



# PARKVIEW TRAUMA 2020

ANNUAL REPORT

 **PARKVIEW**  
ADULT TRAUMA CENTER

 **PARKVIEW**  
PEDIATRIC TRAUMA CENTER

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## INTRODUCTION

Home to the region's first verified trauma center, Parkview is a recognized leader in the care of injured patients. Our Level II Adult and Level II Pediatric Trauma Centers provide specialized care 24/7 to the victims of car crashes, farming injuries, falls and other traumatic events. Whenever the unexpected happens, our team of expert trauma specialists is ready to spring into action.

Parkview is dedicated to continuous performance improvement. We manage a trauma patient data registry, provide injury prevention education to our communities, monitor performance measures, innovate through trauma research and engage in a robust professional outreach and education program — all with the goal of providing better care and improving outcomes for trauma patients in our region.

Over the past 12 months, Parkview has expanded its leadership role in trauma care even further, both here at home and at the national level. See page 3 for a summary of recent achievements and highlights.



## MISSION STATEMENT

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

# YEAR-END HIGHLIGHTS

## National leadership

The Parkview Trauma Services department developed a trauma program that achieved a new level of leadership with the appointment of two Parkview leaders to national positions. Lisa Hollister, DNP, MSN, RN, director, Trauma, Acute Care Surgery and Injury Prevention, was elected to the Board of Directors for the Trauma Center Association of America (TCAA), where she also represents Parkview on the Reimbursement Committee; and Sarah Hoepfner, MSN, RN, Supervisor, Trauma, Acute Care Surgery and Injury Prevention, joined the Disaster Committee of the TCAA this year.

On the state level, Lauren Quandt, MSN, RN, pediatric trauma coordinator and injury prevention specialist, was elected president of the Indiana Trauma Network; and Shanna Lemen, BSN, RN, was chosen to chair the Indiana Trauma Network Registry subcommittee.

## Parkview DeKalb joins program

Extending Parkview Health's service area, Parkview DeKalb Hospital was incorporated into the trauma program in 2019. As a member of the Parkview family, Parkview DeKalb now follows the same standards of care and trauma guidelines as other Parkview hospitals. This brings the total number of Parkview Health hospitals providing trauma care to eight, along with one stand-alone emergency department.

## Increase in trauma patient care

The trauma program treated 2,442 patients through the Parkview Regional Medical Center Emergency Department in 2019, a 7% increase in patient volume over 2018.

## New addition to trauma registry

Parkview developed a new maltreatment/abuse registry to track intentional injury of all ages, adding to the valuable database of information that has already been collected by Parkview Trauma Centers since 1991.

## Mass casualty incident mini-drill exercises

The trauma program successfully conducted mass casualty incident mini-drill exercises in the surgery department and has plans to expand the mini-drills to all departments. Such simulations allow the Parkview team to be better prepared in the event of an actual mass casualty incident.

## Safety precautions implemented

As part of Parkview Health's system-wide response to the COVID-19 pandemic, new safety protocols and precautions were implemented throughout the trauma program in the spring of 2020 to reduce the risk of exposure for all patients, visitors and co-workers.

These are just some of the many ways Parkview remains focused on the trauma patient and providing the best possible trauma care in our region.



**Kellie Girardot, MSN, RN, Trauma Clinical Nurse Specialist**



**Sarah Hoepfner, MSN, RN, CCRN, TCRN, Supervisor, Trauma, Acute Care Surgery and Injury Prevention**



**Jennifer Konger, MHA, BSN, RN, Manager, Community Hospital Trauma Programs**

# PARKVIEW PHYSICIANS GROUP — TRAUMA & ACUTE CARE SURGERY TEAM



**Raymond Cava, MD, FACS**



**Janette Holub, MD**



**Joseph Muller, MD, FACS**



**Dustin Petersen, MD, FACS**



**Lindsay Riegler, MD, FACS**



**Steven Santanello, DO**



**Lashonda Williams, MD, FACS**

# CLINICAL DEFINITIONS

## What qualifies as trauma?

Trauma resulting in injury may be characterized by abnormal energy transfer involving 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).

## Who is a 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).

# RATING SCALES

## Injury Severity Score (ISS)

ISS is an anatomical scoring system designed to provide an overall score for trauma patients with multiple injuries. The ISS 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 them with mortality, morbidity and hospital length of stay.

## Glasgow Coma Scale (GCS)

The GCS is a standard measure used 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.

