



Wisconsin Trauma Report

2020 Year in Review: Updates and Statistics

In support of the Wisconsin Trauma Care System

Forward

The purpose of this report is to inform key partners, including the Wisconsin public, on the trends of traumatic injury throughout Wisconsin. For more information on this report, or to request Wisconsin Trauma Registry data, contact the Wisconsin Department of Health Services (DHS) [Trauma Team](#). All data for this report is from Wisconsin's Trauma Registry.

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A Message From the Trauma Team

2020 brought many challenges into the world, but without dedicated trauma staff like you, the Wisconsin Trauma Care System would not have the strength it has today. As we reflect on the year, we are grateful and thankful for the high-quality care continuously provided to Wisconsinites, timeliness of data submissions, and dedication to performance improvement. If you have any further questions regarding the data below or something you would like included for future editions, please let us know.

[Margaret Finco](#) (State Trauma Coordinator), [Katie Prather](#) (Trauma Registry Data Manager), and [Will Koehne](#) (Epidemiologist)

Department of Health Services
Division of Public Health

Office of Preparedness and Emergency Health Care

www.dhs.wisconsin.gov/trauma

dhstrauma@dhs.wisconsin.gov

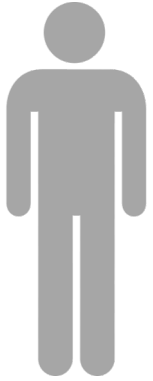
P-02087 (08/2021)



2020 Data in Review

Analyses include patients admitted between January 1 and December 31, 2020

Patient Gender



53%



47%

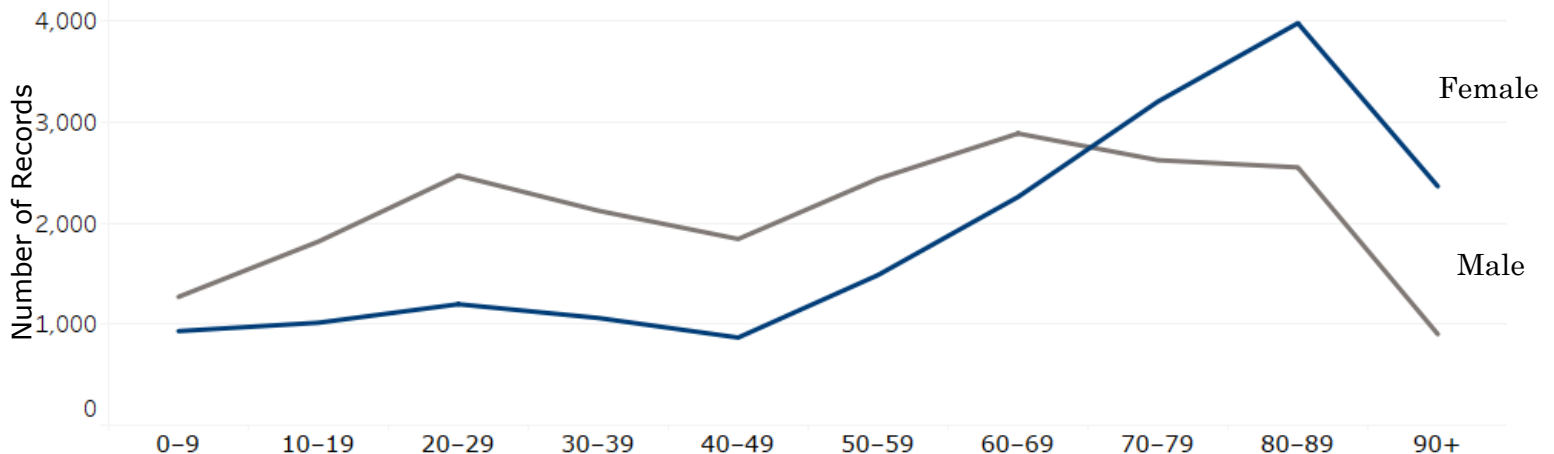
Summary

41,763 Injury Events

39,388 Unique Medical Records

All data for this report were exported on June 28, 2021. Patients may have multiple injury events or may be transferred to multiple facilities, and as a result, they may have more than one entry in the Trauma Registry or more than one medical record ID.

Volume of Patients by Gender and Age Range



Top Five Injury Categories by Age Range

Mechanism of Injury Category	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90+
Slipping, tripping, stumbling and falls	970	382	419	602	813	1,820	3,409	4,842	5,983	3,132
Occupant car, pick-up truck, or van injured in transport accident	189	815	1,328	894	575	602	528	360	203	29
Other land transport accidents	142	391	378	300	258	309	177	104	42	6
Exposure to inanimate mechanical forces	148	230	281	293	224	263	216	120	70	19
Assault	14	168	396	354	201	156	78	14	9	2

