MAINE DEPARTMENT OF LABOR
August 3, 2022

Injury Rates

In order to find injury rates, The Bureau of Labor Standards relies on a federal partnership with the Bureau of Labor Statistics though their Survey of Occupational Injury and Illness (SOII) program. That data is reported on a yearly basis, and the following statistics come from the most recently completed survey year of 2020.

Maine Statewide, all industry, private sector only

- For every 20,000,000 person-hours worked, or for every 10,000 full time equivalent workers (employees working 40 hours per week, 50 weeks per year), there are 3.0 instances of intentional injury perpetrated by a person other than the injured worker
- Approximately 70% of these cases were perpetrated by a health care patient
- Female workers (rate 5.3) are almost 5 times more likely to suffer these types of injury events than male workers (rate 1.1)
- Workers aged 20-24 (rate 7.2) and 25-34 (rate 5.5) are much more likely to suffer these types of injury events than all other age groups, with the next highest being workers aged 35-44 who had an injury rate of only 2.9.

For the private sector Healthcare and Social Assistance industry only**,** the injury rate for these specific types of violent injuries are almost 5 times higher than the all-industry rate, at 14.3 cases per 10,000 FTEs

Information for prior years is omitted since they must be compiled individually, though they can be provided upon request or interest by the committee.

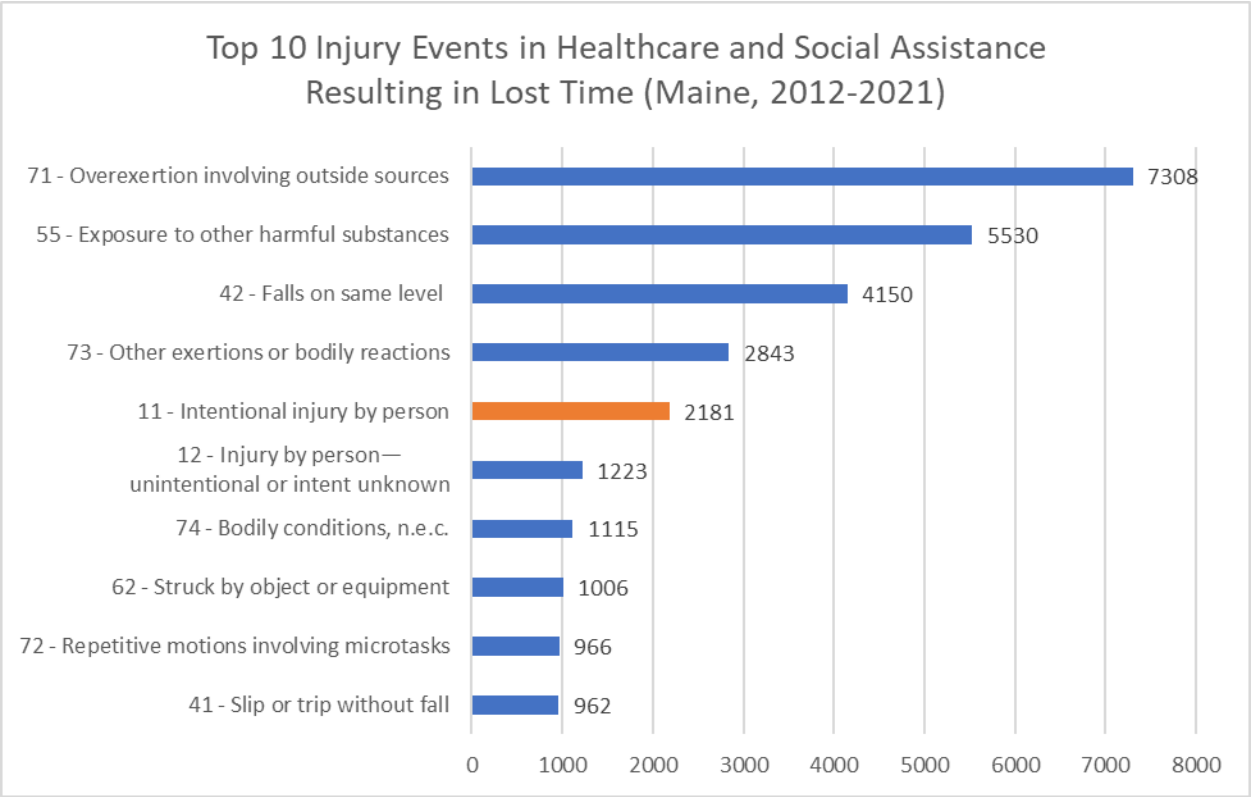
Injury Counts

Maine law mandates that employers are responsible for completing the First Report of Injury (FROI) form and submitting it to their workers' compensation insurance company within 10 days of the first day of disability or the date they were aware of disability, whichever is later. If the employee has physical limitations due to the injury or illness and loses consecutive hours equal to a regular workday because the employer cannot accommodate those restrictions, a FROI must be filed with the Workers Compensation Board (WCB) within 7 days after an employer's notice or knowledge that an employee has lost hours equal to a regular workday regardless of actual wage loss. These claims are hereafter referred to as "Lost Time" claims and are electronically sent from the WCB to the Bureau of Labor Standards (BLS) where we combine information found on the FROI along with our own injury and illness coding schemes to produce workplace injury and illness statistics.

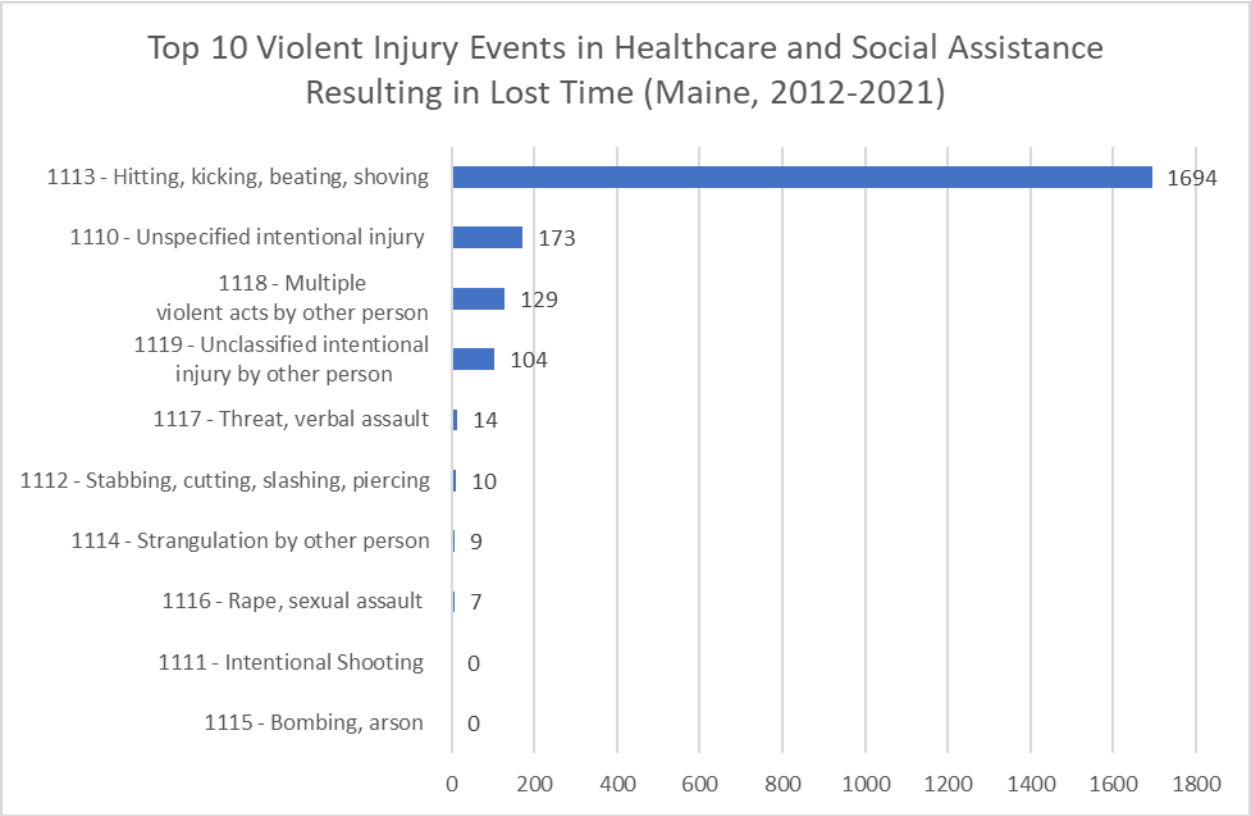
All following information in this report is an analysis of the Lost Time claims we have coded from the WCB.

Between 2012 and 2021, there have been approximately 140,000 lost-time FROIs coded by the BLS. While we have a record of all lost time claims filed in the timeframe, we are not able to use this information to calculate injury rates. We do not receive information from employers stating how many hours of occupational exposure each injured or ill employee had, nor the total number of hours worked by employees who are not injured or ill. That information must be found through the federal SOII program, and due to the Confidential Information Protection and Statistical Efficiency Act (CIPSEA), we are much more limited in what data we are allowed to discuss from that partnership.