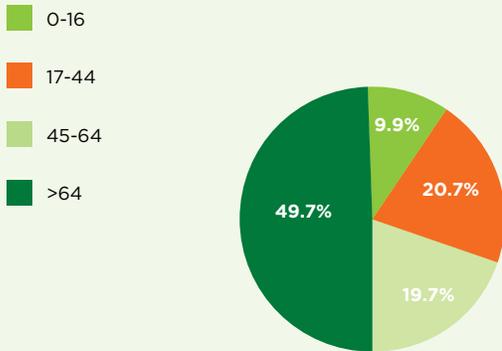


*Left to right:*

**David Goertzen, MD, Ortho NorthEast, and Alicia Floor, BSN, RN, Nursing Manager, Parkview Regional Medical Center**

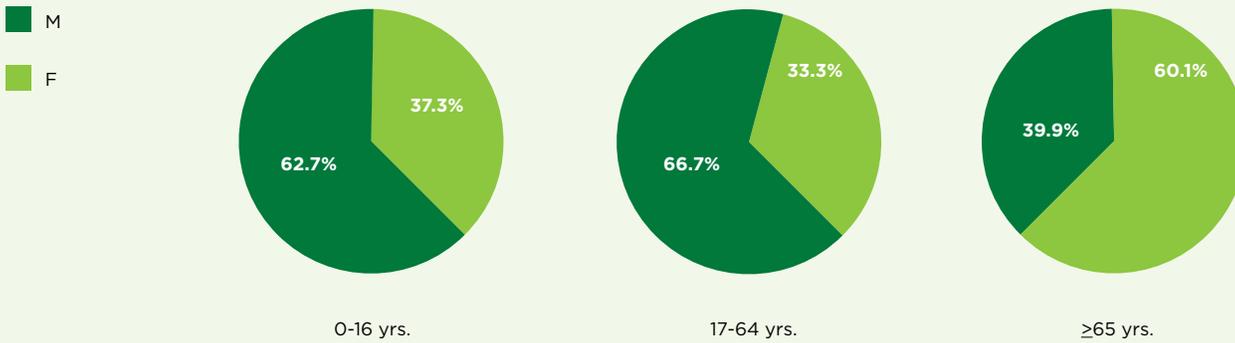
# REGISTRY

## Age of All Injured Patients, 2019

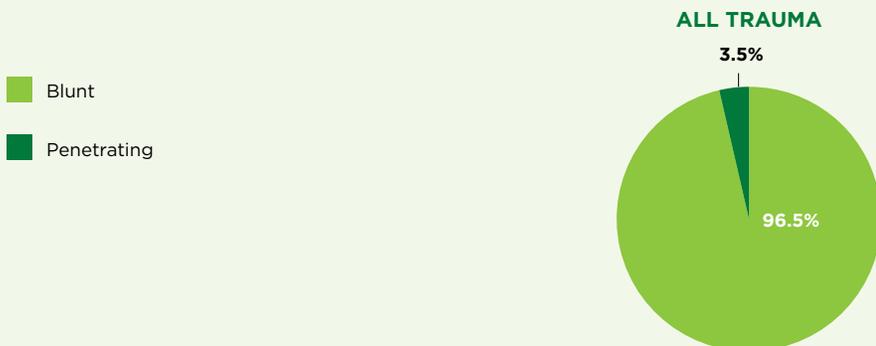


Left to right:  
**Becky Sickafoose, BSN, RN, CEN, CPEN, Trauma Program Nurse, Trauma Services;**  
**Shanna Lemen, BSN, RN, CAISS, Trauma Program Nurse, Trauma Services**

## Age and Sex, All Injured Patients, 2019

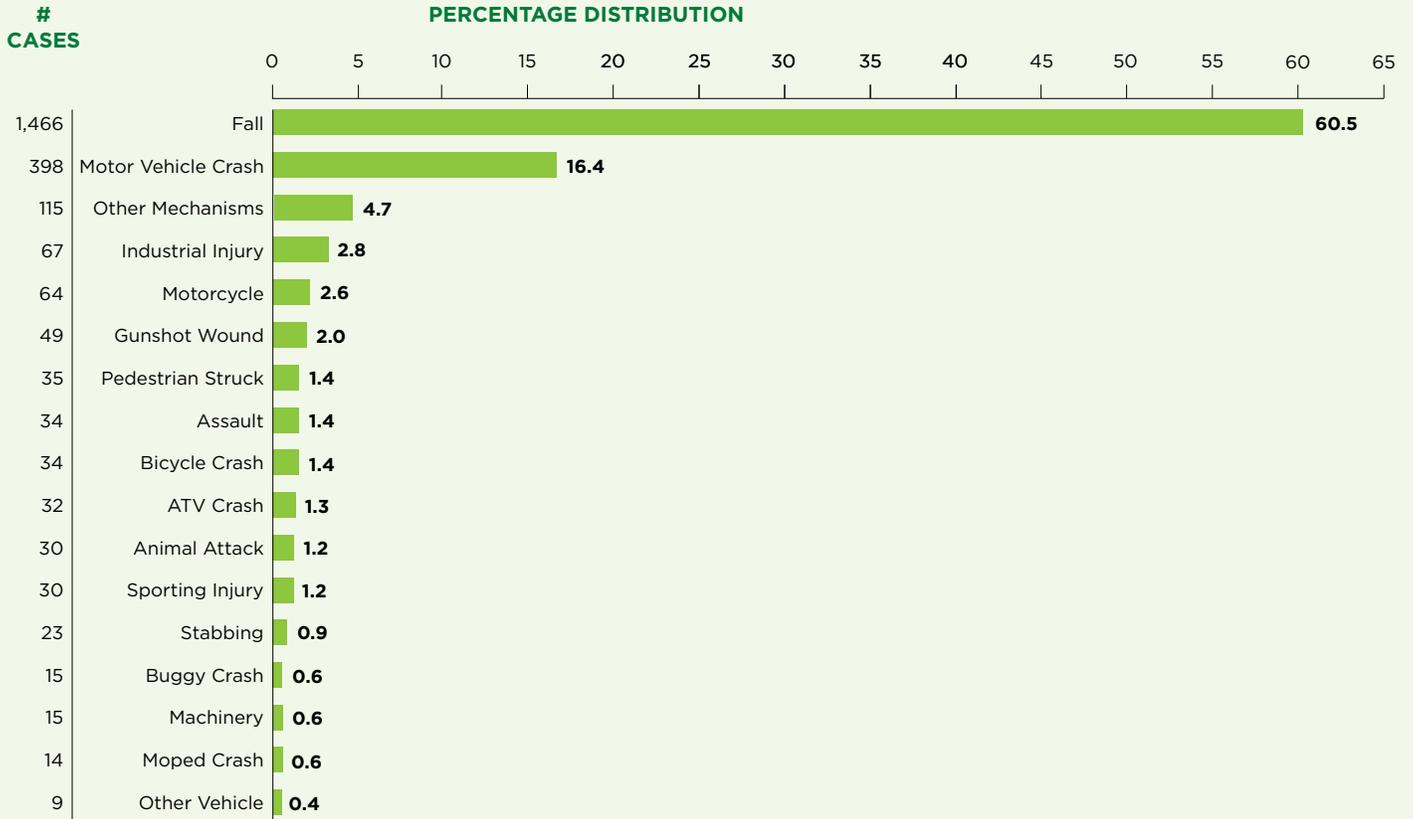


## All Injured Patients, 2019\*



\* Excludes 16 cases with thermal trauma.