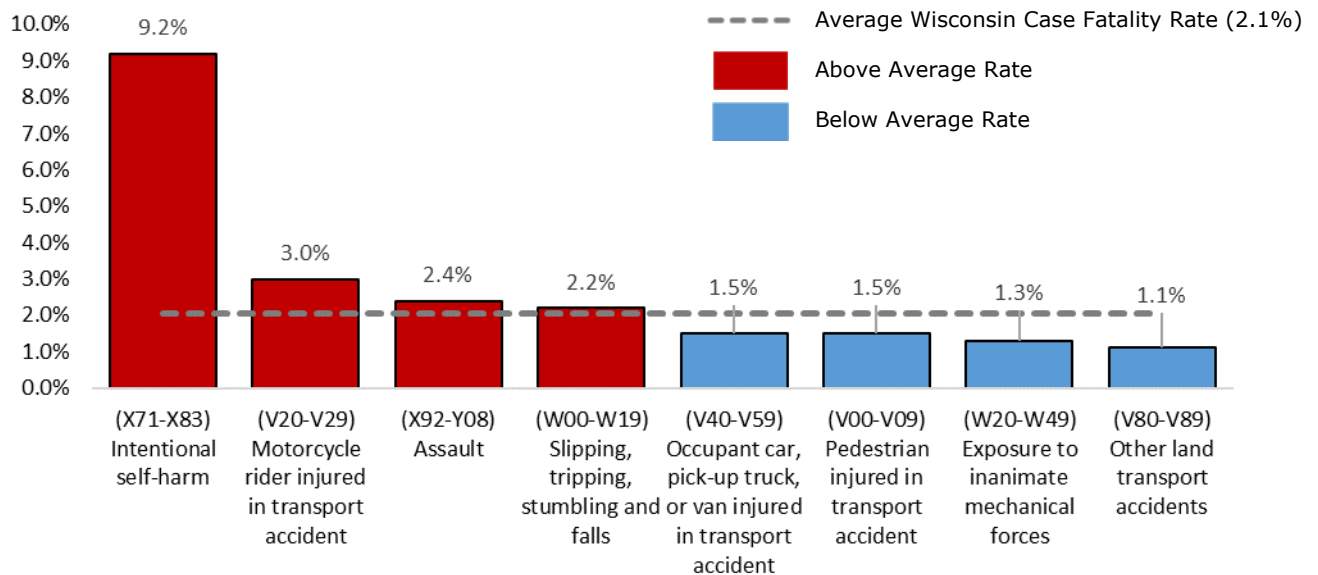


2020 Data in Review

Analyses include patients admitted between January 1 and December 31, 2020

Case Fatality Rate by Mechanism Category (Top 8 Causes of Mortality)

Incident ICD-10 Injury Category	Total Cases	Percent of All Injuries	Deaths	Case Fatality Rate
Slipping, tripping, stumbling, and falls	22,376	57%	488	2.2%
Occupant car, pick-up truck, or van injured in transport accident	5,525	14%	81	1.5%
Motorcycle rider injured in transport accident	1,348	3%	40	3.0%
Assault	1,392	4%	34	2.4%
Intentional self-harm	316	1%	29	9.2%
Other land transport accidents	2,108	5%	24	1.1%
Exposure to inanimate mechanical forces	1,864	5%	24	1.3%
Pedestrian injured in transport accident	923	2%	14	1.5%



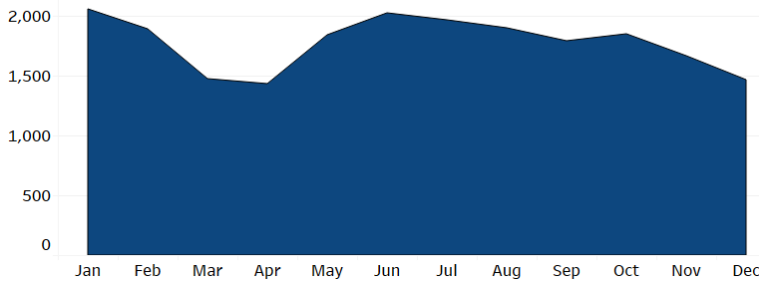


2020 Data in Review

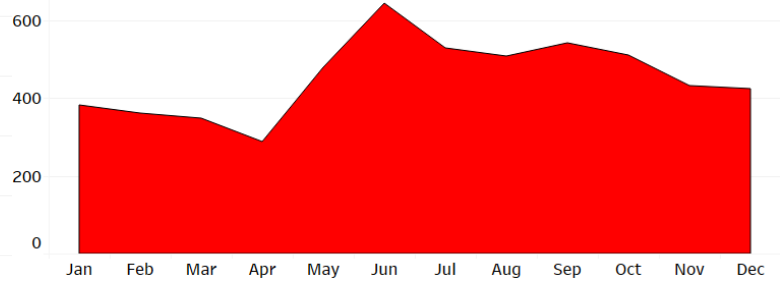
Analyses include patients admitted between January 1 and December 31, 2020