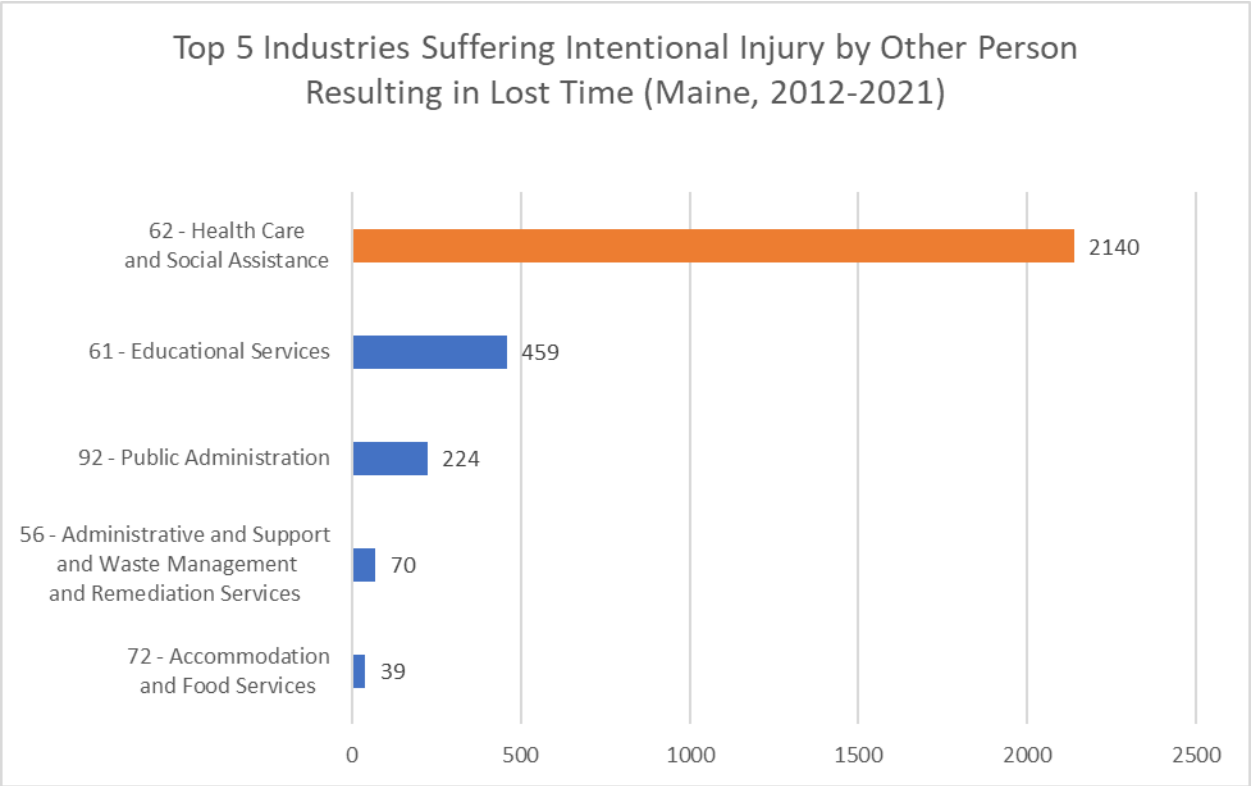
Before getting into specific demographic breakdowns of these types of injuries, it's good to contextualize violence within the healthcare industry.



Between 2012 and 2021, there were 32,062 injuries and illness in Maine's healthcare industry which resulted in days away from work, representing 22.9% of all lost time injuries across Maine. Of these, 2,181 were instances of intentional injury by a person. This represents 6.8% of all injuries within the industry. 41 of those intentional injuries by a person were instances of self-harm, bringing the total number of intentional injuries perpetrated by another person to 2,140. This equates to just over 4 instances of violence in Maine's healthcare system every week for the past 10 years resulting in injuries serious enough to cause days away from work.

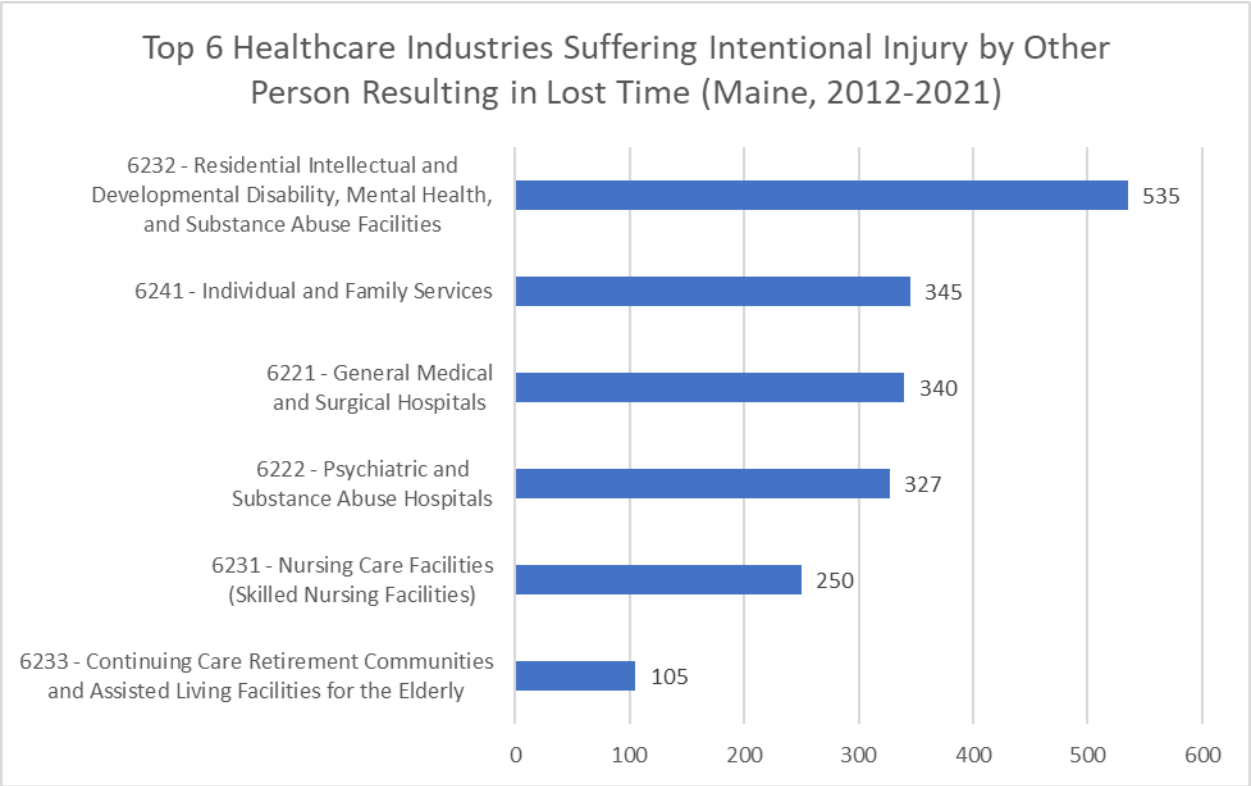


Looking at these 10 classifications of intentional injury, hand-to-hand incidents are far and away the most common way in which people lash out against healthcare and social assistance workers. The Unspecified Intentional Injury category records instances where coders can deduce intentional violence from the injury narrative but are unable to determine what kind of violence was perpetrated. The Unclassified Intentional Injury category is an “All-Other” group for known violence events which do not fit into one of the other 8 named groups. For the most part, these are instances of a person throwing an object at the injured worker.



