

## **SCIENCE & TECHNOLOGY**

## Study: Safety Devices Can Greatly Reduce Big Truck Rear Crashes

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A new study has found that safety equipment could prevent more than 40 percent of crashes in which tractor-trailers **rear-end** other vehicles.

The survey also found that when the rear-end crashes happened, safety systems were able to cut speeds by over 50 percent, resulting in fewer injuries and less damage.

The survey was a project of the **Insurance** Institute for Highway Safety, a research group supported by companies that insure owners of motor vehicles.

The institute's Eric Teoh did the study. He examined crash records from 62 trucking companies that operate tractor-trailers or other large trucks. He found about 2,000 crashes. Those accidents involved vehicles that traveled more than 3.2 billion kilometers from 2017 to 2019.

The safety systems use cameras, radar and other sensors to watch the roadway. Some are designed to warn drivers of dangers, while more complex systems will stop the truck.

Trucks with crash warning systems reduced rear crashes by 44 percent, while **automatic** emergency **braking** systems cut rear crashes by 41 percent, the study found.

The institute called on the federal government to require such systems on new large trucks. It noted that many truck operators are already adding emergency braking on their own.

"Rear-end crashes with trucks and other vehicles happen a lot, often with horrible **consequences**," said Teoh. "This is an important **countermeasure** to that."

The study found that trucks equipped with a crash warning system had 22 percent fewer crashes than those without the technology. Trucks with emergency braking systems had 12 percent fewer crashes.

Teoh said the findings could be valuable for trucking companies and drivers who are considering whether to get safety devices on their next vehicles.

The institute says U.S. crashes involving large trucks rose by nearly one-third since hitting a record low in 2009. A total of 4,136 people died in such crashes in 2018, with 119 deaths resulting from large trucks rear-ending other vehicles.

Two U.S. federal agencies make rules for heavy trucks: The Federal Motor Carrier Safety Administration and the National Highway Traffic Safety Administration. They both said they are examining the new study.

The National Highway Traffic Safety Administration said in a statement it is nearly finished with its own study on driver assist technology on heavy vehicles. It has been urging the voluntary use of systems such as emergency braking.

In the United States, there are currently no requirements for either system. In Europe, automatic emergency braking with forward collision warning has been required by the European Union on most new large trucks since late 2013, the institute said.

I'm Bryan Lynn.

*The Associated Press reported on this story. Bryan Lynn adapted the report for VOA Learning English. George Grow was the editor.* 

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## Words in This Story

**rear-end** – *v*. to hit the back of one car with another in an accident

**insurance** – *n*. in agreement in which you pay a company money and they pay you costs if you have an accident injury, etc.

automatic - *adj.* something controlled using machines and not people

**brake** – *n.* a device that makes a vehicle go slower or stop

**consequence** – *n*. a result of a particular action or situation, often one that is bad or not convenient

**countermeasure** – *n.* an action taken against an unwanted action or situation