Top 8 Injury Mechanism Categories for 2020

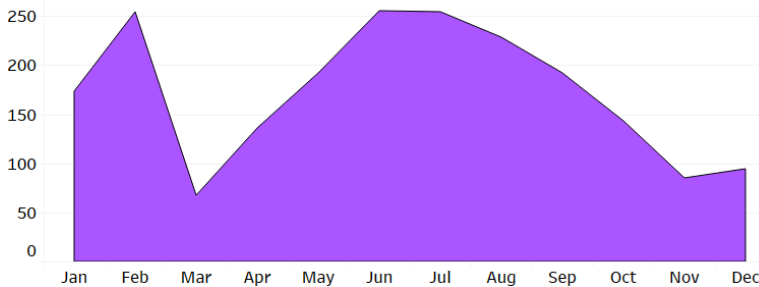
1) Slipping, tripping, stumbling and falls



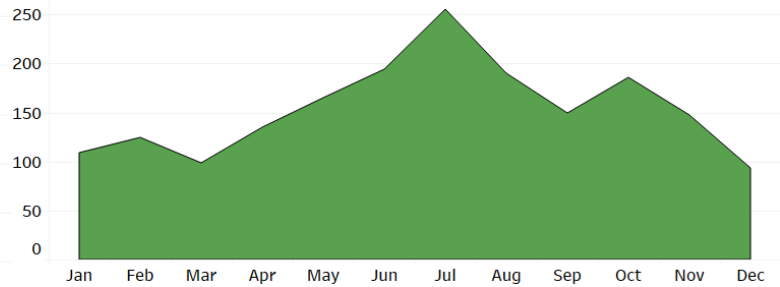
2) Occupant of car, pick-up truck, or van injury



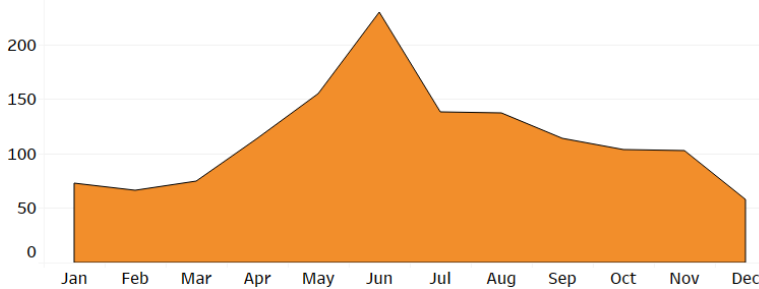
3) "Other" land transport accidents (ATVs, snowmobiles, agriculture vehicles, etc)



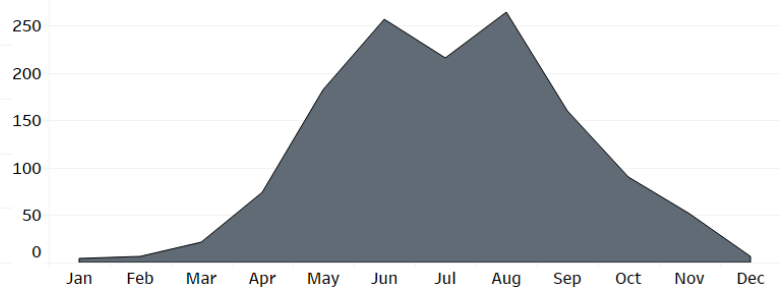
4) Exposure to inanimate mechanical forces



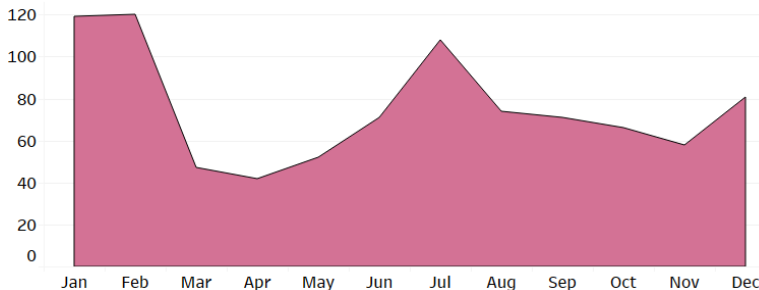
5) Assault



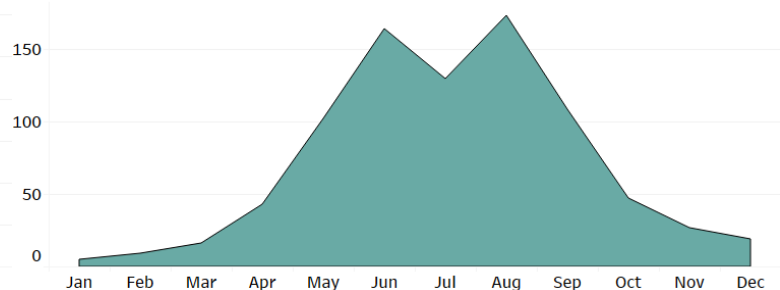
6) Motorcycle rider injury



7) Pedestrian injured by vehicle



8) Pedal cycle rider injury

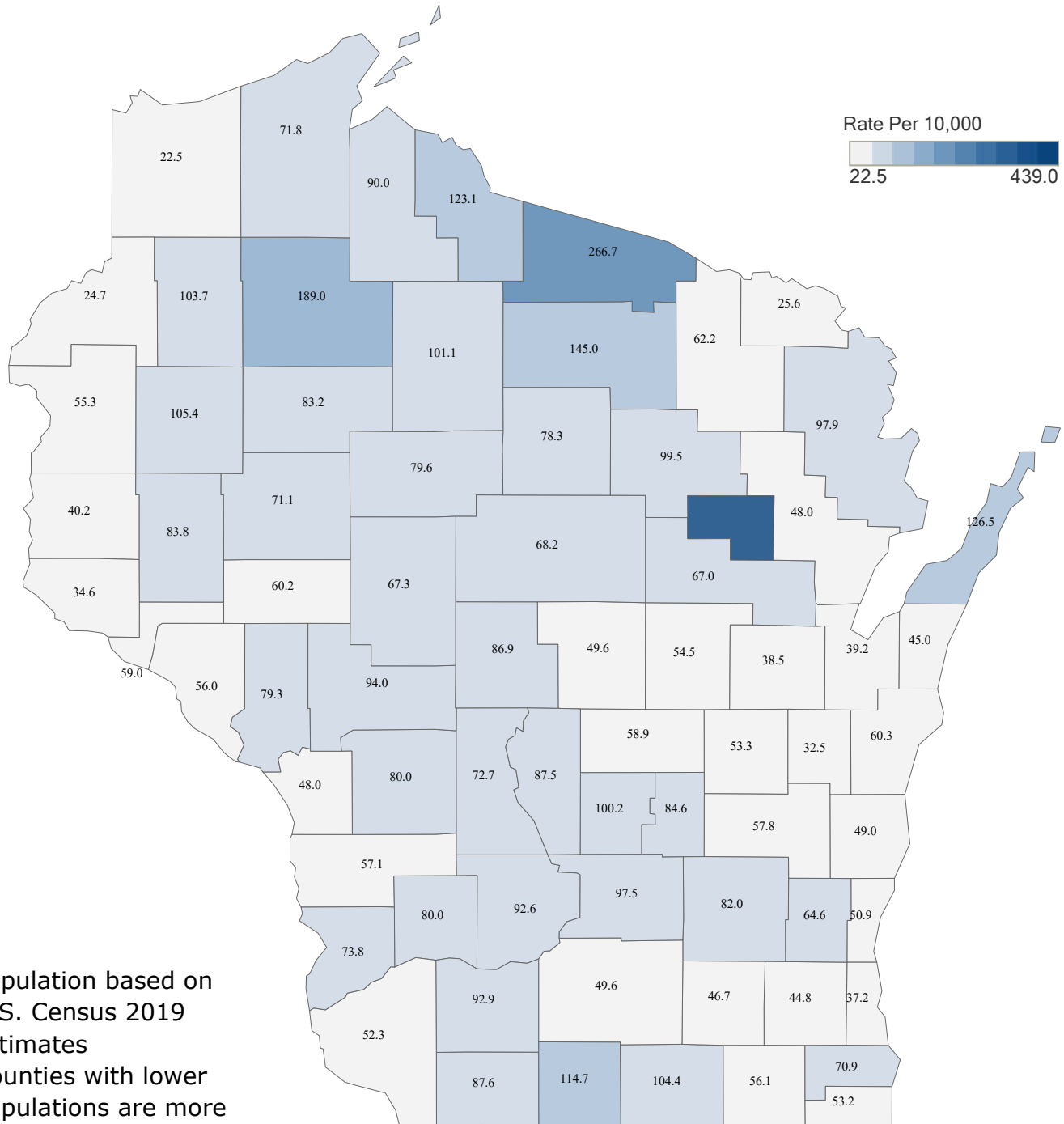




2020 Data in Review

Analyses include patients admitted between January 1 and December 31, 2020

Rate of Traumatic Injuries per 10,000 by Incident County



- Population based on U.S. Census 2019 estimates
- Counties with lower populations are more likely to have varying rates from quarter to quarter or year to year