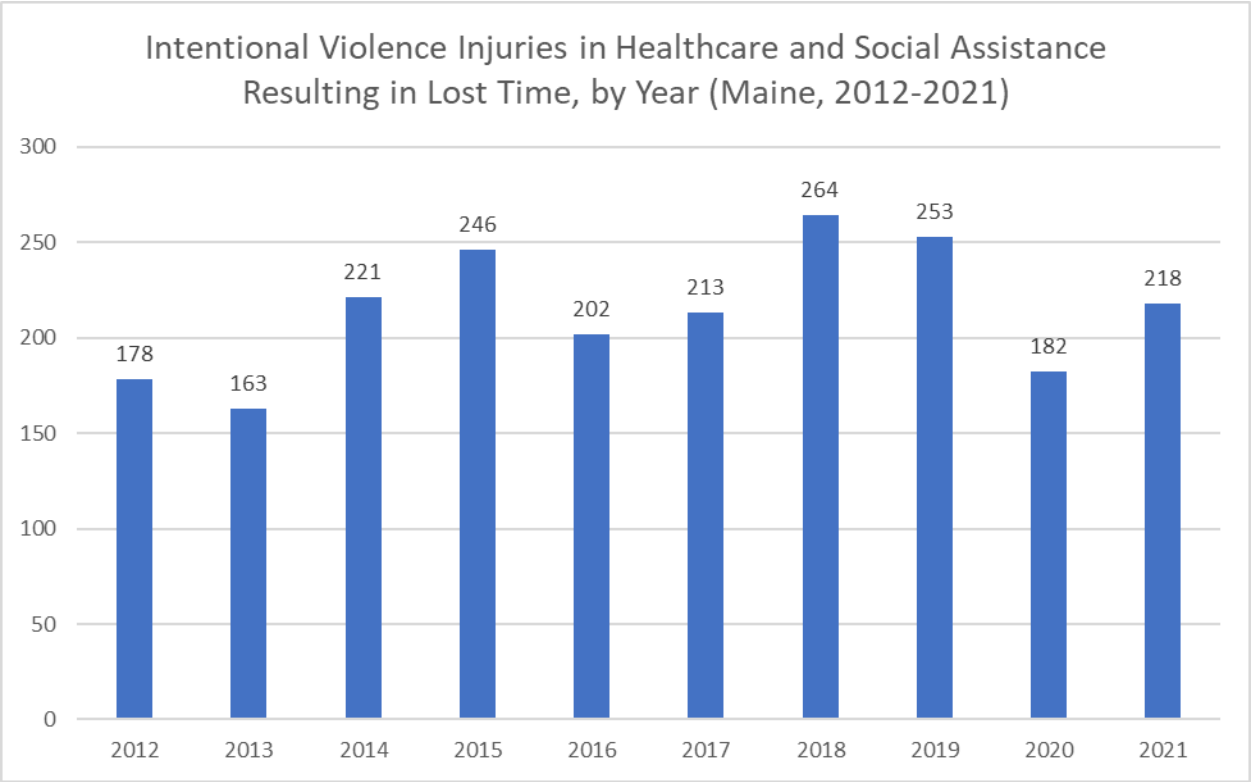
Healthcare and Social Assistance is 1 of only 2 industries for which intentional violence is a top 5 injury event, the other being Educational Services. Unsurprisingly, these two industries recorded the greatest number of intentional violence injury events. What is surprising is how long of a shadow Healthcare and Social Assistance casts over other industries.

Between 2012 and 2021, there were a total of 3,091 instances of intentional injury perpetrated by another person resulting in days away from work. Over 2 out of 3 of these claims were filed by workers within the Healthcare and Social Assistance industry. In the Public Administration industry, which includes police officers and prison wardens, intentional violence was the 13th most common reason for a lost time injury claim. Beyond healthcare, education, and public administration, all other industries combined total 268 intentional violence injury events.

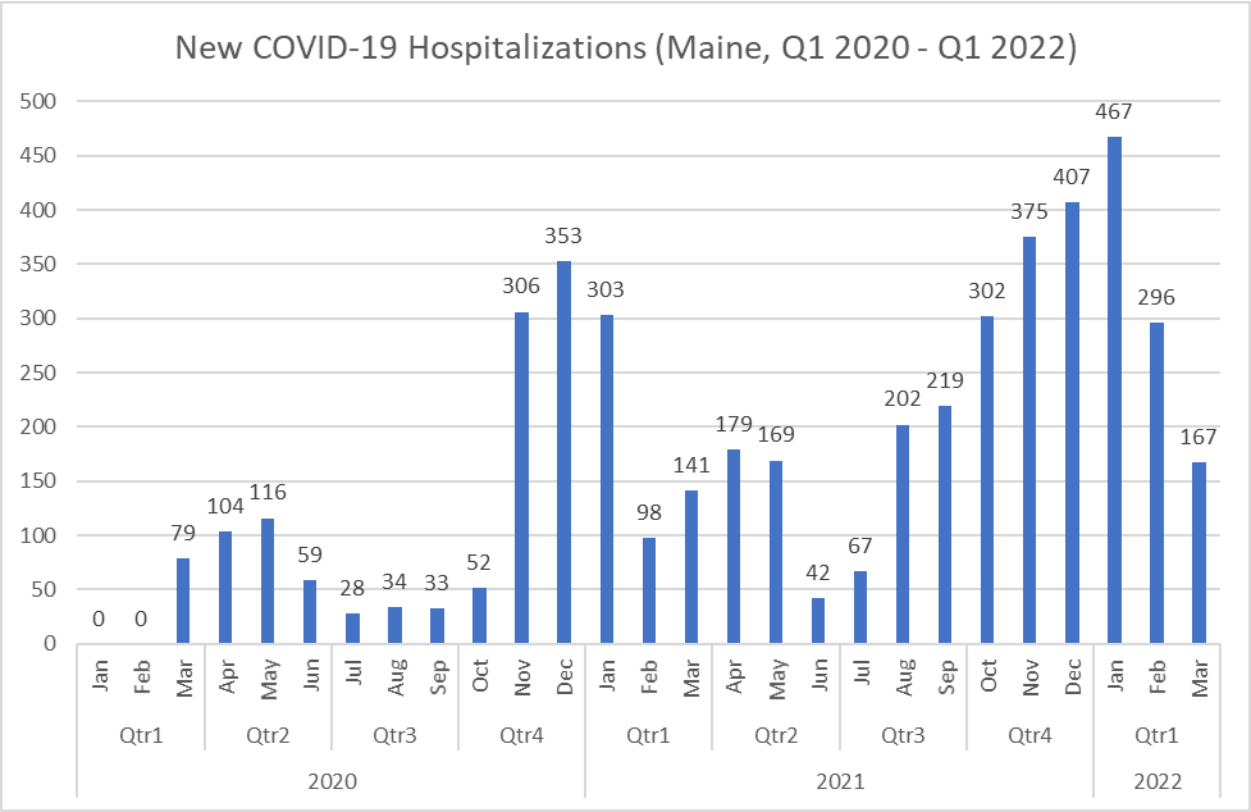


These 6 more specific healthcare segments account for 1,905 (89.0%) of the 2,140 days away violence claims we counted in the previous chart. Because the North American Industry Classification System (NAICS) uses up to 6 digits to classify industries, further breakdowns are available. However, there are diminishing returns on their usefulness, as these 4-digit codes get at the heart of the industry without bogging the reader down in minute details.

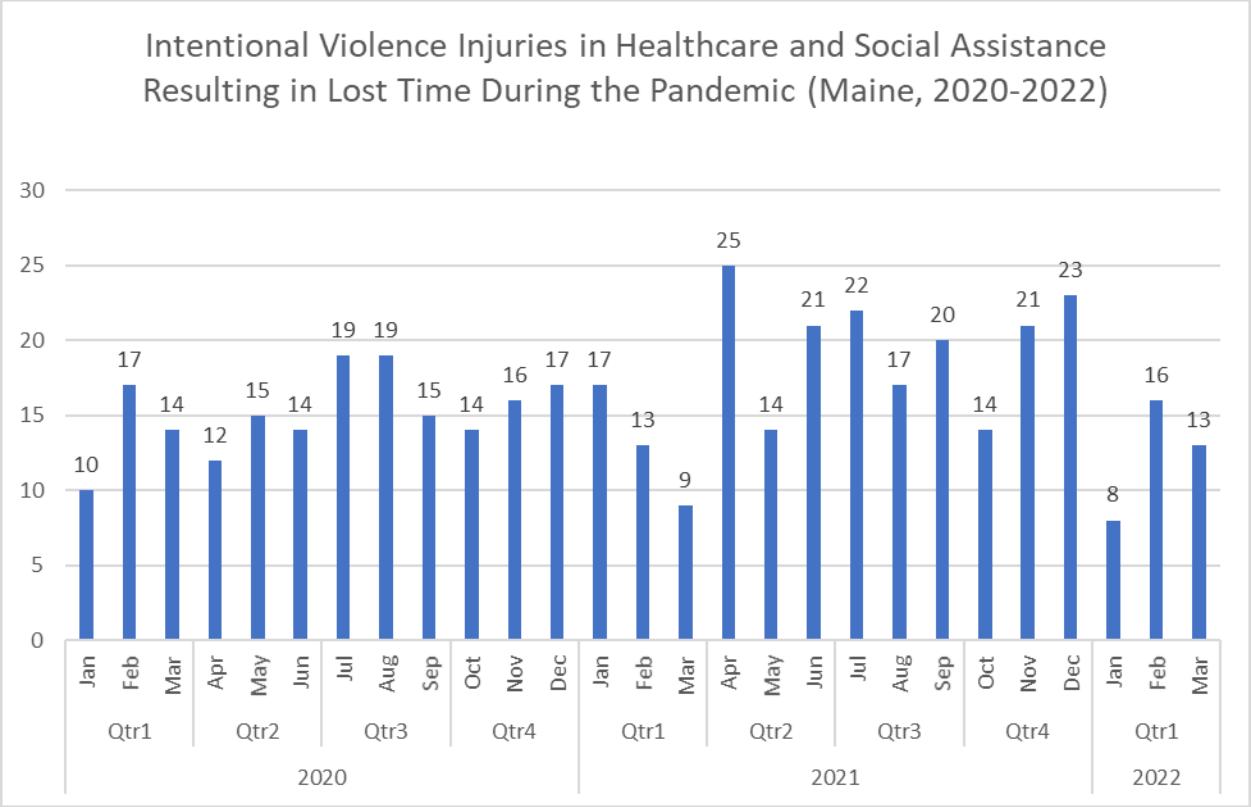
With some idea of how seriously and uniquely intentional violence effects the Healthcare and Social Service industry, we can move on to demographic splices detailing trends.

