

## Occupational-Related Transportation Fatalities in New Mexico, 2013 and 2014

In New Mexico, tracking the patterns of occupational-related injuries and fatalities is carried out by the New Mexico Occupational Health Surveillance Program (NMOSHSP). As a result of a previous analysis of occupational-related fatalities in the state, the transportation industry seemed to be driving high rates, but data were incomplete.<sup>1</sup> The NMOHSP, in partnership with several agencies, has been able to collect additional data which helps to give a more accurate picture of transportation fatalities in the state and ultimately a better indication of interventions that may be needed. This report presents a comparative analysis of occupational-related transportation fatalities in New Mexico for 2013 and 2014 with an emphasis on the improvement of data collection methodology.

### Methods

The 2013 and 2014 occupational-related transportation fatalities were retrieved from the NMOSHSP notifiable conditions database, which includes data from the New Mexico Office of the Medical Investigator (NM OMI), the New Mexico Occupational Health and Safety Bureau (NM OHSB), and physician and clinic reports. All occupational-related fatalities are reported to the NM Department of Health (NMDOH).

Occupational-related transportation fatalities are defined as fatal occupational injuries resulting from transportation incidents.<sup>2</sup> Specifically in this report, transportation incidents include on the road fatalities that involved heavy duty multi-wheeled commercial trucks and trailers. The drivers must be employees of the company or entity that own the vehicle. The name of the industry (transportation), the decedent's name, date, age, location of death, seat belt status, and time of incident for each death were compiled.

The NMOHSP verified each of the cases to be occupational-related transportation incidents by using the in-

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dividual worker's occupation, nature of the event, and the type of vehicle involved. Reports from the NM OHSB and New Mexico Bureau of Vital Records and Health Statistics (BVRHS) were also used, when possible, to confirm the occupational-related status of the fatality.

Because all traffic crash fatalities had not been reported to the NMDOH, the NM Department of Public Safety (DPS) Commercial Vehicle Enforcement Bureau and NM Department of Transportation (NM DOT) Traffic Safety Bureau were approached to obtain data. These agencies investigate commercial and non-commercial vehicle fatalities, respectively. Certain fatalities are uploaded into SAFETYNET (administered by the Department of Transportation Federal Motor Carrier Safety Administration), which is a system which manages and provides appropriate access to crash data, roadside inspection history and data, and motor carrier and shipper identification information. In order to obtain complete transportation-related fatality data, all NM DOT and DPS data were analyzed, not only those cases uploaded to SAFETYNET.

Data collected from NM DOT and DPS were confirmed using the BVRHS death records for 2013 and 2014. All the vehicles were commercial trucks (and thus associated with work activities) with US DOT identification numbers that were involved in fatal crashes in New Mexico. In the process of working with NM DOT and DPS, it was learned that each agency has different methods for data collection and ensuring standards are met before transportation fatality data are uploaded to SAFETYNET. The Traffic Safety Division of the NM DOT usually collects real-time data

after fatality occurrence. These data are scrutinized and classified using the commercial vehicle drivers' name, residence, locations, occupant's seat belt status, and alcohol consumption status. However, these are not classified into occupational versus non-occupational fatalities. The DPS on the other hand, not only retrieves monthly data from their officers in different zones in the state, but also collects data from the NM DOT. These data are further classified as occupational-related transportation fatalities using the Federal Department of Transportation criteria. Both the NM DOT and NM DPS data include raw data that are collected after fatalities that may or may not meet all of the Bureau of Labor Statistics (BLS) Census of Fatal Occupational Injuries (CFOI) criteria. According to partners, CFOI retrieves data directly from the data uploaded to SAFETYNET by the DPS.

The final data for 2013 and preliminary data for 2014 transportation incidents from the CFOI database were also consulted for comparison. The BLS CFOI substantiates data with two or more independent source documents, or a source document and a follow-up questionnaire. NM BLS usually receives transportation data and makes a determination if the fatality was

transportation-related, but the Federal BLS does not share these specific data with New Mexico.

The injury fatality rate among industries involved in transportation incidents for the United States and New Mexico was calculated by NMOHSP by selecting all industries with transportation-related fatalities. The denominator includes the number of FTEs for all industries combined obtained from CFOI. The numerator is the total number of transportation fatalities obtained from NM DOT and NM DPS. CFOI data were not utilized for the numerator since NM DOT and NM DPS data were deemed more complete.