## Mechanism of Injury All Ages, 2019



*In car:*

**Lauren Quandt, MSN-RN, CEN, TCRN, Pediatric Trauma Coordinator and Injury Prevention Specialist**

*In van:*

**Melissa Crance, Administrative Secretary, Trauma, Acute Care Surgery and Injury Prevention**

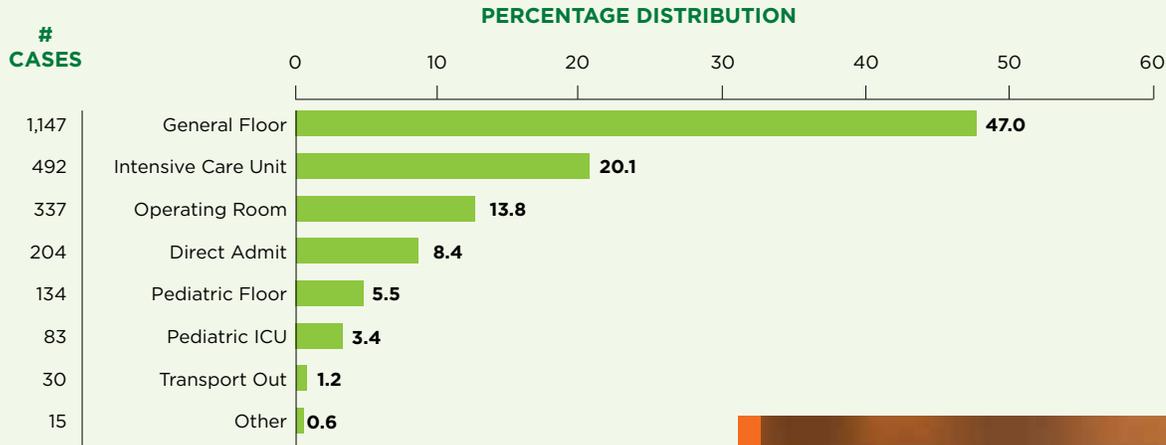


# REGISTRY *continued*

## Trend of Trauma Admission by Type, 2015 - 2019



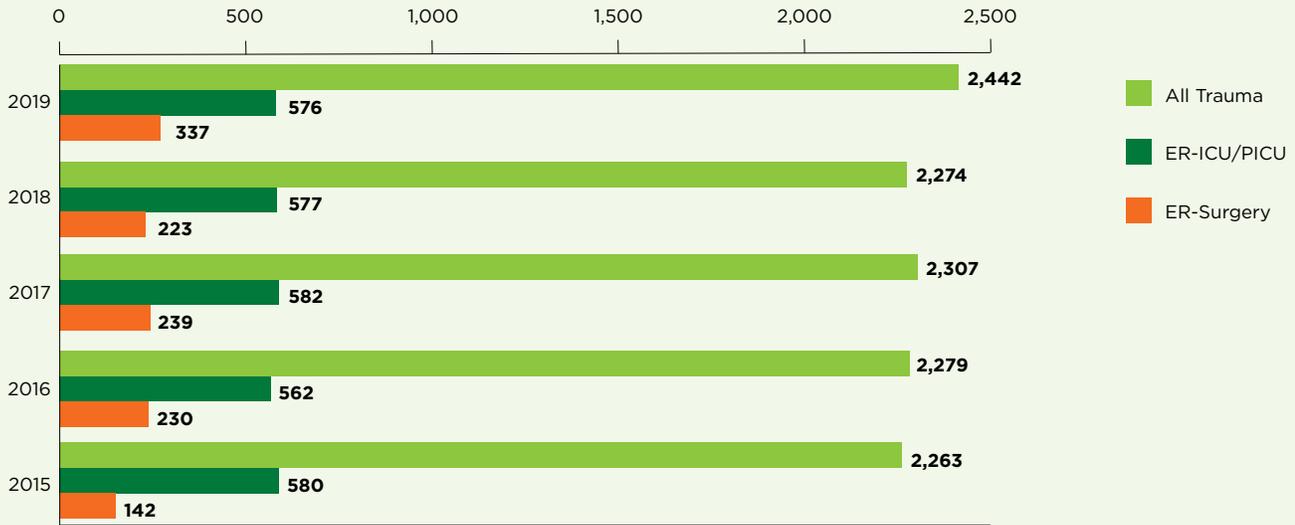
## ER Disposition, All Ages, 2019



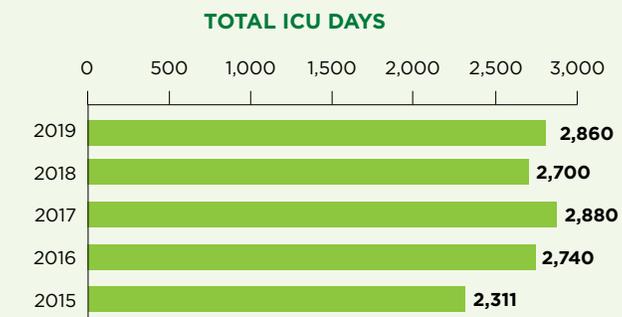
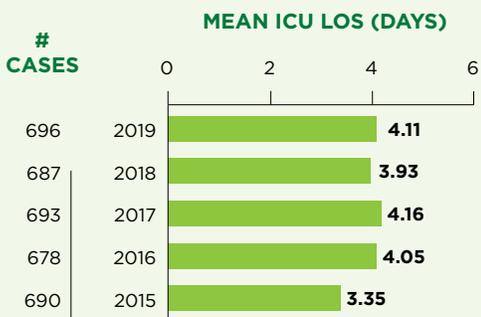
Left to right:  
**Dazar Opoku, BSC, MPH**, Trauma Data Specialist, Trauma Services;  
**Thein-Hlaing Zhu, MBBS, DPTM, FRCP, FACE**, Trauma Epidemiologist,  
 Trauma Services



## Volume of All Ages Admitted from ER to ICU and OR, 2015 - 2019



## ICU Length of Stay (LOS), All Ages, 2015 - 2019



# REGISTRY *continued*

## Volume (and %) of All Patients Admission Glasgow Coma Score (GCS), 2015 - 2019\*



\* Excludes cases for which GCS is unknown.  
 GCS, 3-8 = Possible severe head injury; GCS, 9-13 = Possible moderate head injury;  
 GCS, 14-15 = Possible mild head injury.

## Volume (and %) of All Ages Injury Severity Score (ISS), 2015 - 2019\*



ISS > 15 can include life-threatening, critical or fatal injuries.  
 \* Excludes cases for which ISS is unknown.