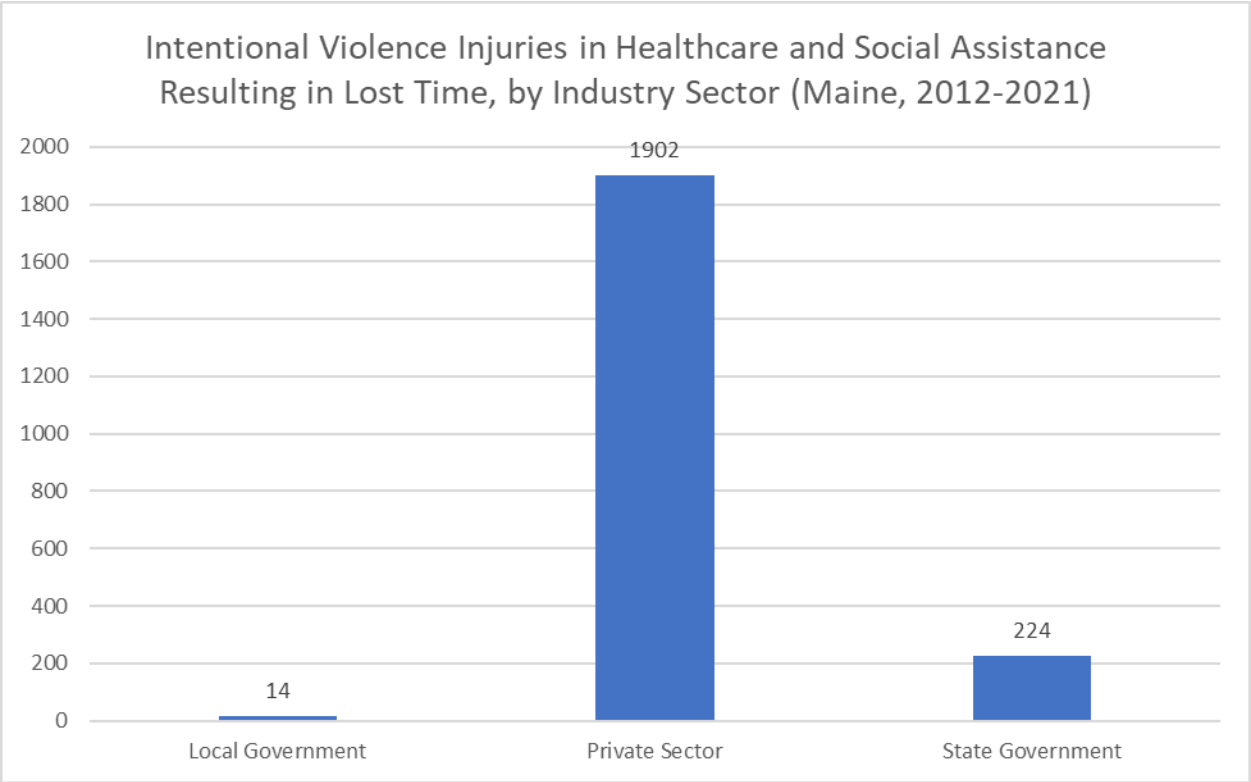


While there appears to be a slight upward trend in the data over time, it could be more easily explained by the increasing trend in total employment within the healthcare and social assistance industry than an indication of rising violence in Maine's healthcare industry. A similar increase exists in the number of individual establishments providing healthcare and social assistance services, leading to a less noteworthy conclusion that the more workers who are exposed to the workplace hazard, the more workers who are injured in violent events.

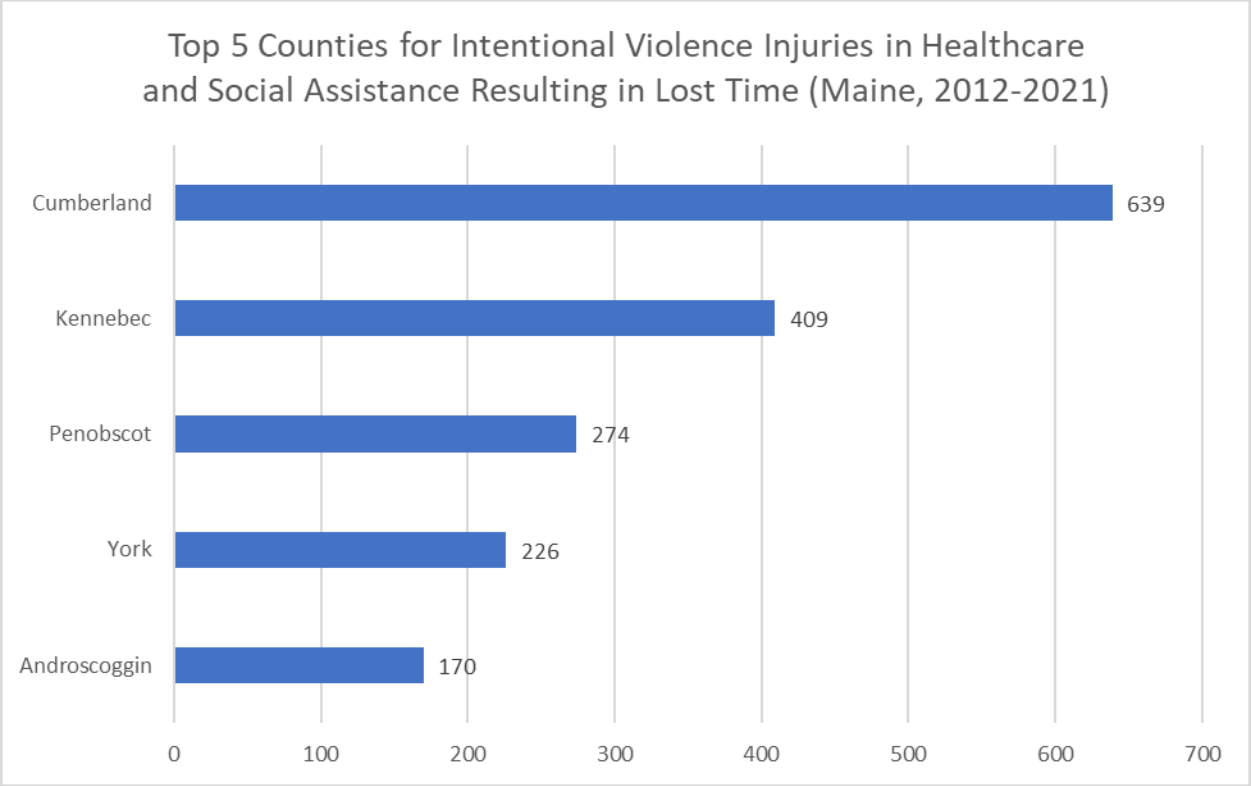


The progression of COVID-19's spread through Maine hospitals is not reflected in violence injuries





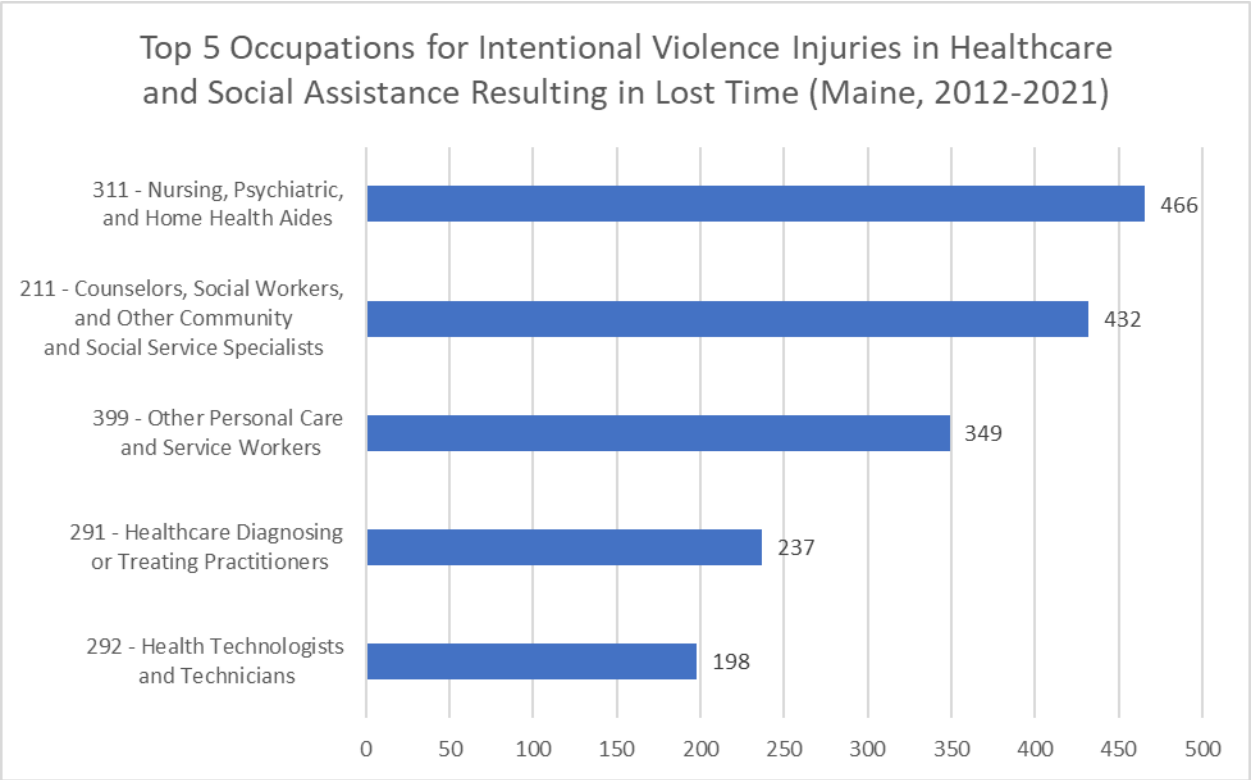
Half of Maine's largest private employers are General Medical and Surgical Hospitals, so it's unsurprising to see the private sector hosting a vast majority of these injuries. Local government includes Mayo Regional Hospital in Dover-Foxcroft before it was privatized, and the Barron Center in Portland. State Government includes Riverview Psychiatric Center, Maine Veterans Homes, and Dorothea Dix Psychiatric Center.