### Results

In 2013, the total number of occupational related transportation fatalities in New Mexico was 53. The highest number of fatalities by county of occurrence was in Cibola County (6). For 2014, the total number of fatalities was 31. The highest number of fatalities by county of occurrence was in Lea County (10).

Out of the 84 occupational-related transportation fatalities in New Mexico in 2013 (Figure 1) and 2014 (Figure 2) combined, 17 decedents were observed wearing seat belts at the scene of the crash; 25 had no seat belt on, while 42 (50%) did not have information

**Table 1. List of Commercial Truck Fatalities, New Mexico, 2013 and 2014**

<b>2013</b>
Truck drivers involved in crash due to inattention (13)
Truck drivers involved in crash due to excessive speed (18)
Pedestrians struck by truck while crossing the road (12)
Truck drivers crashed due to unidentified medical episodes (5)
Truck drivers involved in head-on collisions (4)
Truck driver involved in crash due to mechanical defect (1)
Total fatalities = 53
<b>2014</b>
Truck drivers involved in crash due to inattention (11)
Truck drivers involved in crash due to excessive speed (5)
Truck drivers involved in crash due to failure to yield right of way (2)
Truck driver involved in crash due to an animal (1)
Truck driver involved in crash due to large object in roadway (1)
Cause of crashes were undetermined (11)
Total fatalities =31

Source: New Mexico Department of Public Safety

about whether seat belts were worn or not during the time the incidents occurred.

The detailed list of fatal transportation injuries from DPS illustrates the impact of trucking activities on occupational-related fatalities (Table 1).

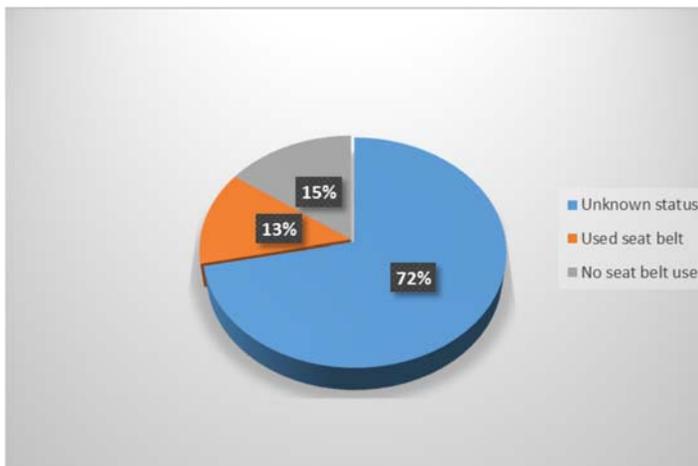
When utilizing NM DPS/DOT data, the calculated rate of 2013 NM transportation injury fatalities was 8.8 per 100,000 FTEs ages 16 years and older (53 fatalities). In 2014, the calculated rate of NM transportation injury fatalities was 5.1 per 100,000 FTEs ages 16 years and older (31 fatalities) (Table 2).

**Table 2. Occupational Transportation Fatalities by Year, NM and US, 2013 and 2014**

2013		2014	
NM	US*	NM	US*
8.8 (53)	1.7 (1865)	5.1(31)	1.7 (1891)

\*CFOI data, Bureau of Labor Statistics

**Figure 1. Occupational Transportation Fatalities by Seat Belt Status, NM, 2013**



Source: New Mexico Department of Transportation

### Discussion

Workplace fatalities are of significant concern in NM with a fatality rate considerably higher than that of the United States. Transportation remains the top high-risk industry for workplace fatality in New Mexico, and the NM OHSP seeks to identify every one of these fatalities. In NM, transportation-related fatalities are hugely impacted by the oil and gas industry and commercial motor vehicle accidents, especially the heavy trucks. The 2013 death rate was higher than the 2014 rate.

This might be due to reduction in oil and gas industry activities in different parts of the state in 2014 compared to 2013 or the death rate may fluctuate from year to year based on small numbers of deaths. In 2014 the reporting of seat belt use by truck drivers was complete compared to 2013 when a majority of these deaths had unknown seat belt use. The completeness of seat belt use data in 2014 may have been as a result of improvement in timely data reporting by the DOT and DPS at the scene of the accidents. This further underscores the need for comprehensive data collection and entry at the scene of every injury or fatality.

### Recommendations

Efforts should be made to increase seatbelt use among truck drivers. Recently, the NMOHSP established a partnership with DOT and DPS for transportation-related data collection. For transportation-related fatalities in New Mexico, the NM DOT and NM DPS data were found to be most comprehensive. Therefore, in addition to CFOI data, the NMOSHSP proposes to utilize the DOT and DPS data, with BVRHS confirmation. The resulting information will be used to inform interventions that can be developed to reduce these fatalities.