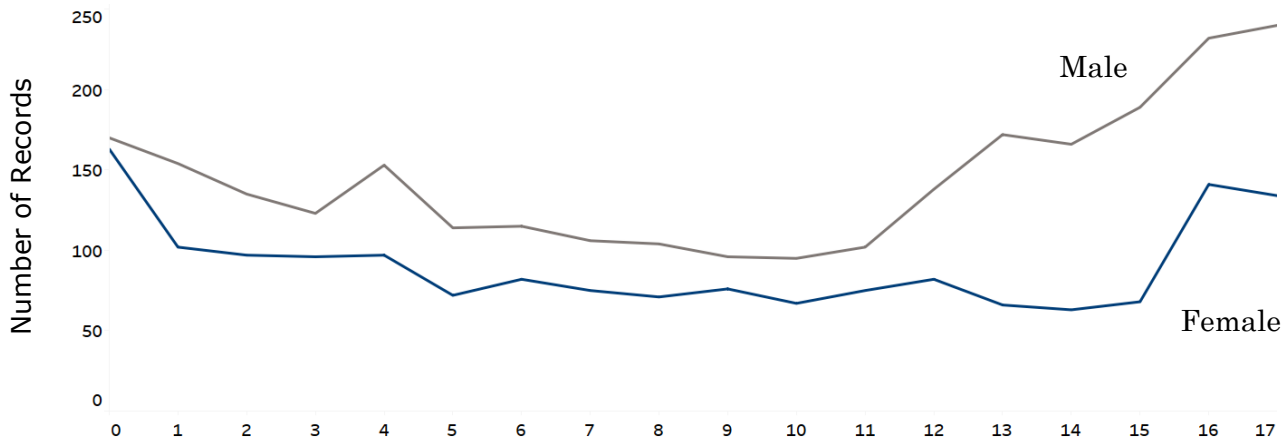


2020 Data in Review: Comparisons

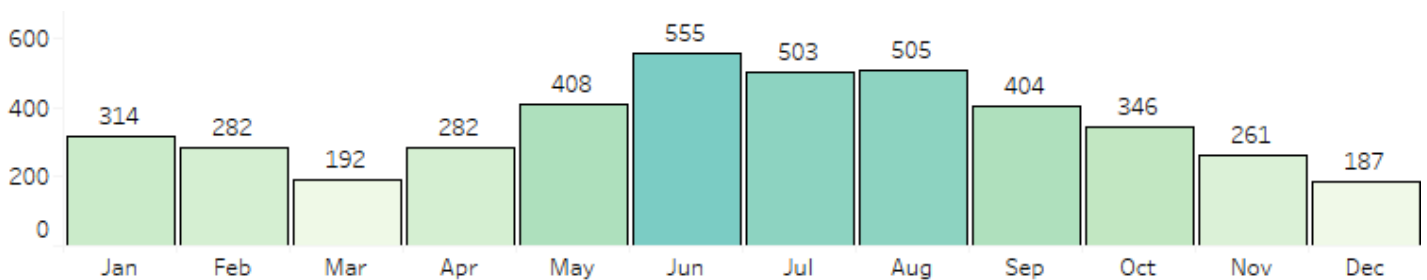
2020 Pediatric Trauma Data

4,791 Injury Events
4,306 Unique Medical Records

Volume of Pediatric Patients by Gender and Age Range



Volume of Pediatric Trauma Patients by Emergency Department Admission Month



Top 5 Pediatric Injury Categories by Age Group

Mechanism of Injury Category	0-4	5-9	10-14	15-17
Slipping, tripping, stumbling and falls	586	384	199	117
Occupant car, pick-up truck, or van injured in transport accident	96	93	105	337
Other land transport accidents	37	105	177	139
Exposure to inanimate mechanical forces	85	63	107	70
Pedestrian injured in transport accident	43	64	116	64

A higher proportion of pediatric trauma patients are injured by vehicles while they are pedestrians or while they are riding their bikes. Additionally, many trauma incidents among teens are due to car accidents.



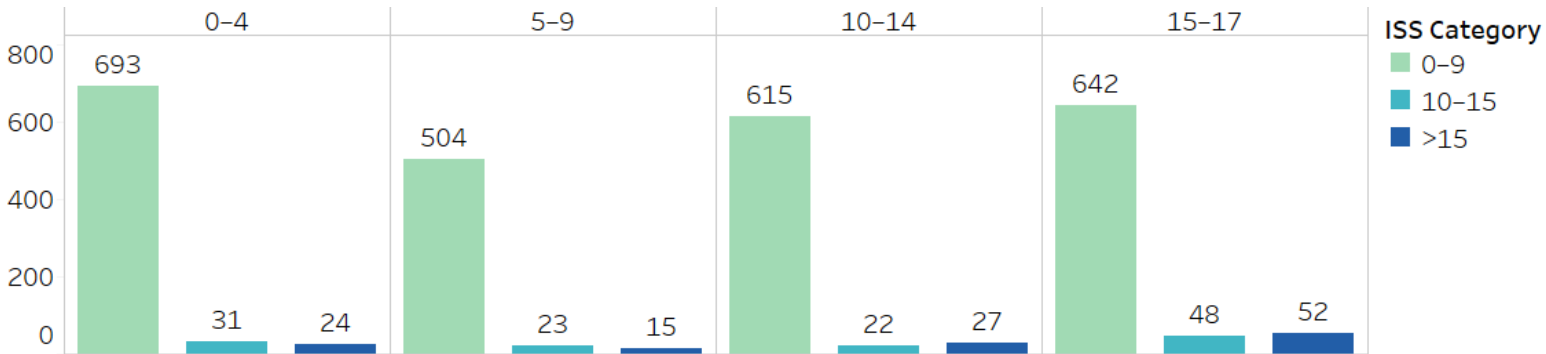
2020 Data in Review: Comparisons

The Importance of Non-Pediatric Trauma Care Centers

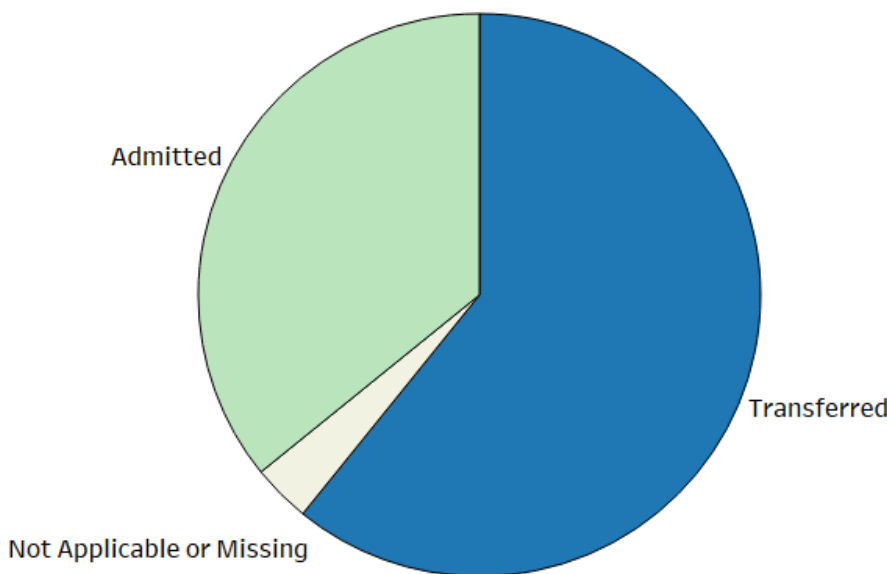


About **6 of 10** pediatric patients received their initial care at a hospital that is not designated as a Level I or Level II Pediatric Trauma Center. This highlights the role that non-pediatric trauma centers play in caring for our sick and injured pediatric trauma patients in Wisconsin.

Volume of Pediatric Trauma Patients Initially Seen at Non-Pediatric Trauma Care Centers by Age and Injury Severity Score (ISS)



Admission and Transfers Among Major Trauma Pediatric Patients Seen at Non-Pediatric Trauma Care Centers for Initial Care



36% of major trauma patients age 17 and under that were initially seen at a non-pediatric trauma care center were admitted to that hospital.

61% of these patients were transferred to another hospital. The remaining 3% is made up those who were not transferred or admitted or for whom this information was missing.