With each of the top 5 counties home to a major hospital campus employing hundreds of workers directly, and thousands of local workers in satellite offices within the hospital network, the distribution of violence cases seen above is not unexpected. For reference, Aroostook was the next highest county of incidence, totaling 90 claims over the past 10 years.

These 5 occupation classes account for 1,979 (92.5%) of the 2,140 total claims filed, so there are few insights to be gained from discussing other occupations such as healthcare managers, security guards, or patient access representatives. This breakdown is based on the Standard Occupational Classification (SOC) system using the first 2 digits of the 6-digit occupational code. However, we can break down these occupation classifications further.

Every chart in the following series only lists extensions of the occupation classifications featured in the previous chart. E.G. Every 3-digit SOC code in the next chart will have either 31, 29, 21, 39, or 25 as the first two digits.


Top 5 Occupations for Intentional Violence Injuries in Healthcare and Social Assistance Resulting in Lost Time (Maine, 2012-2021)
311 - Nursing, Psychiatric, and Home Health Aides
466
211 - Counselors, Social Workers, and Other Community and Social Service Specialists
432
399 - Other Personal Care and Service Workers
349
291 - Healthcare Diagnosing or Treating Practitioners
237
292 - Health Technologists and Technicians
198
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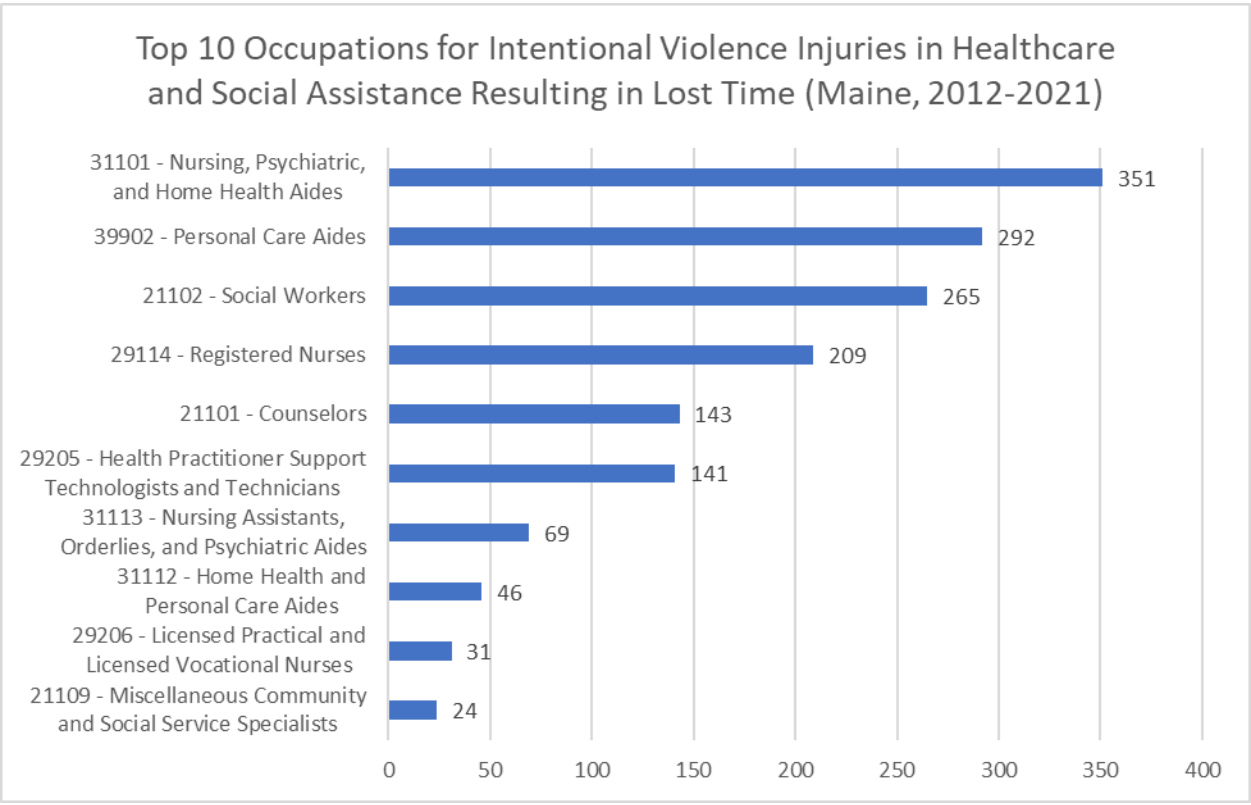
Top 10 Occupations for Intentional Violence Injuries in Healthcare and Social Assistance Resulting in Lost Time (Maine, 2012-2021)
31101 - Nursing, Psychiatric, and Home Health Aides
351
39902 - Personal Care Aides
292
21102 - Social Workers
265
29114 - Registered Nurses
209
21101 - Counselors
143
29205 - Health Practitioner Support Technologists and Technicians
141
31113 - Nursing Assistants, Orderlies, and Psychiatric Aides
69
31112 - Home Health and Personal Care Aides
46
29206 - Licensed Practical and Licensed Vocational Nurses
31
21109 - Miscellaneous Community and Social Service Specialists
24
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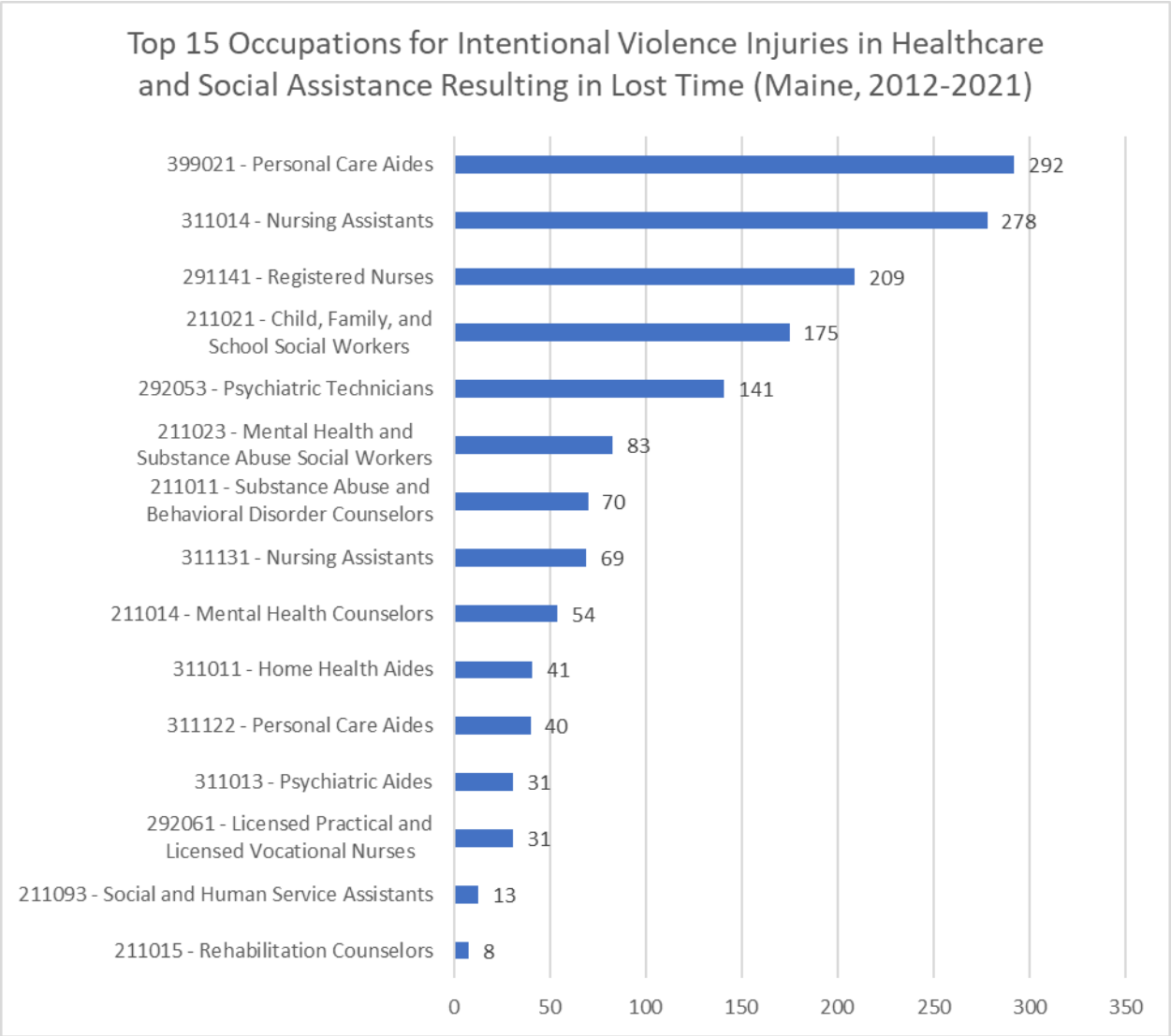
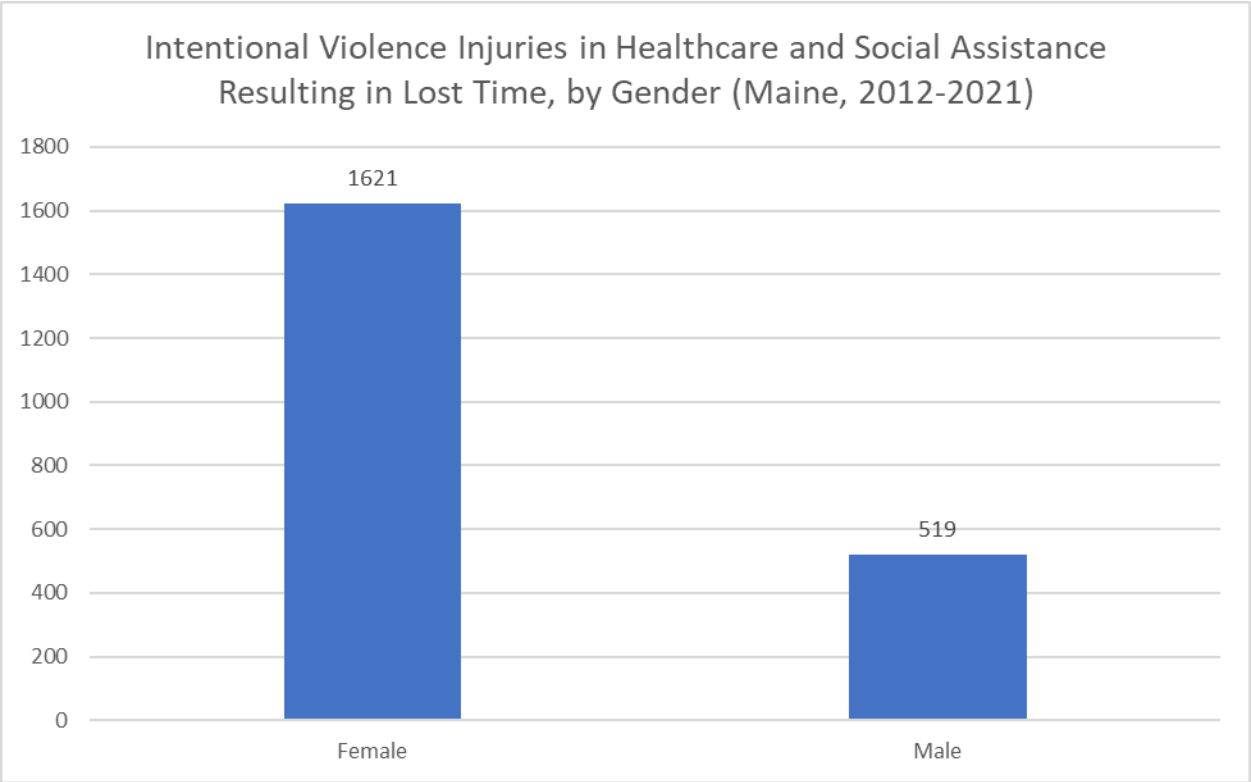
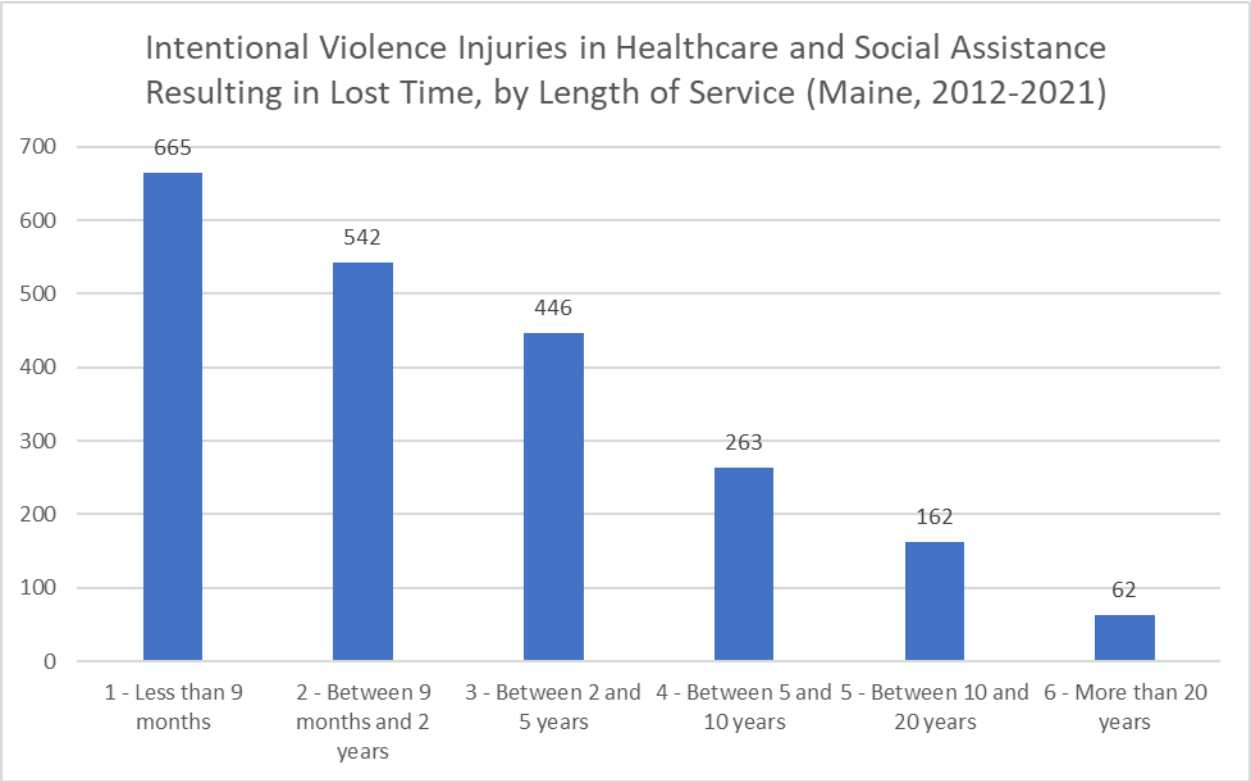


These 15 occupational classifications account for 1,535 (71.7%) of the 2,140 lost time violence claims in the healthcare and social service industry.

Note: Personal Care Aides are listed twice due to a change in the coding structure. From 2012 through 2019, personal pare aides used the unique 399021 code. In 2020, they were moved into the 311 – group alongside home health aides, nursing assistants, orderlies, and psychiatric aides.

