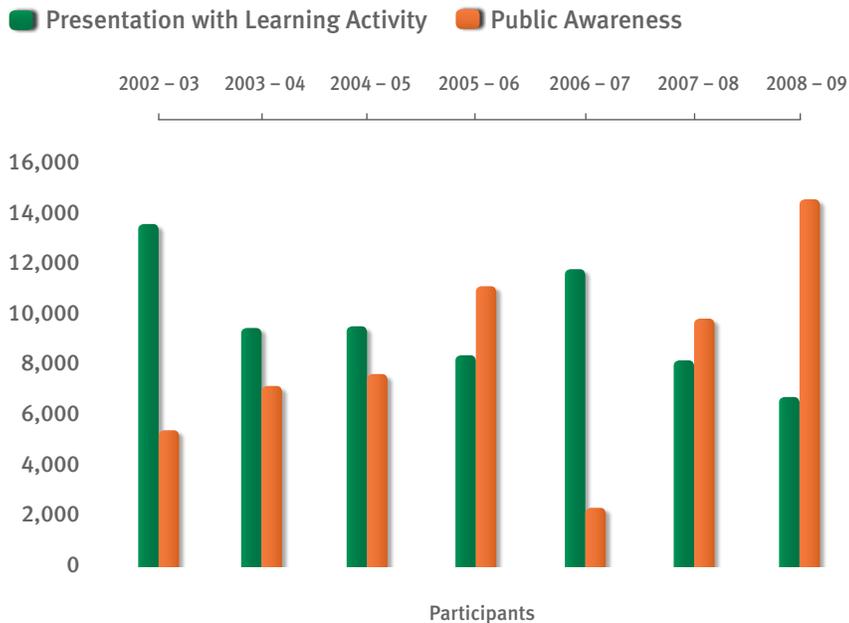


The Parkview Pediatric Trauma Center introduced a new illustration this year to represent the joy and energy common to healthy children. Through care of injured children and various trauma prevention programs, the pediatric trauma team facilitates good health for children throughout our region.



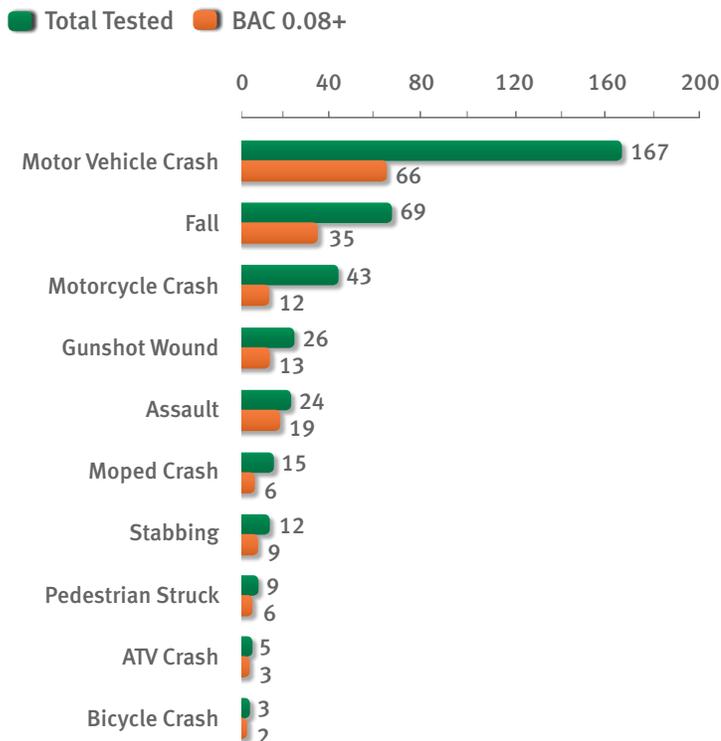
### Don't Drink and Drive Program Participants

School Years 2002-03 through 2008-09



### Blood Alcohol Concentration (BAC) Level in Selected Patients

2009



Note: BAC equal to or greater than 0.08 is considered legally intoxicated.