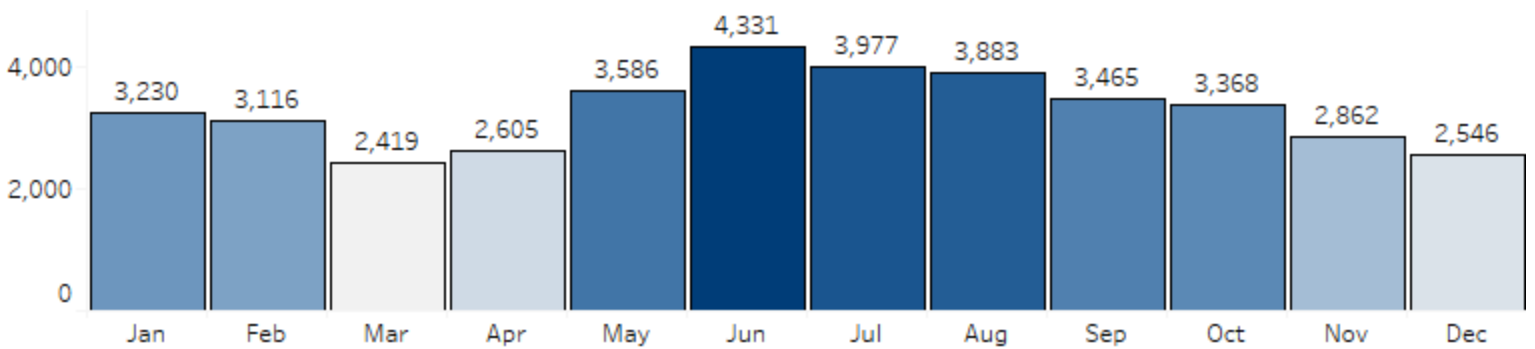


2020 Data in Review: Comparisons

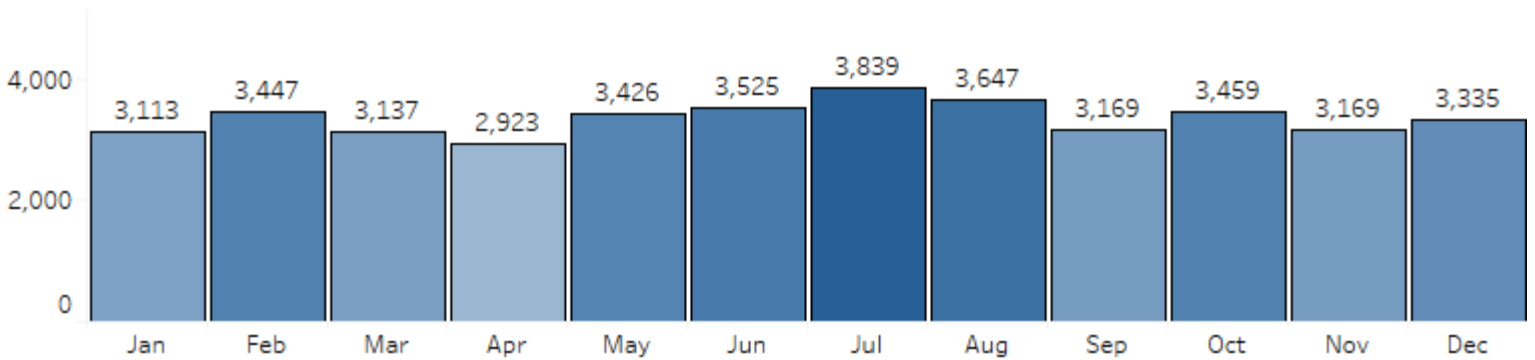
Trauma Incidents by Month for 2020 and 2019

Although the number of trauma incidents in 2020 was relatively close to the number of incidents in 2019 (39,388 in 2020 versus 40,189 in 2019) and the distribution of Injury Severity Scores (ISS) was similar, the pattern of some types of trauma was different. Of the most common causes of trauma: fall injuries decreased in 2020; vehicle-related trauma remained about the same from 2019 to 2020; assault-related trauma followed a different pattern, but the total number of assault-related trauma increased only slightly; and the number of traumas associated with ATV use increased greatly.

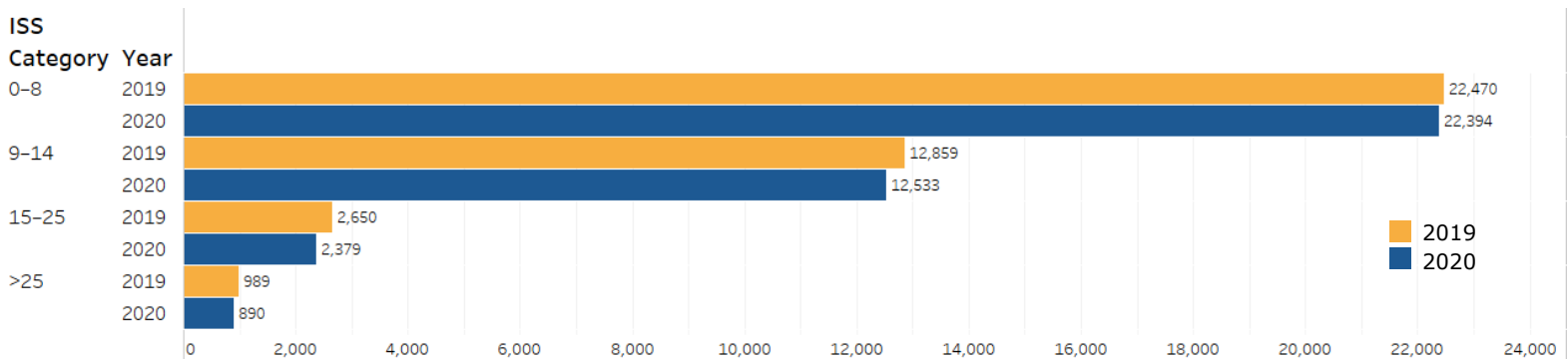
Trauma Incidents by Month, 2020



Trauma Incidents by Month, 2019



ISS Score Distribution



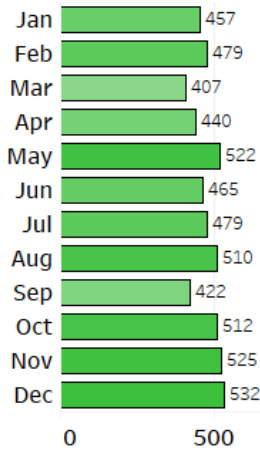


2020 Data in Review: Comparisons

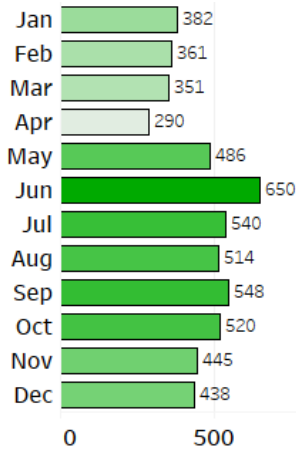
Car, Truck, and Van Trauma

The number of traumas associated with car, pickup truck, and van accidents decreased slightly from 2019 (5,750 injuries) to 2020 (5,525 injuries).