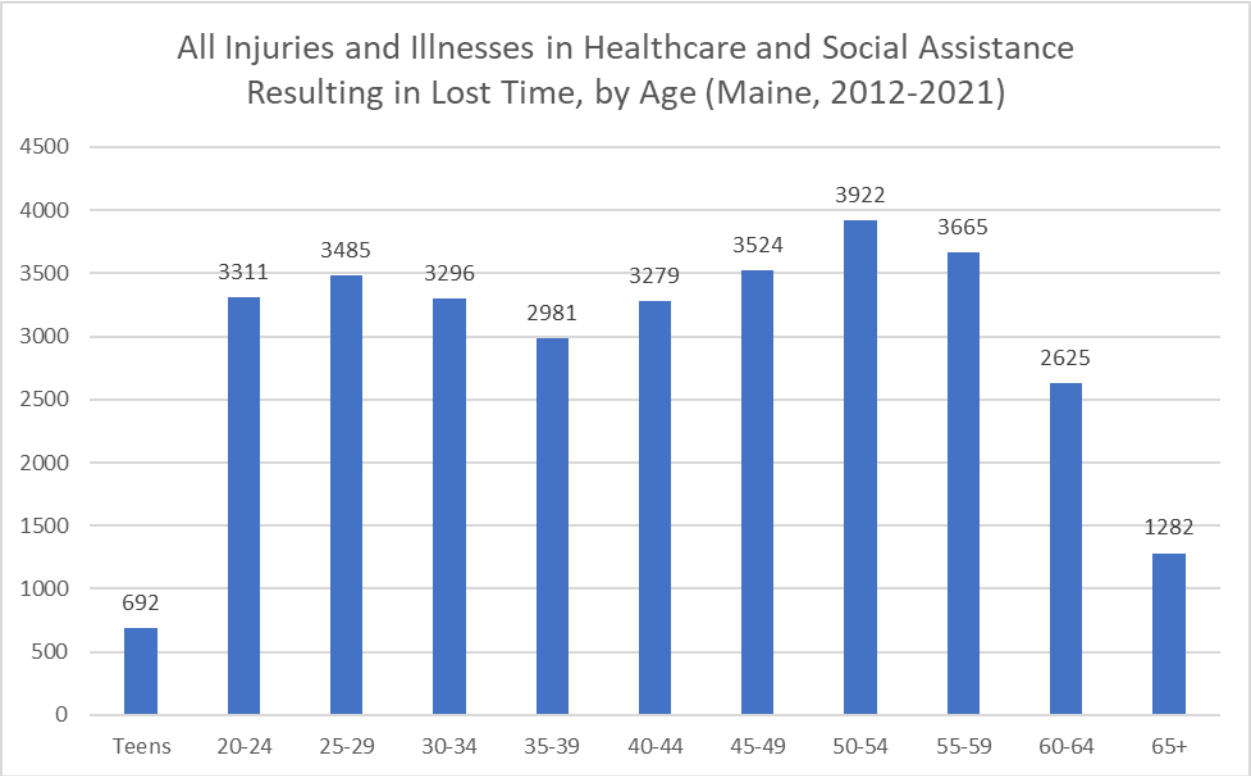


Seeing 3 out of every 4 violence injuries occurring to female workers is not surprising. This is very much in line with the overall claim spread, where 4 out of every 5 lost time injuries or illnesses in the healthcare and social assistance industry are occurring to female workers.



Typically, 1 out of every 3 lost time claims is filed by a worker who has not yet finished their first year of service with their employer. The divisions above have been chosen to display a better illustration of the steady decrease in injuries as employees become more tenured in their position. The trend seen here is typical of many industries and occupations.

The routineness of the length of service splice makes the following age demographics stand out.

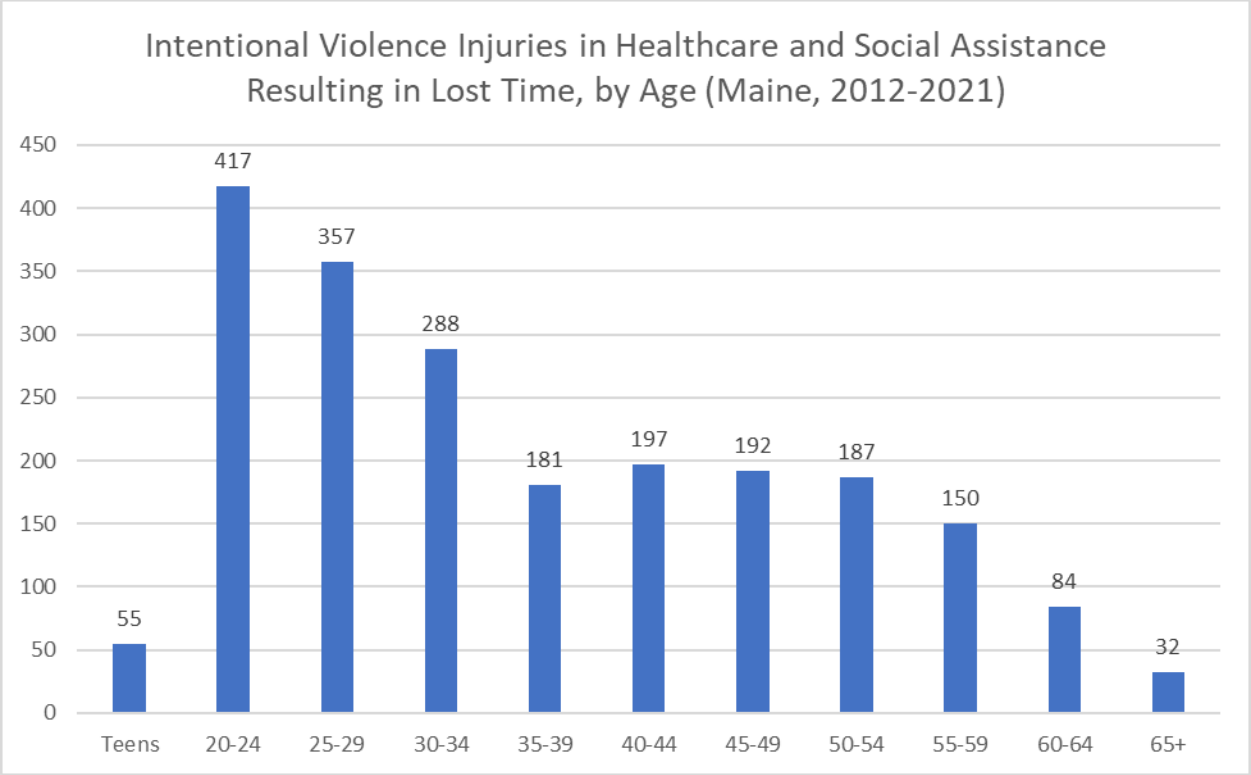


Note: Age represents the age of the worker at the time of the injury, not normalized to their age in 2022.

When looking at large swaths of injury data by age, the shape of the graph above is seen frequently. Low injuries to teens followed by a sharp increase with a local maximum in the mid to late 20's is expected. Injury counts then decrease through the 30's, before starting to rise again and ultimately peaking in the early to mid-50's. Finally, there is a sharp drop off in injury counts as workers become eligible for retirement.

What we've noticed in the past is that age bears so significance on injuries; younger workers are equally likely to suffer a lost time injury in the workplace as older workers. The has allowed us to use age as a proxy for estimating the age of the Maine workforce. The chart above accurately displays the age distribution of workers within the healthcare and social service industry over the last 10 years.

We would expect this same general shape for almost any chart with a sufficient number of data points. For intentional violence in healthcare and social service, we have over 2,000 injuries, which should be more than enough to generate this distribution. However, that is not the case.

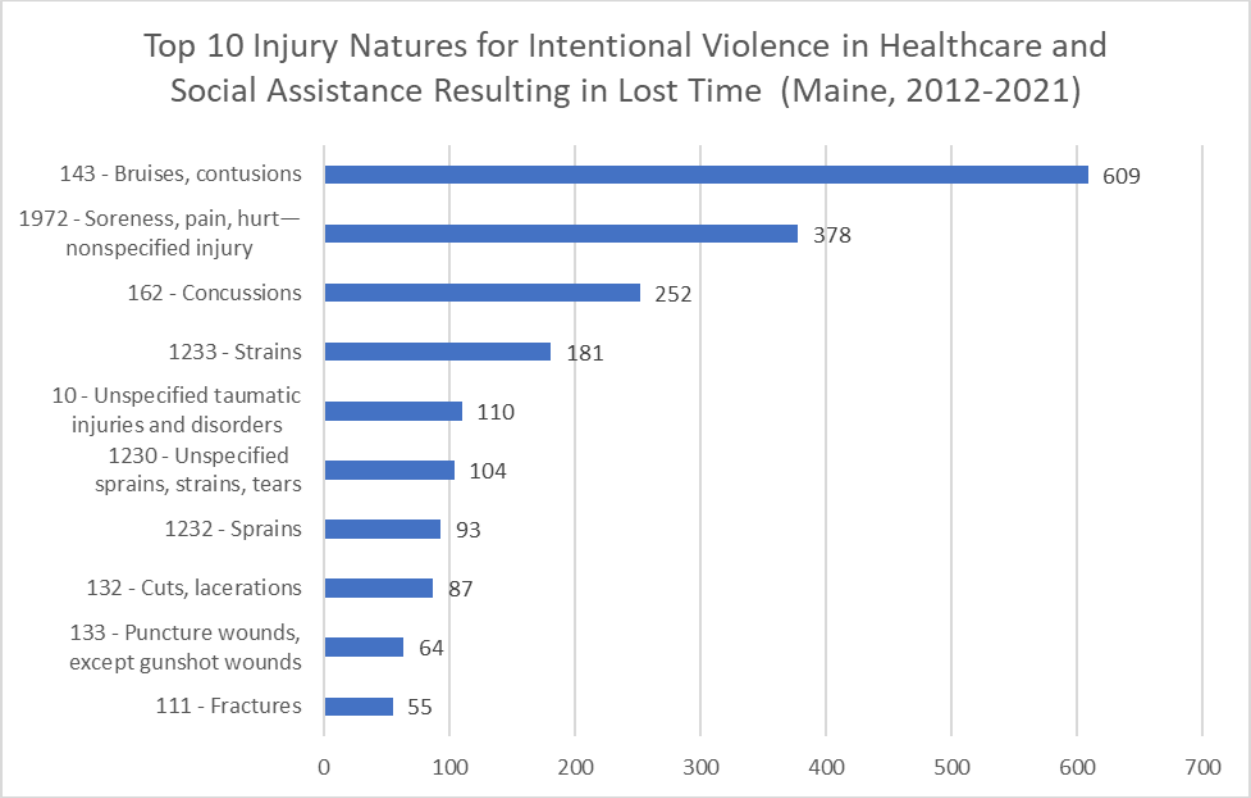


Here we see an absolute maximum in the count of injury claims for workers in their early 20's, and an almost strictly decreasing number of injuries in older workers. Given the previous demographic slices showing trends which are more-or-less regular for large datasets, the age demographic is completely contrary to our expectations.

