



**LANGDON
& EMISON**

- **Heavy trucks and modern cars should have CMS**
- **NHTSA: The cost to install CMS ranges from \$44-\$197**
- **NHTSA: Comprehensive study found CMS was highly effective – no rear-end crashes**

Learn how Collision Mitigation Systems (CMS) claims can maximize the recovery for your clients





CMS Claims in Heavy Truck Crashes

If you have a heavy truck crash, you should consider a CMS claim. CMS includes a number of safety features, including automatic emergency braking, forward collision warning and lane departure warnings.

Most crashes can be avoided entirely or at least mitigated where people should not be seriously injured or killed. As you will see in this brochure, the costs of these systems are very low, but are commonly deleted by truck companies to increase profits.

Just for example, testing confirms that automatic emergency braking systems can completely stop a heavy truck up to a 70 mph closing speed. In 2016, NHTSA studied 150 heavy trucks equipped with CMS. The trucks drove over three million miles with no rear-end crashes.



Collision mitigation systems were typically not available as even an optional feature on medium-duty or Class 6 trucks until many years after the same manufacturers were making use of the technology in their semi-trucks



These trucks should be equipped with CMS technology - don't overlook these vehicles when considering CMS claims.

What do Automatic Braking and Forward Collision Warning Systems Cost?

The National Highway Traffic Safety Administration (NHTSA) has reported “cost” information for Forward Collision Warning/Autonomous Emergency Braking (FCW/AEB) systems as follows:

- The average incremental cost to manufacturers for installing these systems was as low as \$44 per truck.
- The increase to end-user prices is as low as \$70 per truck and should not exceed \$316 per truck.



Manufacturers (e.g., Paccar) claim that the CMS safety features are “standard” safety features. However, they offer purchasers what they call “Delete Options,” where the purchaser can go down a list and delete the safety feature to save a few hundred dollars. Truck buyers routinely delete the safety features to do just that: save a few dollars. Some manufacturers (such as Paccar) still make money when the safety features are deleted since the buyer is not credited with the full cost of the safety feature.

Theories of Liability: Failure to Equip a New Heavy Truck

- OEM manufacturers: They should have made CMS Standard. Safety is not an “option.”
- Purchasers of New Trucks: They should have paid for CMS; instead, they put profits over safety by choosing the “Delete Option for the safety feature.
- Failure to retrofit a used heavy truck: Owners of all heavy trucks should retrofit their heavy trucks to add CMS. These are available on most trucks on the roadway.



CMS features should be installed on every truck on the road. Unfortunately, many manufacturers and truck buyers continue to put profits over safety.

America is behind other nations in regulating CMS safety features.

The United States continues to lag far behind European countries when it comes to safety. The European Union has required AEB systems for all new heavy trucks since 2015. But even before then, manufacturers were selling trucks in Europe with these safety systems, but will sell the same truck in the United States without the safety systems.

The average incremental cost for installing CMS features: as low as \$44 per truck.

As noted previously, there are various theories of liability for these cases. For new heavy trucks, manufacturers should have provided the CMS safety features. For used heavy trucks, most have retrofits available where the CMS safety systems can be installed post-sale. These safety features are available for most trucks on the roadway today.

Every heavy truck crash should be investigated for a CMS claim.

Heavy Truck Automatic Emergency Braking: Proposed Federal Regulations and Standards

When choosing co-counsel to work with on cases related to this practice area, it is key to do so with a partner who is well versed in the newest proposed regulations and standards for heavy trucks. On July 6, 2023, NHTSA issued a notice of proposed rulemaking (NPRM) regarding the adoption of standards and regulations for the use of automatic emergency braking systems in heavy vehicles, i.e., vehicles with a gross vehicle weight rating greater than 10,000 pounds.



The NPRM includes proposals to adopt a new Federal Motor Vehicle Safety Standard (FMVSS) to require automatic emergency braking (AEB) systems, including forward collision warning capabilities, on heavy vehicles, and to now require nearly all heavy vehicles to have electronic stability control systems that meet the existing requirements of FMVSS No. 136. Additionally, the NPRM includes a proposal to require both the AEB and ESC systems to be on at all times during vehicle operations. Testing standards and performance requirements are included as well among the proposed rules.

Purpose of the Proposed Rules – Safety Problem Identified by NHTSA

The heavy vehicle NPRM emerged from NHTSA's grant in 2015 of a petition for rulemaking submitted by the Truck Safety Coalition, the Center for Auto Safety, Advocates for Highway and Auto Safety and Road Safe America. The NPRM is also meant to satisfy the mandate under the Bipartisan Infrastructure Law (enacted as the Infrastructure Investment and Jobs Act) directing

42,939

The number of fatalities in 2021 from motor vehicle crashes, the most since 2005.



the adoption of such standards. As reported by NHTSA, in 2020, there were 38,824 people killed in motor vehicle crashes in the U.S. The number rose to 42,939 in 2021, the most fatalities from motor vehicle crashes since 2005. The upward trend dates back to 2010.

Overwhelmingly, these crashes occurred on straight roadways (99 percent) and in dry conditions (85 percent); conditions ideal for AEB system operation. Notably as well, but not surprising, fatal heavy vehicle rear-end crashes occur most frequently at higher speeds, with 89 percent resulting from crashes at speeds above 50 mph.