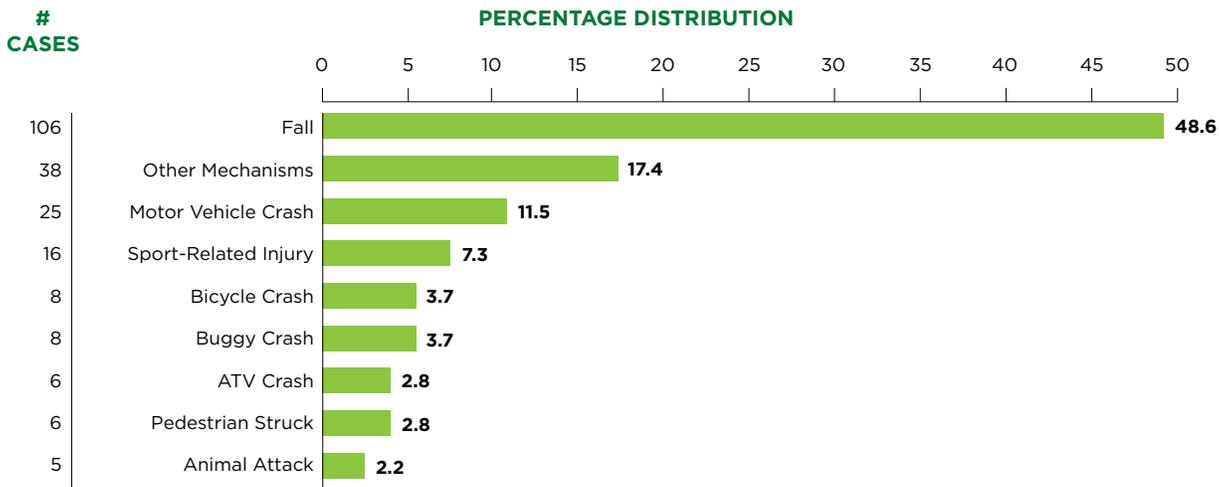
# PEDIATRICS

## Volume (and %) of Pediatric Patients (Ages 0 - 14) Injury Severity Score (ISS), 2015 - 2019\*



ISS > 15 can include life-threatening, critical or fatal injuries.  
 \* Excludes cases for which ISS is unknown.

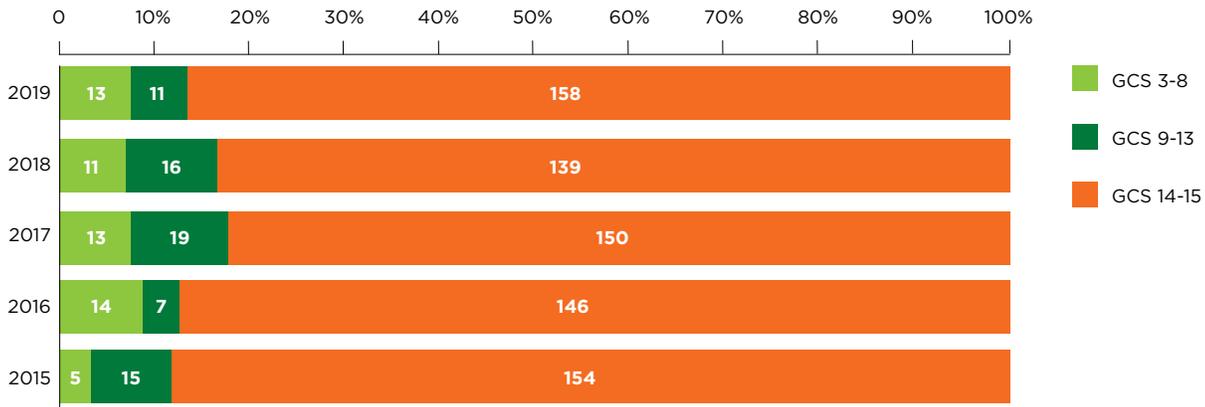
## Mechanism of Injury, Pediatric Patients, Ages 0 - 14 Years, 2019



Note: There were three cases with unknown mechanism of injury.