There could be numerous reasons for this distribution, and most likely a combination of factors more easily ascertained by those working in the industry. We offer some possible explanations as a starting point to spur deeper discussions

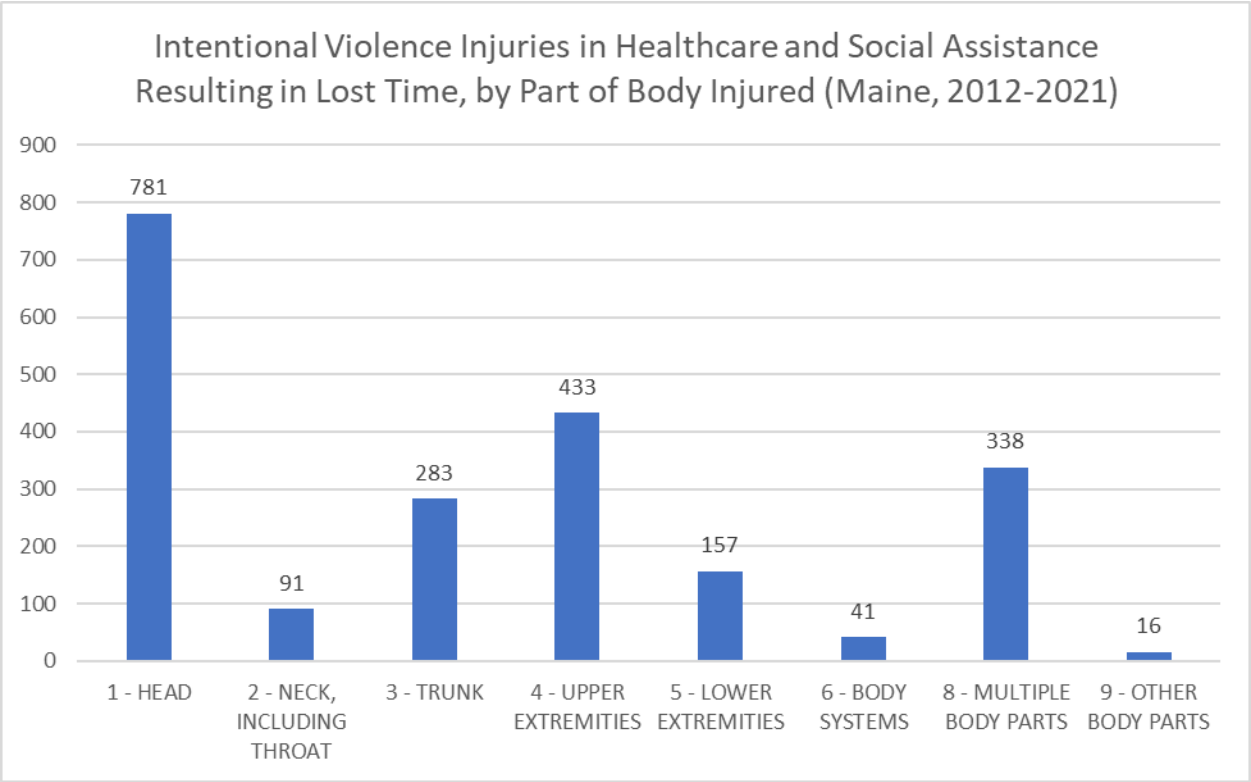
- The healthcare and social assistance industry may be seeing a significant amount of turnover, and new hires already at higher risk of injury are disproportionately younger workers
- Younger workers may be suffering violent injury events before they are able to complete their MOAB training, and are more at risk of violence due to their lack of education
- Younger workers may lack the experience or emotional intelligence to assess when a patient begins showing signs of hostility, and not act as defensively or disarmingly as older workers
- Younger workers may not be empathizing with patients appropriately, and coming off as a cold target to people who already feel disconnected, abused, or frustrated by the healthcare system
- Younger workers are systematically being put in more hazardous situations, assigned to care for patients with a higher risk of lashing out

- Patients are more likely to feel disrespected by younger workers telling them unpleasant news, and therefore less restrained in their interactions with the workers.

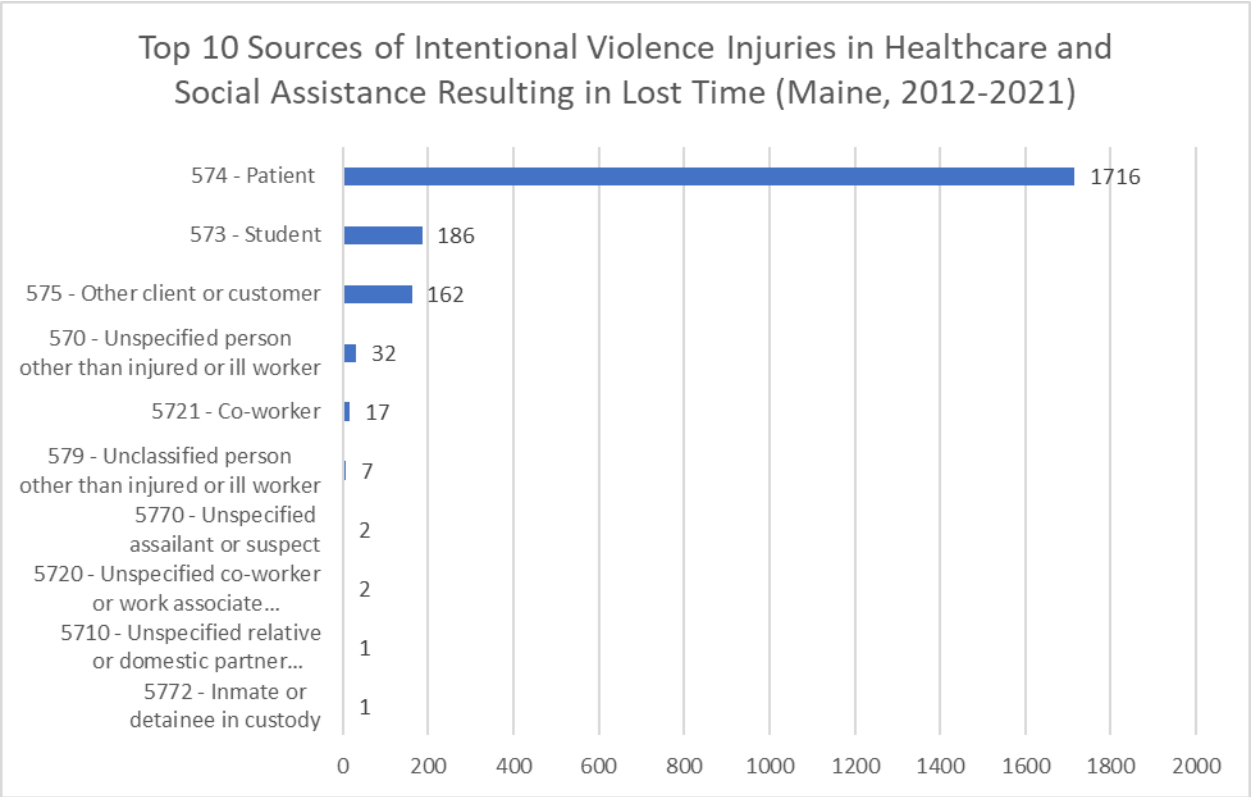


"Soreness, pain, hurt – nonspecified injury" represents injuries where there is not enough information in the claim to assign a more specific medical diagnosis. This nature having the second highest frequency is a sign that these types of injuries are more lacking in detail compared to other injury events. Given the higher level of specificity and medical jargon typically seen in the narratives for this industry, it's odd that vague terms of Hurt, Sore, or Injured would appear without more descriptive language. Two possible explanations are below.

- There may be some reluctance to talk about these types of injuries in detail, to protect patient confidentiality for instance
- The full extent of the attack is unknown at the time the FROI is filled out and submitted



Any time the nature of injury is a concussion, the Brain will always be selected as the part of body injured. While that explains some of the disproportionate head injuries resulting from violent attacks, it doesn't fully explain the tendency for aggressors to go for the head.



The person who commits a violent act is classified according to their relationship to the injured worker. There should be no surprise that a vast majority of violent injuries are committed by patients. The Student and Other Client/Customer classifications are specific to a select few occupations within the industry and are used due to the employee and the other person not having a traditional provider/patient relationship.