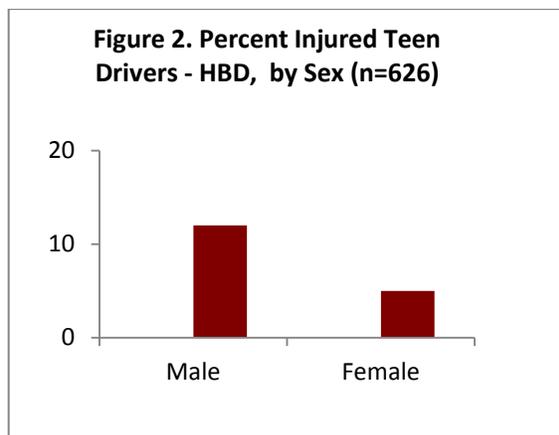
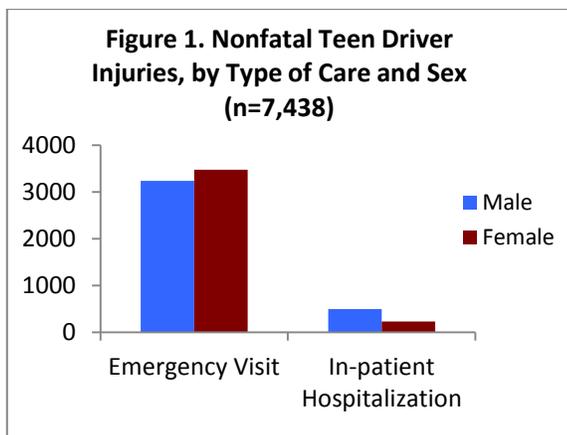


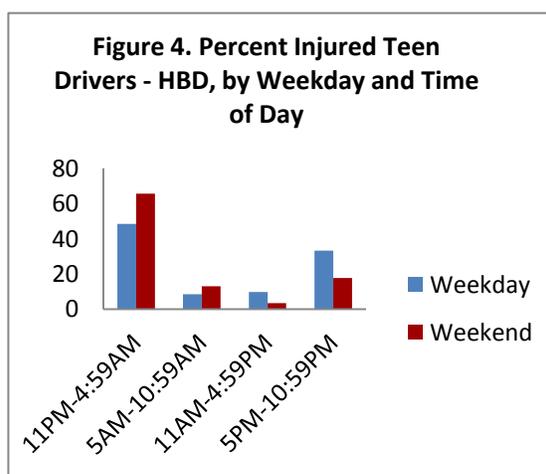
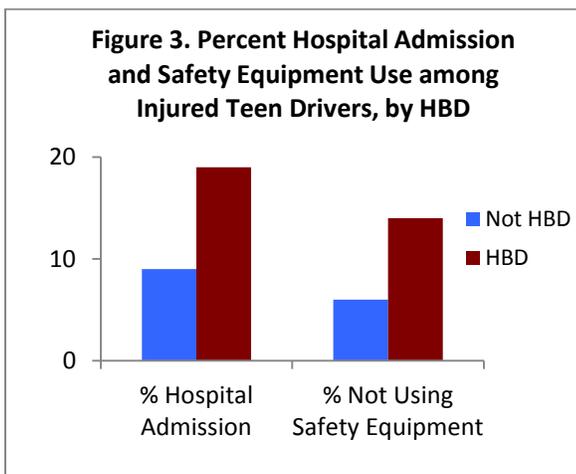
Injuries to Teens Who Drink and Drive

For California teens (ages 16-19), car crashes are the leading cause of non-fatal, unintentional injury requiring hospitalization (1). In 2009, the California Highway Patrol (CHP) reported 11,729 teen drivers were injured as a result of their involvement in a car crash – most (98%) were non-fatal injuries (2). In this report, we focus on the 7,438 non-fatally injured teen drivers for whom we have Crash-Medical linked data* from 2009, with special attention to those who had been drinking (HBD).

The vast majority of injured teen drivers were treated at an emergency department (ED), while nearly 10% were seriously injured, requiring hospitalization. Female drivers were slightly more likely than male drivers to be treated and released for injuries from the ED. Males were twice as likely to require hospitalization (Figure 1). Overall, 8% of the non-fatally injured teen drivers HBD - 12% of males and 5% of female teen drivers (Figure 2).



- The percent of HBD injured teen drivers admitted to the hospital was twice that of those who had not been drinking (19% versus 9%) (Figure 3).
- Similarly, the percent of HBD injured teen drivers not using safety equipment (i.e. seat belts, helmets)** was more than twice that of those who had not been drinking (14% versus 6%) (Figure 3).
- Although not shown, HBD injured teen drivers were also more likely to have been at fault in the collision (93% versus 63%), crashed on weekend evenings, and in collisions in which the vehicle overturned (13% versus 8%) or hit an object (49% versus 21%).
- More than one-half (57%) of injuries to HBD teen drivers occurred between 11 PM and 5 AM (Figure 4).



- Medical outcomes for injured teen drivers (both HBD and non-HBD) admitted to the hospital are shown in Table 1. Traumatic brain injuries accounted for 27% of all serious injuries requiring hospitalization, followed by injuries to the lower extremities, and to the torso (both internal injuries and fractures).

Table 1. Injury Body Regions			
2009 Teen Driver Hospitalizations, by Sex			
Body Region	Male	Female	Total Number
Traumatic brain injury	141	57	198
Lower extremity	113	34	147
Torso	97	42	139
Upper extremity	53	28	81
Vertebral column	32	27	59
All other regions	57	40	97
Total	493	228	721

Summary

- Drinking and driving remains a serious safety problem among high-risk, inexperienced teen drivers, even with Graduated Driver Licensing laws.
- Of the 7,438 non-fatally injured teen drivers receiving care in a hospital or emergency department, 8% had been drinking.
- Compared to the non-fatally injured teens who had not been drinking, HBD teen drivers were more likely to have been male, unbelted, at fault, in more serious crashes, and to have more serious injuries requiring hospitalization.
- Drinking appears to have impaired teen drivers' judgment and/or skills, and increased their risk of crashing and being seriously injured.

References

1. California Department of Public Health, Safe and Active Communities Branch, Report generated from <http://epicenter.cdph.ca.gov>. Source: Office of Statewide Health Planning and Development (OSHPD), 2010 Patient Discharge Data. Accessed: September 27, 2012.
2. California Highway Patrol, 2009 Statewide Integrated Traffic Records System (SWITRS) data. <http://www.chp.ca.gov/switrs/switrs2009.html>

Methods

*The Crash Medical Outcomes Data (CMOD) Project, modeled after the National Highway Transportation Safety Administration's Crash Outcome Data Evaluation System (CODES), probabilistically links police collision records to health data from emergency department visits and hospitalizations (OSHPD). This information allows us to look at the medical outcomes of these crashes and the relationships between those outcomes and various risk factors and crash characteristics. This fact sheet describes the injuries associated with the 63% of non-fatally injured teen drivers (7,438/11,729) for whom we have linked data.

**Two percent of the HBD drivers were motorcyclists.

Information for persons injured in crashes may be accessed through the CMOD online query [Linked Crash-Medical Data](#). This query is part of the EpiCenter online query system accessed at <http://EpiCenter.cdph.ca.gov>. There you may create tables, using up to 25 variables to see how victim characteristics and crash circumstances affect the victim's medical outcome. For technical assistance on using the query or for other questions related to the CMOD project, contact Lynn.Walton-Haynes@cdph.ca.gov

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