This “target crash population” accounts for approximately 388 fatalities and 30,000 injuries annually. NHTSA estimates that requiring AEB on heavy trucks will reduce rear-end collisions involving class 7 and 8 trucks in certain common crash scenarios by 38.5 percent, and in other common crash scenarios by 49.2 percent annually.

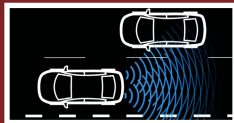
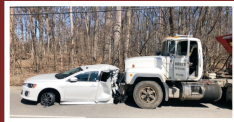
**FCW/AEB systems
have the capacity for
being able to decrease
rear-end collisions.**

A recent Insurance Institute for Highway Safety study estimated that forward collision warning and automatic emergency braking systems reduce crashes by 44% and 41%, respectively.



A key benefit is mitigating the crashes that do happen. Among front-to-rear crashes of trucks in which these technologies intervened (issued a warning or braked automatically), speed was reduced by about 50%, on average, between intervention and impact.

IIHS Study Shows CMS Leads to Fewer Wrecks



The Insurance Institute for Highway Safety and the Highway Loss Data Institute collaborated on a 2023 study that analyzed the effects of CMS features. Some statistics from their findings:

Automatic emergency braking

- 50% Front-to-rear crashes
- 56% Front-to-rear crashes with injuries
- 41% Large truck front-to-rear crashes

Automatic emergency braking with pedestrian detection

- 27% Pedestrian crashes
- 30% Pedestrian injury crashes

Lane departure warning

- 11% Single-vehicle, sideswipe and head-on crashes
- 21% Injury crashes of the same types

Blind spot detection

- 14% Lane-change crashes
- 23% Lane-change crashes with injuries

Rear automatic braking and rearview cameras

- 78% Backing crashes
- 22% Backing crashes with cross-traffic alert

Collision Mitigation Systems for Passenger Vehicles

A passenger car's CMS features similarly include a collection of advanced safety technologies designed to assist drivers in avoiding or reducing the severity of collisions. These systems typically utilize a combination of sensors, cameras, radar, and sometimes lidar (Light Detection and Ranging) to detect potential hazards on the road.

Here are some key aspects and background information on CMS features for passenger vehicles:

Detection Systems: Modern vehicles often integrate multiple detection systems such as radar and cameras. Radar systems are effective for detecting objects at a distance, while cameras provide detailed visual information about the surrounding environment. Some systems also incorporate lidar for even more precise object detection.

Functionality: Collision mitigation systems generally work by monitoring the vehicle's surroundings and assessing the risk of a collision. They can detect vehicles, pedestrians, cyclists, and other obstacles in the vehicle's path.

Warning Systems: These systems typically include warning alerts to the driver, such as visual and auditory signals, when a potential collision is detected. This gives the driver a chance to react and take evasive action.



Our attorneys have extensive experience in cases involving CMS accidents, and can be reached any time to talk about your potential case.

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Many injuries and fatalities today are avoidable, and this technology is emerging as a key and increasingly central component to the determination of whether an injury could have been prevented.

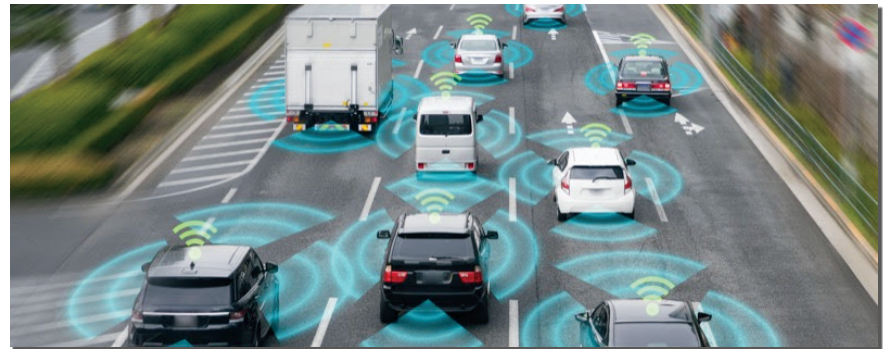
Automatic Braking: Many CMS features are designed to intervene automatically if the driver does not react in time to avoid a collision. This may involve autonomous emergency braking (AEB), where the system applies the brakes to reduce the impact or prevent the collision entirely.

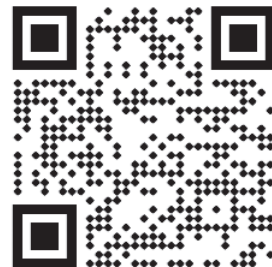
Integration with Other Systems: These systems may work in conjunction with other safety features such as adaptive cruise control (ACC), lane departure warning (LDW), and blind-spot monitoring (BSM) to enhance overall vehicle safety.

Effectiveness and Safety Benefits: Studies have shown that CMS features can significantly reduce the frequency and severity of collisions. They are particularly effective in preventing rear-end collisions and collisions involving pedestrians or cyclists.

Overall, CMS features represent a significant advancement in vehicle safety technology, aiming to reduce accidents, injuries, and fatalities on the road by providing additional layers of protection and assistance to drivers.

Collision Mitigation Systems or “Collision Avoidance Technology” is widely recognized as the next frontier in product liability litigation in automotive cases.





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