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.

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

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

<table>
<thead>
<tr>
<th>Mechanism of Injury Category</th>
<th>0-9</th>
<th>10-19</th>
<th>20-29</th>
<th>30-39</th>
<th>40-49</th>
<th>50-59</th>
<th>60-69</th>
<th>70-79</th>
<th>80-89</th>
<th>90+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slipping, tripping, stumbling and falls</td>
<td>970</td>
<td>382</td>
<td>419</td>
<td>602</td>
<td>813</td>
<td>1,820</td>
<td>3,409</td>
<td>4,842</td>
<td>5,983</td>
<td>3,132</td>
</tr>
<tr>
<td>Occupant car, pick-up truck, or van injured in transport accident</td>
<td>189</td>
<td>815</td>
<td>1,328</td>
<td>894</td>
<td>575</td>
<td>602</td>
<td>528</td>
<td>360</td>
<td>203</td>
<td>29</td>
</tr>
<tr>
<td>Other land transport accidents</td>
<td>142</td>
<td>391</td>
<td>378</td>
<td>300</td>
<td>258</td>
<td>309</td>
<td>177</td>
<td>104</td>
<td>42</td>
<td>6</td>
</tr>
<tr>
<td>Exposure to inanimate mechanical forces</td>
<td>148</td>
<td>230</td>
<td>281</td>
<td>293</td>
<td>224</td>
<td>263</td>
<td>216</td>
<td>120</td>
<td>70</td>
<td>19</td>
</tr>
<tr>
<td>Assault</td>
<td>14</td>
<td>168</td>
<td>396</td>
<td>354</td>
<td>201</td>
<td>156</td>
<td>78</td>
<td>14</td>
<td>9</td>
<td>2</td>
</tr>
</tbody>
</table>
### Case Fatality Rate by Mechanism Category (Top 8 Causes of Mortality)

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

#### Graph

- **Average Wisconsin Case Fatality Rate (2.1%)**
- **Above Average Rate**
- **Below Average Rate**

**Legend:**
- Red: Above Average Rate
- Blue: Below Average Rate
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
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.
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.
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.
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).

Adult Falls

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

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).

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).
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
- Ascension Saint Michael’s Hospital of Stevens Point
- Aurora Medical Center Bay Area
- Marshfield Medical Center - Neillsville
- SSM Health St. Clare Baraboo
- 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
- Divine Savior Healthcare
- Hayward Area Memorial
- Western Wisconsin Health
- Aurora Medical Center Washington County

**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