

Prevalence of Alcohol Testing and Impairment in On-road Farm Equipment-Related Crashes October, 2014

The problem

- 7.3% of all motor vehicle crashes involve an alcohol impaired driver
- Over 30% of all FATAL motor vehicle crashes involve an alcohol impaired driver

Objective: To understand how being under the influence of alcohol is associated with an injury or death in a farm equipment-related crash. Alcohol impairment was defined as a blood alcohol concentration of 0.08% (approximately 2 drinks in one hour for females and 3 drinks in one hour for males). Data are from farm equipment-related crashes from four Midwestern States, 2005-2010.

Findings

1. **Testing for alcohol impairment is common.** Over 97% (2642 of 2701) of crashes had the farm equipment or other driver tested for alcohol use.

2. **Alcohol impairment is infrequent.**

Among those crashes with drivers tested, only 2.6% of crashes involved an alcohol impaired driver.

3. **The other vehicle driver is more likely to be alcohol impaired than the Farm Equipment driver (Figure 1).** Among alcohol impaired drivers, 59.1% were the driver of the other motor vehicle and 40.9% were of the farm equipment.

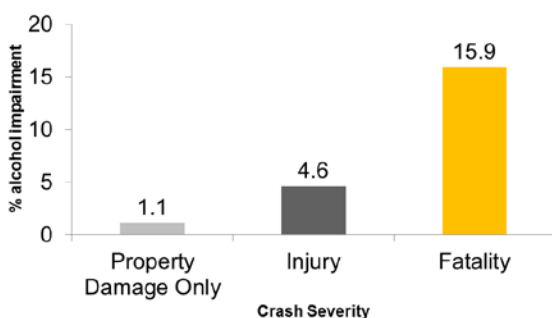
Figure 1. Is the alcohol impairment more frequent in the farm equipment or other vehicle (N=66 drivers)?



4. **Crashes with alcohol impairment have a higher frequency of fatalities and injuries (Figure 2).**

Almost 16% of fatal crashes involved alcohol followed by crashes with an injury (4.6%) and property damage only crashes (1.1%). Fatal crashes are also more likely to be non-collisions or rear-end crashes. Alcohol impaired drivers were 3.5 times more likely to be injured or die than non-impaired drivers.

Figure 2. As crash severity increases so does the proportion of alcohol impairment.



Safety Tips

- Never operate a motorized vehicle, including farm equipment, under the influence of alcohol.
- Rear-end crashes are more likely to result in fatalities.
 - As a farm equipment driver, install a slow moving vehicle (SMV) emblem on the rear of your equipment and make sure it is visible to other road users.
 - As a traditional motor vehicle driver, slow down as soon as you see farm equipment ahead of you, they are traveling much slower than you think!