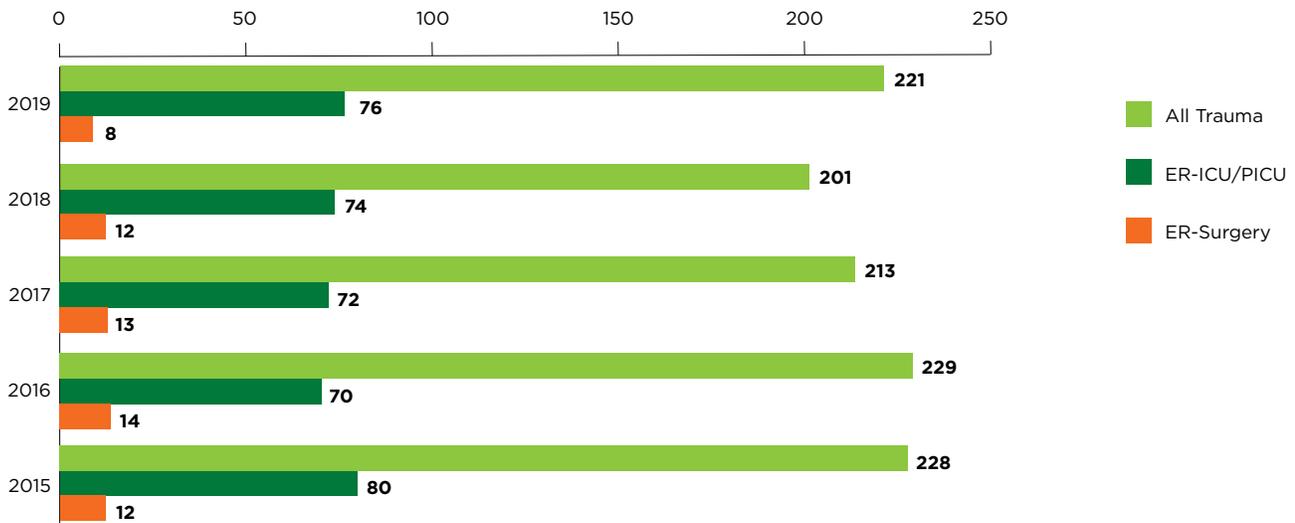
# PEDIATRICS *continued*

## Volume (and %) of Pediatric Patients (Ages 0 - 14) Admission Glasgow Coma Score (GCS), 2015 - 2019\*

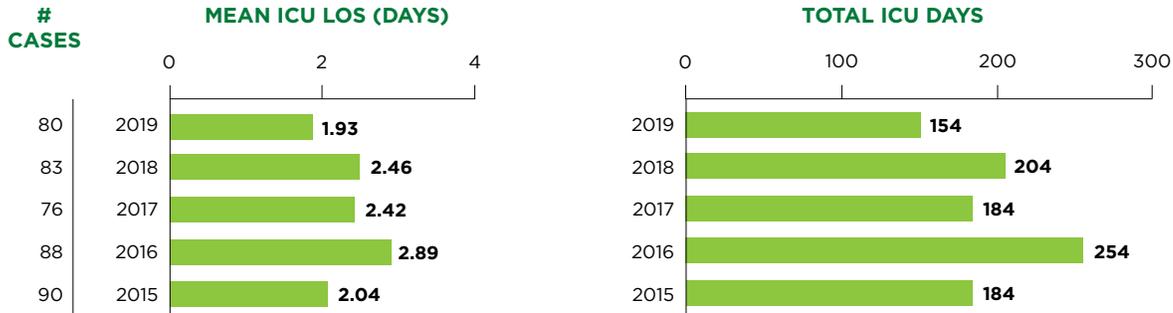


\* Excludes cases for which GCS is unknown.  
 GCS, 3-8 = Possible severe head injury; GCS, 9-13 = Possible moderate head injury;  
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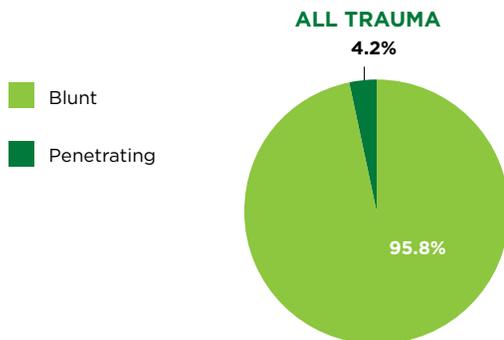
## Volume of Pediatric Patients (Ages 0 - 14) Admitted from ER to ICU and OR, 2015 - 2019



## ICU Length of Stay (LOS), Pediatric Trauma (Ages 0 - 14), 2015 - 2019



## Trauma Type, Pediatric Patients (Ages 0 - 14), 2019\*



\* Excludes one case with thermal trauma.

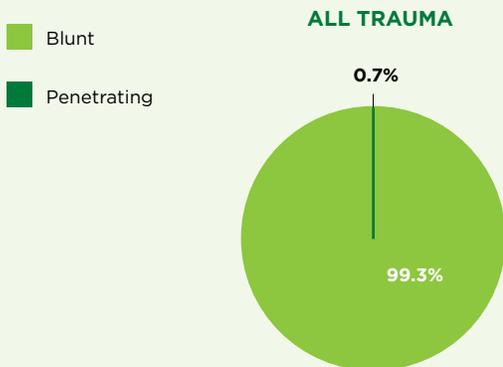
Left to right:

**Joseph Muller, MD**, Trauma & Acute Care Surgeon; **Alicia Floor, RN**, STICU; **Eric Olsen, MD**, Emergency Medicine; **Lashonda Williams, MD**, Trauma & Acute Care Surgeon