2019 Vehicle Trauma



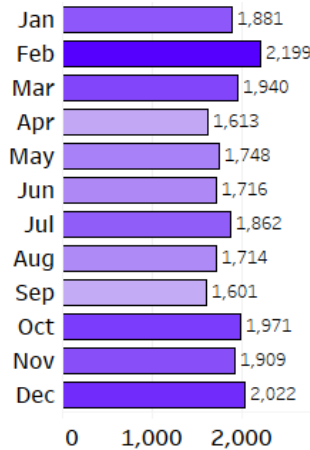
2020 Vehicle Trauma



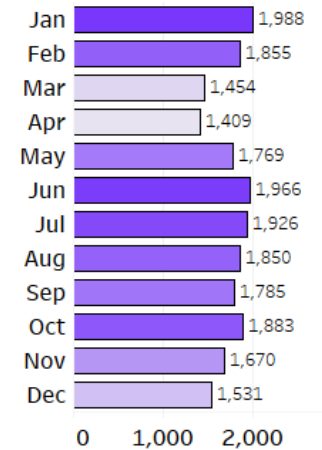
Adult Falls

Fall injuries decreased somewhat from 2019 to 2020, going from 22,176 fall injuries in 2019 to 21,086 in 2020.

2019 Adult Falls



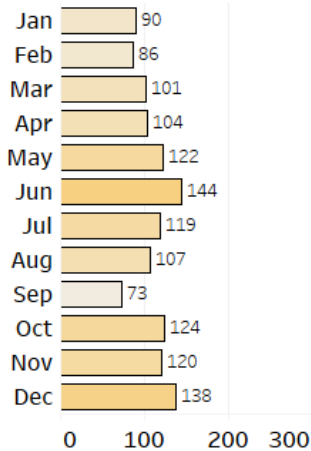
2020 Adult Falls



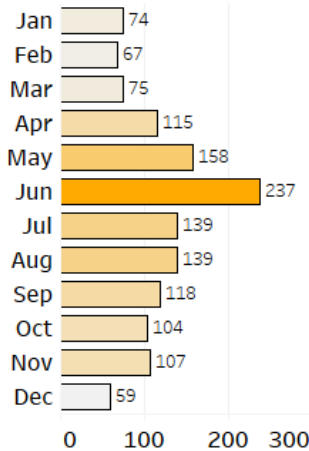
Assault Trauma

Though there were much higher counts of trauma due to assault in June of 2020 than in June of 2019, overall, there was only a small increase in number of traumas due to assaults (1,328 in 2019 versus 1,392 in 2020).

2019 Assaults



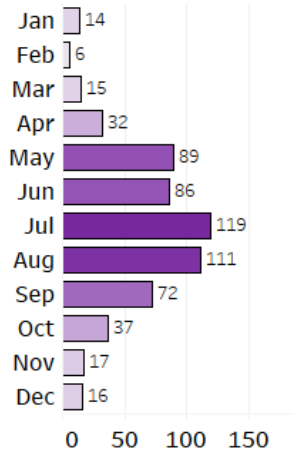
2020 Assaults



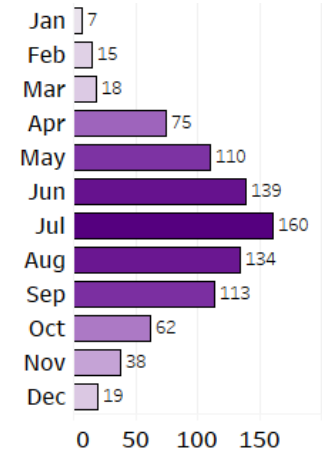
ATV/Off-Road Vehicle Trauma

Trauma occurring during the use of ATVs or other off-road vehicles increased by **45%** between 2019 (614 trauma injuries) and 2020 (890 injuries).

2019 ATV Traumas



2020 ATV Traumas





Outstanding Submission Timeliness

Analyses include patients admitted between January 1 and December 31, 2020

Recognition for Timeliness of Data Reporting in 2020

2020 was an especially difficult year for meeting reporting timeliness goals; nevertheless, the below facilities completed records with exceptional timeliness.

Platinum: 100% of Records Closed Within 60 Days of Patient Discharge



Ascension Our Lady of Victory Hospital

Marshfield Medical Center - Neillsville

Ascension Saint Michael's Hospital of Stevens Point

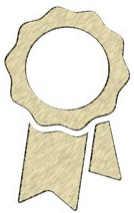
SSM Health St. Clare Baraboo

Aurora Medical Center Bay Area

Unity Point Hospital

Westfields Hospital

Gold: 99.9%–99.0% of Records Closed Within 60 Days of Patient Discharge



Waukesha Memorial Hospital

Oconomowoc Memorial Hospital

Upland Hills Health

Silver: 98.9%–98.0% of Records Closed Within 60 Days of Patient Discharge



Amery Hospital & Clinic

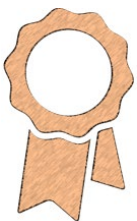
Western Wisconsin Health

Divine Savior Healthcare

Aurora Medical Center Washington County

Hayward Area Memorial

Bronze: 97.9%–95.0% of Records Closed Within 60 Days of Patient Discharge



Marshfield Medical Center - Eau Claire

Aspirus Medford Hospital

Aurora West Allis Medical Center