## The right message at the right time: TEXTING WHILE DRIVING

The facts are shocking. Individuals who drive while sending or reading text messages are 23 percent more likely to be involved in a car crash than other drivers. Recent studies have shown that reaction times for individuals who text while driving are comparable to those for individuals who drive while under the influence of alcohol. Alcohol consumption and teen driving are not good companions. Neither are texting and driving.

Since Parkview Trauma Centers introduced the Don't Text & Drive public service campaign, thousands of young people and adults have seen and heard the message. As part of presentations to high school students throughout the region, hundreds of teens have publicly signed a pledge to resist texting while driving. The Don't Text & Drive message impacts the safety of area roadways and the number of lives lost in car crashes.

Because of the Don't Text & Drive campaign's popularity throughout the region, Parkview physicians and staff continue to expand its reach. Components of the campaign are being trademarked to maintain the integrity of the message while introducing it into other communities. St. Mary's Trauma Centers in Evansville, Ind., were the first to introduce Parkview's message into their own community.

Anyone interested in sharing this vital message can access more information and resources at Parkview's Don't Text & Drive page on Facebook and at [donttextdrive.com](http://donttextdrive.com).

To explore how you can share the Don't Text & Drive message, call Parkview Trauma Prevention at (260) 373-7201.

Sources: AAA, Nationwide Insurance study, National Highway Traffic Safety Administration and the Virginia Tech Transportation Institute

**Evans Toyota, Fort Wayne**, supports the Don't Text & Drive effort by providing a Toyota Scion bearing this critical message. **Lori Hunt**, trauma prevention coordinator (below right), describes to local students the dangers associated with texting and driving.



## Trauma Centers advocate

### ‘SHARE THE ROAD’ MESSAGE

Earlier this year, the Parkview Adult Trauma Center and Parkview Pediatric Trauma Center partnered with the City of Fort Wayne and the Ronald G. Repka Foundation to support the national Share the Road safety campaign.

The greatest potential danger for cyclists and motorists sharing area roadways occurs when a motorist attempts to pass a cyclist in traffic. To address this danger, the local campaign featured the message “Pass With Care” on billboards along Fort Wayne city streets where cyclists often compete with motorists for space.

In addition, the Parkview Trauma Centers participated in several community events at which staff distributed educational materials with tips on enhancing safety for everyone. Parkview also introduced cycling-related merchandise to the inventory of bike and all-sport helmets at the Parkview Safety Store, including:

- Cycling shirts
- Personal flashing safety lights
- Knee pads



The Ronald G. Repka Foundation carries on the memory of Ron Repka, who died in 2001 at the age of 40 when he was struck by a car while cycling in rural Allen County.

## TRAUMA SERVICES STAFF

**Mary O. Aaland, MD, FACS**, Medical Director,  
Trauma Services and Surgical Trauma ICU,  
Parkview Hospital; and Trauma Surgeon,  
Indiana Surgical Specialists

**Lisa Hollister, RN**  
Trauma Program Manager

**Thein Hlaing Zhu, MB BS, DPTM, FRCP, FACE**  
Trauma Epidemiologist

**Cheri Braun, RN**  
Trauma Program Nurse

**Debbie Hawkins, RN, BSN**  
Trauma Program Nurse

**Bryan Mathieson, MSN, FNPC**  
Trauma Nurse Practitioner

**Chris Scheumann, RN, CCRN, CEN, NREMT-P, PI**  
Trauma Outreach Coordinator

**Lori Hunt, BA**  
Trauma Prevention Coordinator

**Brenda Morgan**  
Trauma Administrative Assistant

Parkview Health  
10501 Corporate Drive  
Fort Wayne, IN 46845

NON-PROFIT ORG.  
U.S. POSTAGE  
PAID  
FORT WAYNE, IN  
PERMIT NO. 1424



### Trauma Services Mission Statement

Our multidisciplinary team is dedicated to the treatment of victims of trauma, the education of the community and the prevention of injury. We strive for optimal outcomes by providing efficient, quality care, and are committed to supporting the caregivers in the crisis arena.

 **PARKVIEW**  
ADULT TRAUMA CENTER

 **PARKVIEW**  
PEDIATRIC TRAUMA CENTER