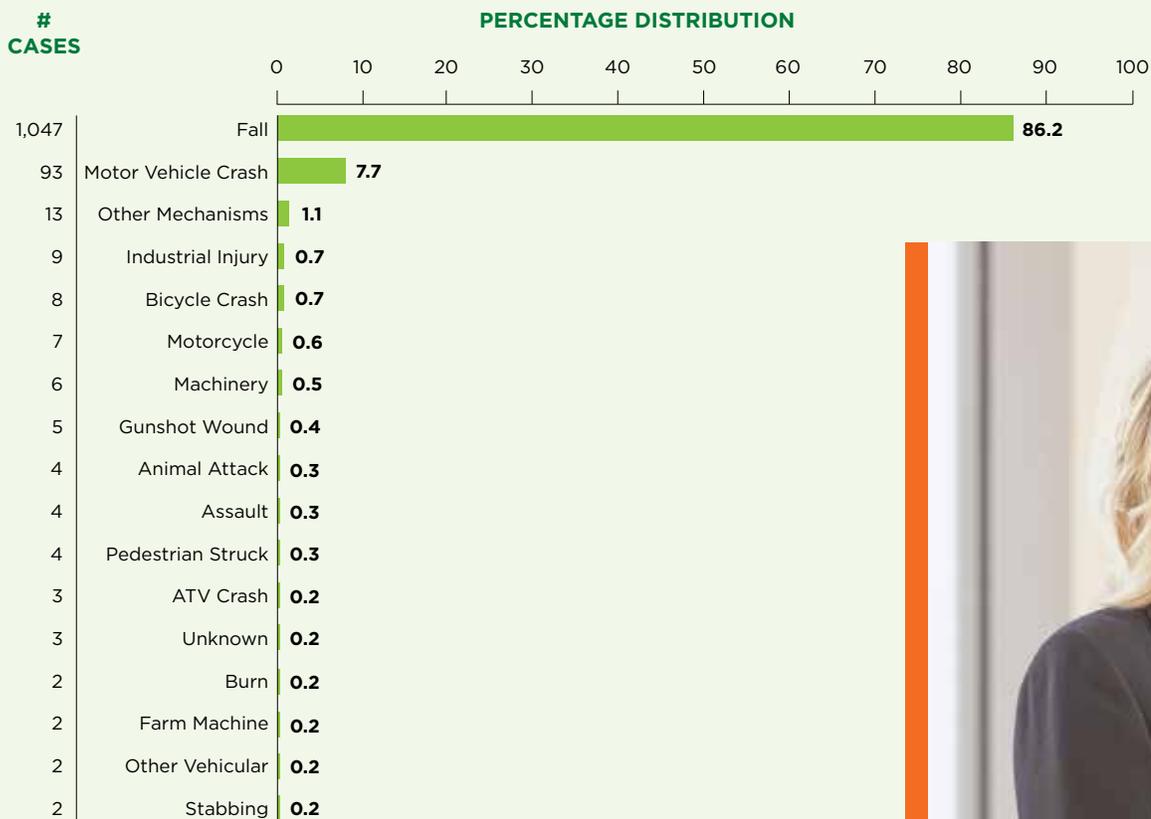
# GERIATRICS

## Trauma Type, Geriatric Patients (Ages ≥ 65), 2019



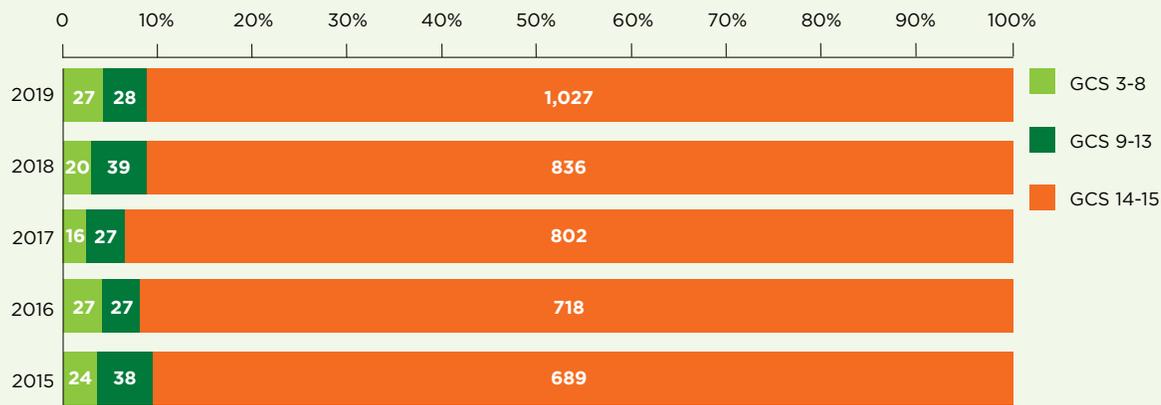
Nicole Bishir, BSN, RN, Geriatric Trauma Coordinator, Trauma Services

## Mechanism of Injury, Geriatric Patients, Ages ≥ 65 Years, 2019



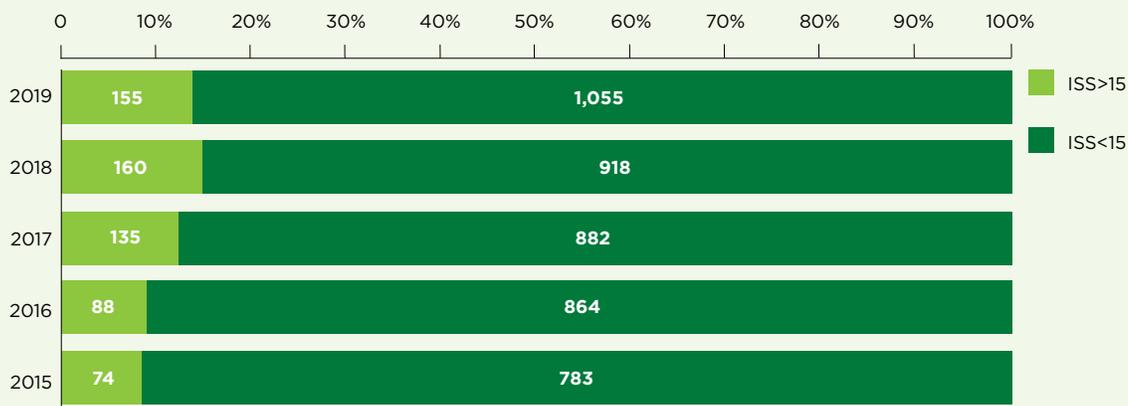
Lisa Hollister, DNP, MSN, RN, Director, Trauma, Acute Care Surgery and Injury Prevention

## Volume (and %) of Geriatric Patients (Ages ≥ 65) Admission Glasgow Coma Score (GCS), 2015 - 2019



\* Excludes cases for which GCS is unknown.  
GCS, 3-8 = Possible severe head injury; GCS, 9-13 = Possible moderate head injury;  
GCS, 14-15 = Possible mild head injury.

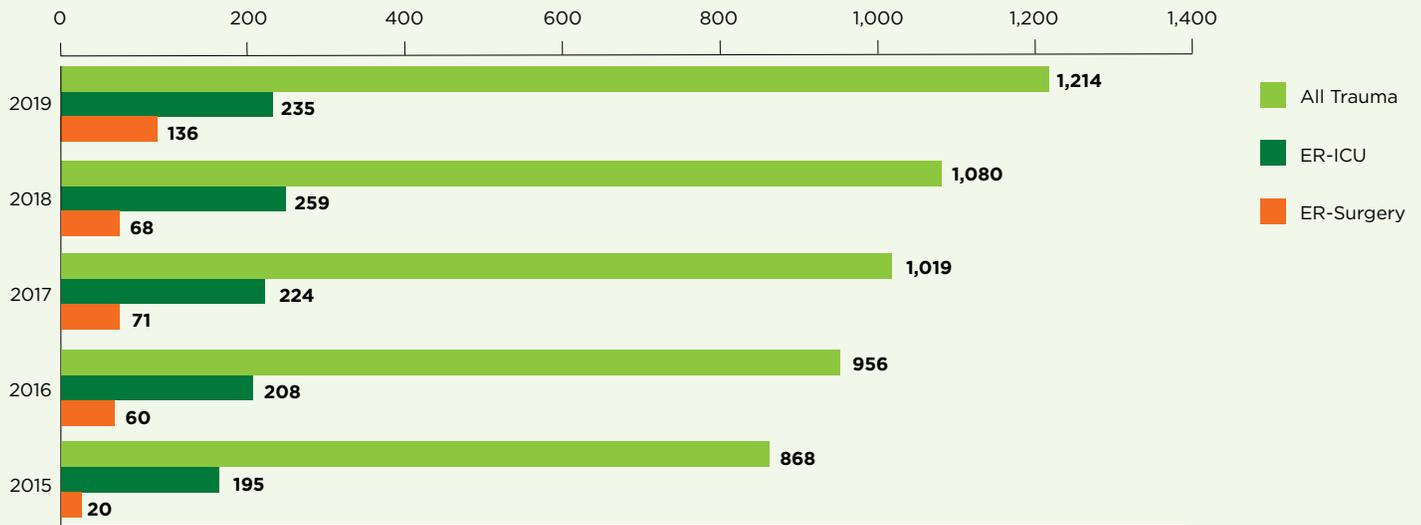
## Volume (and %) of Geriatric Patients (Ages ≥ 65 Years) Injury Severity Score (ISS), 2015 - 2019\*



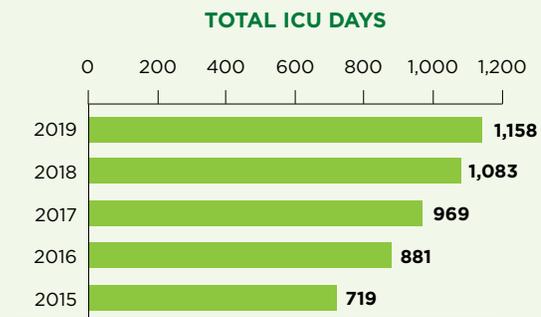
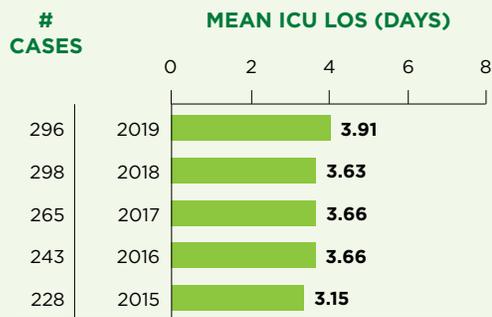
ISS > 15 can include life-threatening, critical or fatal injuries.  
\* Excludes cases for which ISS is unknown.

# GERIATRICS *continued*

## Volume of Geriatric Patients (Ages ≥ 65) Admitted from ER to ICU or Surgery, 2015 - 2019

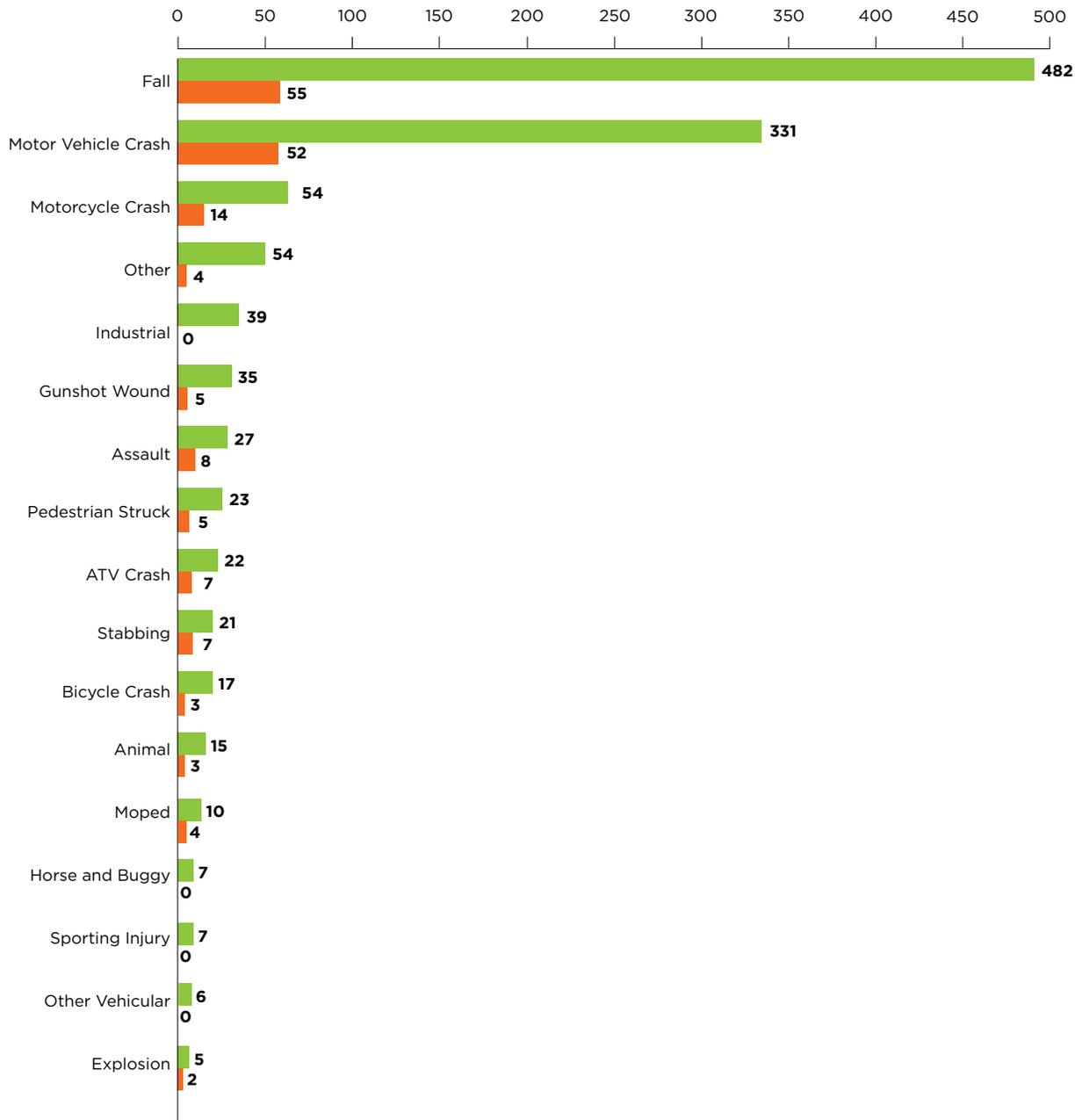


## ICU Length of Stay (LOS), Geriatric Trauma (Ages ≥ 65), 2015 - 2019



# PREVENTION

## Blood Alcohol Concentration (BAC) Level in Selected Mechanisms for Injured Patients, 2019

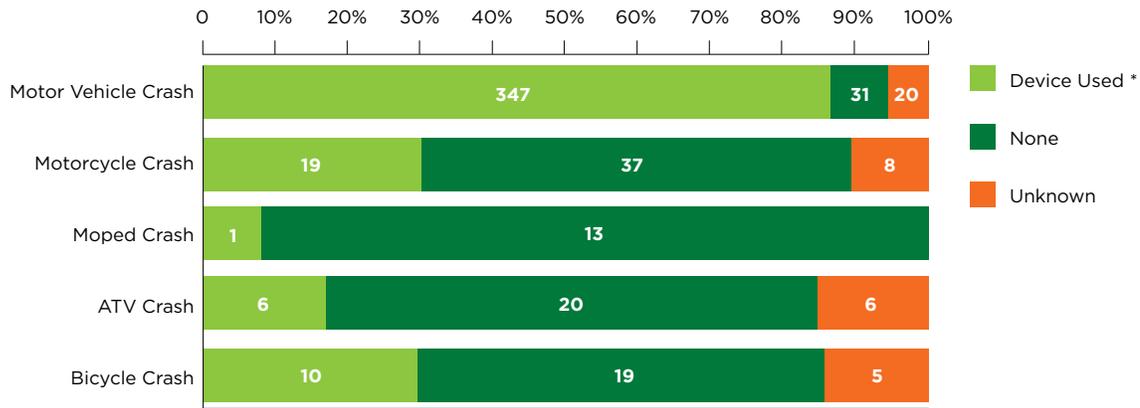


Note: BAC equal to or greater than 0.08 level is considered legally intoxicated.

■ Total Tested  
■ BAC 0.08+

# PREVENTION *continued*

## Protective Devices Used in Selected Crash Types, All Injuries, 2019



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

# PREHOSPITAL

## Mode of Transportation to Parkview Trauma Centers, 2019



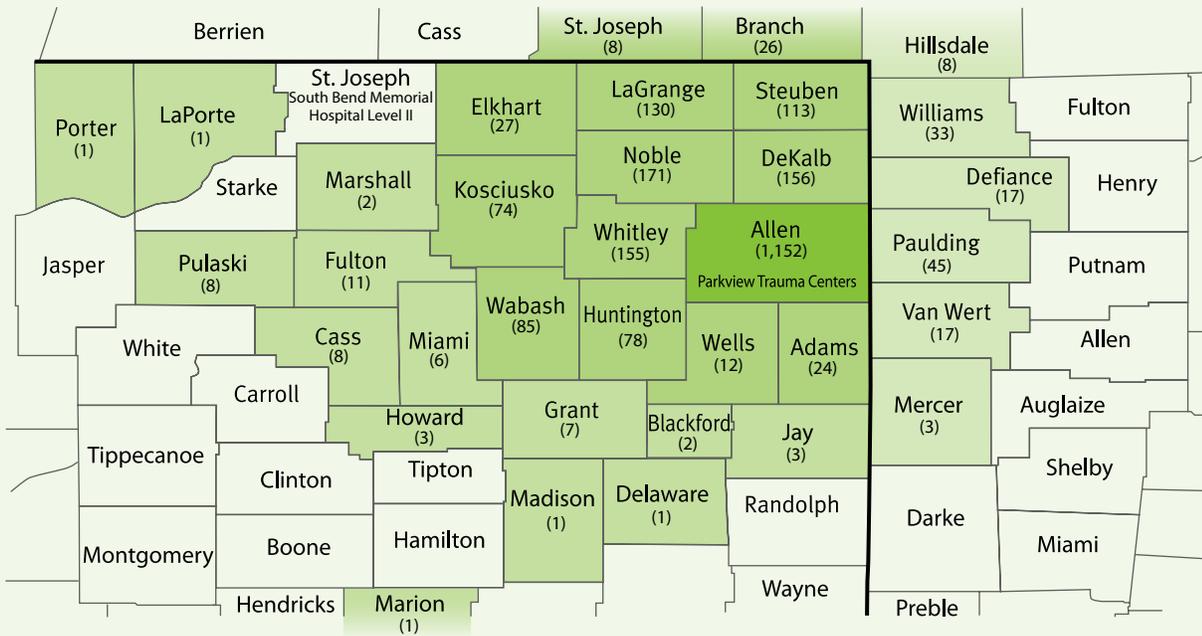
Note: There were two cases with arrival by police.

