transportation and warehousing—is of particular concern. Most research on forklift related injuries used data prior to 2000. Examining more current data is warranted.

Methods/Approach We examined trends in forklift related fatalities occurring in the U.S. from 2001–2017 using data from the Census of Fatal Occupational Injuries. To identify the patterns of these types of fatalities by industry and specific cause, we are examining fatality reports from OSHA's Integrated Management Information System.

Results In total, 1788 forklift related fatalities occurred from 2001–2017. Fatalities increased from 123 in 2001, to a peak of 150 in 2005, before gradually declining to a low of 74 in 2017. The industries accounting for the largest proportion of forklift related fatalities were manufacturing (22.5%), construction (16.3%), transportation and warehousing (13.2%), and wholesale trade (12.1%).

Conclusions Forklift related fatalities have decreased overall since 2005. However, dozens of unnecessary deaths still occur every year due to forklifts. Prevention efforts should be targeted at the four industries accounting for 64.1% of all forklift related fatalities.

Significance While the number of fatalities from forklifts has decreased in recent years, these fatalities still happen all too frequently considering that most could be prevented. Understanding more about how these incidents happen will allow us to develop new interventions, which are especially needed in the four industries that account for almost two thirds of all forklift related fatalities. Our findings will create a blueprint for progress towards safer workplace practices in these industries.

Firearms

0112 THE NUMBER AND TYPE OF PRIVATE FIREARMS IN THE UNITED STATES: RESULTS FROM THE 2019 NATIONAL FIREARMS SURVEY

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Statement of purpose The purpose of this work is to provide updated nationally representative estimates of the US gun stock including novel estimates of the number of guns by gun type and sub-type.

Methods/Approach Data for this study came from a web-based, nationally representative survey of 2,950 gun owners conducted in August of 2019. Respondents were asked specific questions about household firearms including the number and types of guns in the home, storage practices, and reasons for ownership. To ensure results representative of the US adult (aged ≥18 years) population in 2019 we used weights that combined pre-sample and study-specific poststratification weights to account for oversampling and survey non-response in all analyses and in reporting weighted percentages and 95% confidence intervals.

Results The gun stock is an estimated 270 million guns among approximately 53.8 million gun owners across the United States. 45% are handguns and about 56% are long guns, including an estimated 18.9 million semi-automatic military style rifles. Handguns are the majority of guns owned by

those with two or fewer guns while long guns are the increasing majority of guns owned by those with three or more guns. Most of the private gun stock is found at the homes of gun owners (84%), but an estimated 4.5 million handguns can be found in cars.

Conclusions In order to effectively account for exposure, interventions and advice to improve storage of private guns should account for the number and types of guns owned, and when storage devices are provided, should consider long guns as well as handguns especially in homes with multiple guns.

Significance These estimates reflect firearms exposure and inform firearm injury prevention aimed at reducing household exposure.

Transportation Safety

0113 COST OF HEAD INJURIES CAUSED BY MOTORCYCLE CRASH AMONG HELMET USERS AND NON-USERS IN A PUBLIC TERTIARY CARE HOSPITAL OF KARACHI, PAKISTAN

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Statement of purpose Motorcycle riders are one of the most vulnerable road users. Helmet use may reduce healthcare cost due protective effects against head injuries. In this study, we aimed to estimate the difference in the healthcare cost of head injuries among motorcycle riders who were wearing helmet and those who were not wearing helmet at the time of crash.

Methods/Approach Motorcycle crash victims that were brought to a public tertiary care emergency in Karachi between July to September 2019 were studied through descriptive cross-sectional design. A self-structured standard questionnaire form was used to collect data on demographics, injury pattern, helmeting practice, and length of hospital stay, out-of-pocket payments (OOP), healthcare service utilization at the facility and all direct and indirect medical costs incurred during hospitalization period.

Results 323 motorcyclists were involved in the accident, 112 patients had head injuries with mean age of 32 years old. The helmeted motorcyclists had a significantly lesser median total healthcare cost of PKR 10796 (\$69) [IQR 9851 -12581] as compared to higher cost of PKR 12113 (\$77) [10431 - 50545] by the non-helmeted counterpart during the hospital stay.

Conclusion The results of this study demonstrates that helmet use among motorcyclists can significantly reduce healthcare costs and healthcare resource utilizations during hospitalization in managing head injuries. Thus, it is important to implement strict helmeting practice to decrease cost burden on healthcare facilities and patient's caregivers.

Significance The cost-saving ability of helmet use is widely reported around the globe. However, many studies have reported hospital charges instead of cost which may not reflect the actual cost of managing injuries. Our study has used healthcare cost estimation to provide contextual evidence on cost-saving ability of helmet and can help in prioritizing mandatory helmet use for injury prevention and reduction in economic burden on healthcare system.