### References

1. Irobi, E. (2015). Workplace Fatalities in New Mexico, 2013. *New Mexico Epidemiology*. August 7, 2015 (6): 1.4.
2. United States Department of Labor. (2015). Occupational safety & Health Administration: Motor Vehicle Safety. Retrieved from <https://www.osha.gov/SLTC/motorvehiclesafety/>

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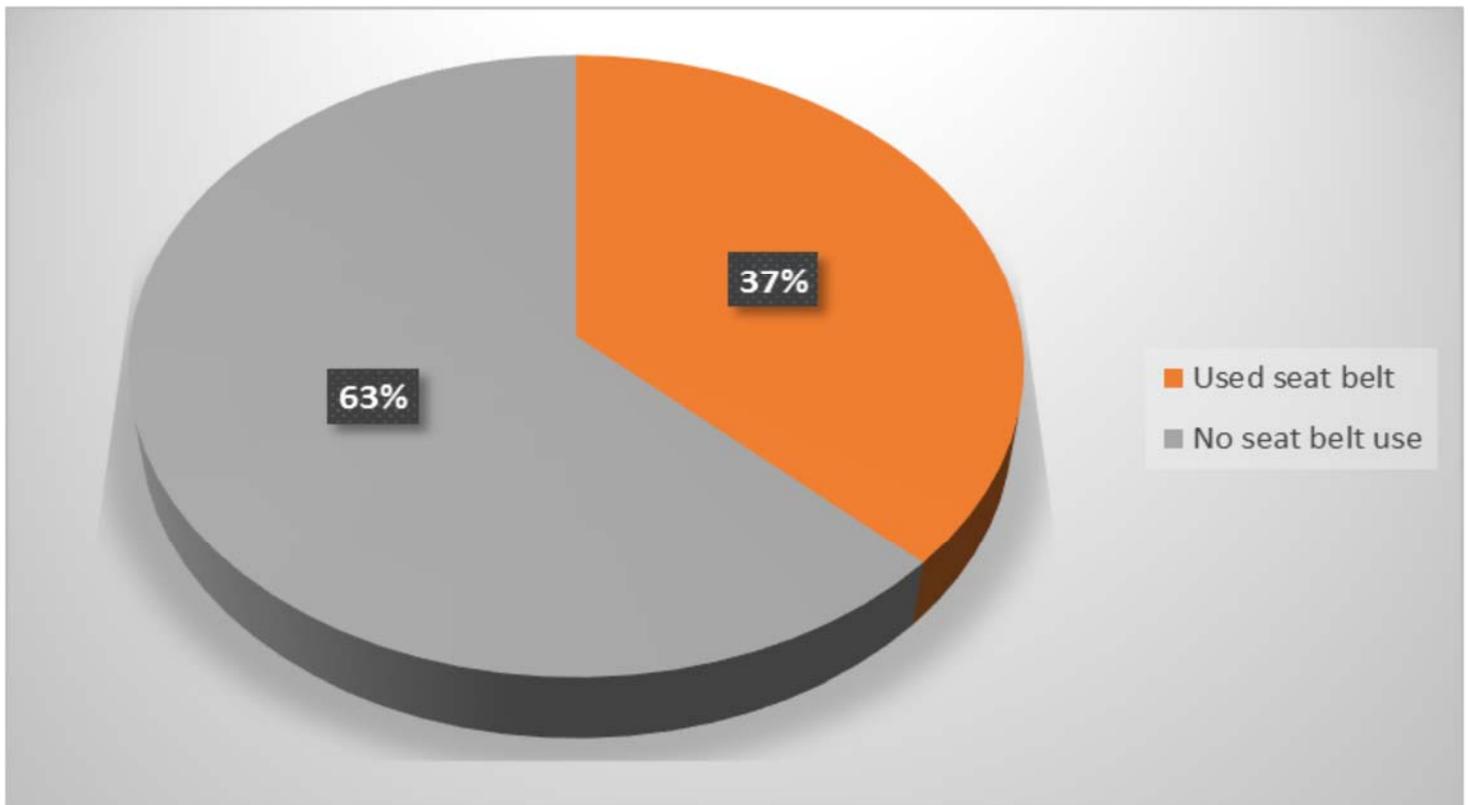
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**Figure 2. Occupational Transportation Fatalities by Seat Belt Status, NM, 2014**



Source: New Mexico Department of Transportation