# PREHOSPITAL *continued*

## Volume (and %) of All Patients from Scene or Transferred to Parkview Trauma Centers, 2015 - 2019



## County of Injury Occurrence in Catchment Area, 2019



## TRAUMA & ACUTE CARE SURGERY LEADERSHIP

**Raymond Cava, MD, FACS**, Trauma Medical Director, Adult and Pediatric Trauma Centers, Parkview Regional Medical Center; Medical Director, Surgical Trauma ICU; Co-Medical Director, Pediatric ICU

**Lisa Hollister, DNP, MSN, RN**, Director, Trauma, Acute Care Surgery and Injury Prevention

**Jennifer Konger, MHA, BSN, RN**, Manager, Community Hospital Trauma Programs

**Sarah Hooppner, MSN, RN, CCRN, TCRN**, Supervisor, Trauma, Acute Care Surgery and Injury Prevention

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**Jeffrey Nickel, MD**, Emergency Department Trauma Liaison

**David Goertzen, MD**, Orthopedic Trauma Liaison

**Jason Heisler, DO**, Orthopedic Trauma Liaison

**Jim Dozier, MD**, Neurosurgery Trauma Liaison

**Joseph Yurkanin, MD**, Anesthesia Trauma Liaison

**Benjamin Moreno, MD, PhD**, Radiology Trauma Liaison

**Jayesh Patel, MD, FAAA**, Co-Medical Director, Pediatric ICU; Pediatric Trauma Liaison

**Richard Falcone, MD, MPH**, Pediatric Trauma Consultant; Pediatric Trauma Medical Director, Cincinnati Children's Hospital Medical Center