

Motor Vehicle Safety (Loose Cargo) Meeting Kit

Safety: loose cargo inside and outside of a motor vehicle

Motor vehicle crashes are the leading cause of workplace injuries according to the Bureau of Labor Statistics. Motor vehicle incidents contributed to 40% of all workplace fatalities. The majority of injuries occur during the initial impact of a crash; however loose cargo both inside or outside of the vehicle can cause additional injuries or property loss incidents.

Loose Cargo in Vehicles

Loose cargo within a vehicle or piece of heavy equipment such as empty bottles, trash, tools, PPE, etc. are not only a distraction while driving or operating, but they also turn into projectiles during a crash. A recent segment on Good Morning America looked at the dangers unsecured items in a vehicle can pose. Safety expert, Sean Kane of Safety Research and Strategies, told Good Morning America that ordinary objects in cars and trucks are responsible for 13,000 injuries each year. Those half-filled water bottles, canned goods, lab tops could all become dangerous projectiles when hurling through the air during collisions. At 55 miles per hour, a 20-pound object hits with 1,000 pounds of force – so powerful that a suitcase can literally shear off the arm of a crash test dummy. It is just as important to mitigate the secondary hazards, such as loose cargo, as it is to do so for the more obvious primary hazard of the actual impact of a crash.

UNRESTRAINED PASSENGERS CAN CAUSE INJURIES

Just as loose objects can cause serious injuries in a car accident, unrestrained passengers can become deadly projectiles in a high-speed car accident. Passengers who are not wearing their seat belts are at serious risk of severe, even fatal, injuries if they are involved in a car accident. However, an unsecured or improperly secured passenger can also endanger the lives of other

passengers inside the vehicle. In fact, according to the American Medical Association (AMA), in a simulated accident using crash test dummies, including one that was unrestrained in the back seat, the unrestrained dummy hit the dummy in the front seat with enough force that they both hit the windshield.

Research shows that the risk of dying in a car accident increases by 25 percent if at least one other passenger is not properly secured by a seat belt. Unrestrained pets can be just as dangerous as unrestrained human passengers.

OTHER DANGERS

Unsecured cargo can lead to other dangers as well. Loose objects located within the driver's foot space may lodge themselves beneath the brake pedal, causing a dangerous scenario in which the driver cannot stop the vehicle. That is why it is important to keep your vehicle organized and free of debris.

Remember that even the smallest item can turn into a lethal projectile in an accident. Resist the temptation to throw items in the seat next to you simply because it is convenient. By taking these precautionary measures, you can greatly reduce your risk and make your drive a safer one.

Most people have a variety of loose objects in their car, including small items such as cell phones, children's toys, and water bottles, as well as larger, heavier objects such as laptops, purses, luggage, or canned goods. Although none of these items are normally considered dangerous, even a cell phone or a small toy can strike passengers with extreme force during a car accident, causing a range of injuries. According to Safety Research and Strategies, loose objects in cars are responsible for approximately 13,000 injuries each year. Although it is not always possible to avoid a car accident, motorists can take steps to minimize the risk of injuries caused by unsecured loose objects inside the vehicle.

PREVENT INJURIES

One of the first things that most drivers do when they get in

their car is fasten their seat belts to ensure that they are safely restrained. However, they do not always take a moment to secure loose items in their car before they drive. **The following are simple steps drivers can take to reduce the risk of injuries caused by loose objects:**

- Safely secure all objects that are not attached to the vehicle.
- Make sure that all passengers have properly secured their seat belts. If any of the passengers are young children, check their car seats or booster seats before driving to ensure that they are safely secure.
- If pets are riding in the car, make sure that they are restrained, either in an approved travel carrier or a safe restraint system or harness.
- Keep all groceries in the trunk of the vehicle. If the vehicle has a cargo hold rather than a trunk, use cargo nets and tethers to prevent loose objects from striking passengers.
- Keep the inside of the vehicle clean and organized.
- Put small objects, such as phones or sunglasses, in the glove compartment.
- Place lighter items in fixed compartments in the vehicle and use the cargo nets, tethers, and anchors to secure heavier items.
- Secure objects that you do not need at home.
- Pack heavier items on the bottom and lighter items on top. Center these items in the vehicle and rest them next to fixed components in your vehicle.

FINAL MITIGATION TAKE AWAYS

- Practice good housekeeping. Remove any trash and unnecessary items from your vehicle or cab of a piece of heavy equipment.
- Utilize the trunk area or cargo boxes before putting items in the cab area of the vehicle.
- Tie down or secure any remaining items properly.
- Perform periodic inspections of any vehicles used both on

and off the work site for loose cargo.

FINAL WORD

Loose cargo (cell phones, laptops, bottled water, children's toys and unrestrained passengers) are possible dangerous projectiles that can make an accident scene more horrific. Prevention, inspection and common sense can prevail here and make accidents with loose cargo entirely preventable.