

# **HAZARD** ALERT

# **Incidents Involving Dump Trucks**

Kentucky Occupational Safety and Health Surveillance, December 2018

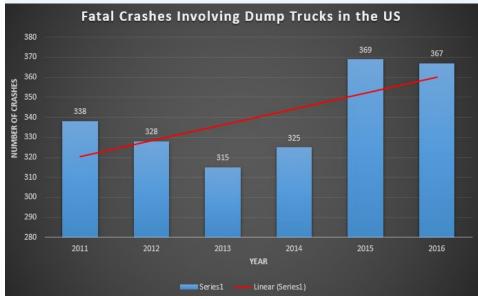
## What is the hazard?

In 2017, the dump truck service market size in the U.S. was valued at \$18.3 billion and is expected to grow 13% by 2025<sup>1</sup>. Due to their weight, increased stopping distance, elevated center of gravity, and high frequency of rollovers, motor vehicle accidents involving dump trucks pose significant risks to operators and passengers. From 2011-2016, there was an average of 340 fatal crashes involving dump trucks in the U.S. each year<sup>2</sup>.



Case 1: A dump truck driver was travelling on a rural highway when he drifted off the road, overcorrected, and rolled over onto his passenger side, knocking him unconscious. The driver perished when the truck caught fire due to a punctured fuel tank that occurred during the rollover. He was not wearing a seat belt (2017).

Case 2: A self-employed driver lost control of his fully-loaded dump truck while attempting to maneuver through a downhill S-curve. Due to the truck's speed, the driver was unable to keep the vehicle on the road and rolled over onto the driver side. The driver died due to blunt force trauma to the head and body (2018).



Source: https://www.fmcsa.dot.gov/safety/data-and-statistics/large-truck-and-bus-crash-facts



#### **Recommendations:**

- Employers who utilize dump trucks should enforce a strict seat belt policy. A 2013 Federal Motor Carrier Safety Administration (FMCSA) study determined that dump truck drivers had the lowest seat belt usage rate (70%) of all commercial motor vehicle (CMV) body types<sup>3</sup>.
- Dump truck drivers should reduce their speed to below that of the posted speed limit when entering a curve. Any speed limit posted on curve warning signs are meant for passenger vehicles, not CMVs. 40% of speed-related fatalities occur on curves<sup>4</sup>.
- Dump truck operators should show caution when raising the truck bed to unload materials.
   Due to their design, dump trucks can easily tip if on a surface that is not level, material sticks to one side of the bed, load is uneven or heavy on top of box, or if the tires do not have even pressure.



### **Further Resources:**

Name of Resource	Resource Description	Resource Link
Case Report: 17KY034 Dump Truck Driver Loses Control and Flips Truck Resulting in Fire KY FACE Program	Full occupational fatality investigation report.	http://www.mc.uky.edu/kiprc/face/ reports/pdf/17KY034.pdf
Tech Sheet—Dump Truck Safety	A fact sheet from EMC Insurance that provides tips on dump truck stability, hazard control, maintenance, and loading/unloading.	http://www.emcins.com/Docs/Risk/ TechSheets/ Tech Dump Truck Safety 20111025.pdf
CMV Driving Tips	Link includes statistics on crashes involving excessive speed with video examples.	https://www.fmcsa.dot.gov/safety/driver -safety/cmv-driving-tips-too-fast- conditions
OSHA Accident Search Results	OSHA's compiled search of all fatality investigations involving dump trucks.	https://www.osha.gov/pls/imis/ AccidentSearch.search?acc_keyword=% 22Dump%20Truck%22&keyword_list=on

Let us know what you think about this alert. <u>Click here</u> to complete our brief, anonymous survey.

For additional training materials and information regarding the KOSHS program, please visit the program website at: <a href="http://www.mc.uky.edu/kiprc/koshs/index.html">http://www.mc.uky.edu/kiprc/koshs/index.html</a>

- [1] https://www.hexaresearch.com/press-release/us-dump-truck-service-market-analysis
- [2] https://www.fmcsa.dot.gov/safety/data-and-statistics/large-truck-and-bus-crash-facts
- [3] https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/Safety\_Belt%20Factsheet\_508.pdf
- [4] National Highway Traffic Safety Administration. (2005). Analysis of Speeding-Related Fatal Motor Vehicle Traffic Crashes. (DOT HS publication No. 809 839). (pg. 1). Washington, D.C: Author.

#### **Contact KOSHS:**

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#### **Acknowledgements:**

Produced by the Kentucky Occupational Safety and Health Surveillance (KOSHS) Program, Kentucky Injury Prevention and Research Center (KIPRC) as bona fide agent for the Kentucky Department for Public Health.

The KOSHS Program is funded by grant 5U60OH008483-14 from the National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention.