



PROTECTING MOBILE WARFIGHTERS

Tragic crash → walk away event

Remain ready to fight

U.S. Army Photo by Pfc. Devin Klecan / Released

NDIA *2025 Tactical Wheeled Vehicles Conference*

IMMIO 

CAPE 



United States Army Reserve | Battalion Support Operations

The background of the left side of the graphic is a photograph of a military vehicle, possibly an armored personnel carrier, that has been crushed and overturned. The vehicle is shown in a state of severe wreckage, with its large tires and metal body parts visible. The image is overlaid with a semi-transparent green filter.

123 DEATHS

NON-COMBAT CRASHES
2010 to 2019

(GAO report 21-361)

Approved for Public Release

SAFETY SOLUTION

93%

REDUCED RISK

OF SEVERE INJURY
OR DEATH



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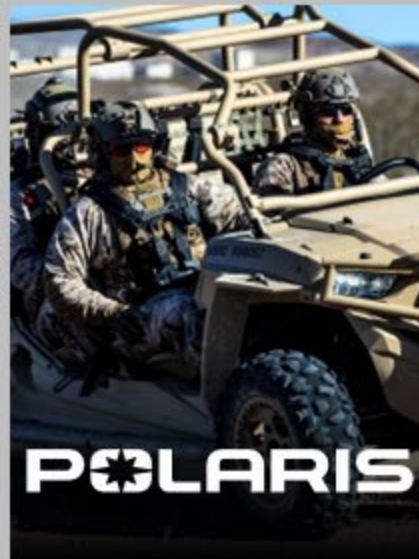
CAPE Engineering Manager

NDIA *2025 Tactical Wheeled Vehicles Conference*



Non-Automotive
Occupant Safety
for over 60 years

UNIQUE VEHICLES



MODERN SAFETY

Front Airbags

Side Airbags

Overhead Airbags

Seat Belt Pretensioners



UNIQUE VEHICLES

Modernize
Safety

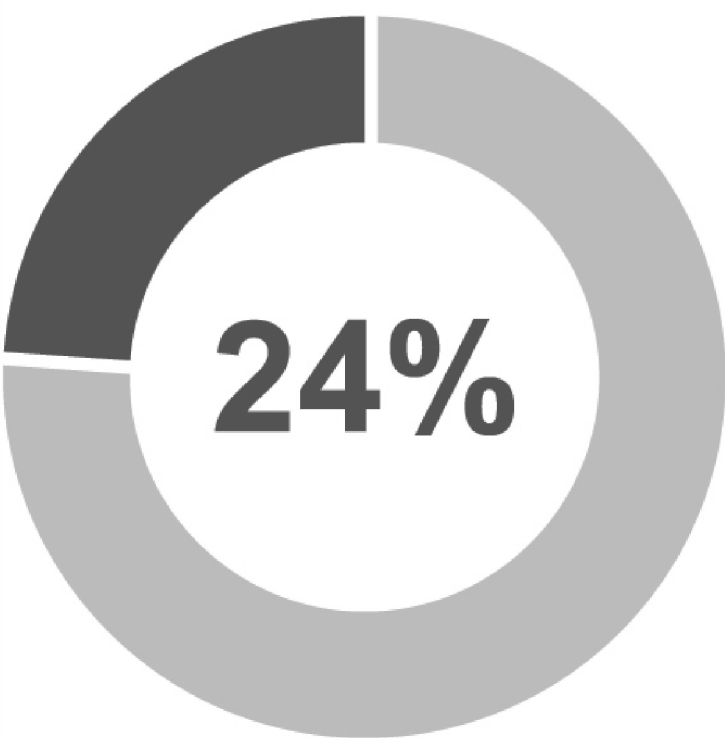


SAVE LIVES

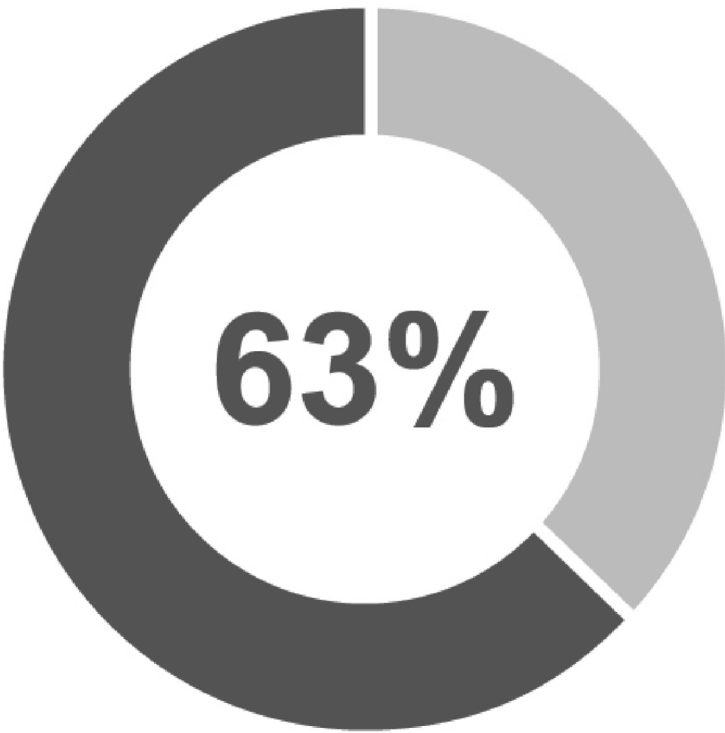


Percentage of Army and Marine Corps Tactical Vehicle Accidents Involving Rollovers, Fiscal Years 2010 through 2019

Rollovers occurred in:



of all accidents



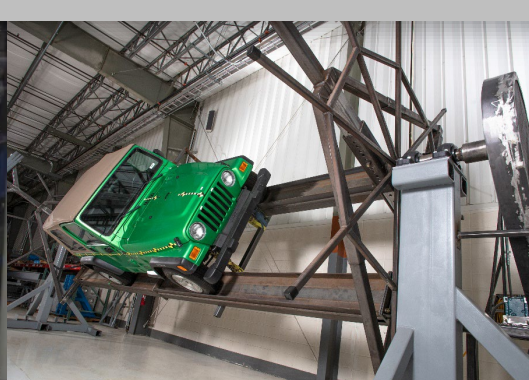
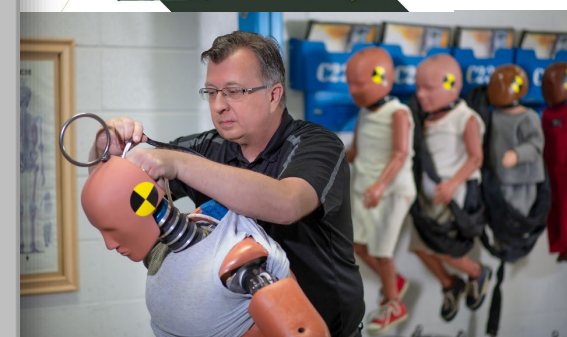
of accidents involving
a military death

ROLLOVERS
most dangerous
crash

**NEW
INNOVATION**

Severe injury
reduced
93%

Source: GAO analysis of Department of Defense data. | GAO-21-361





CENTER FOR ADVANCED PRODUCT EVALUATION

ANALYZE PROBLEM

Vehicle
Occupants
Injury
Death



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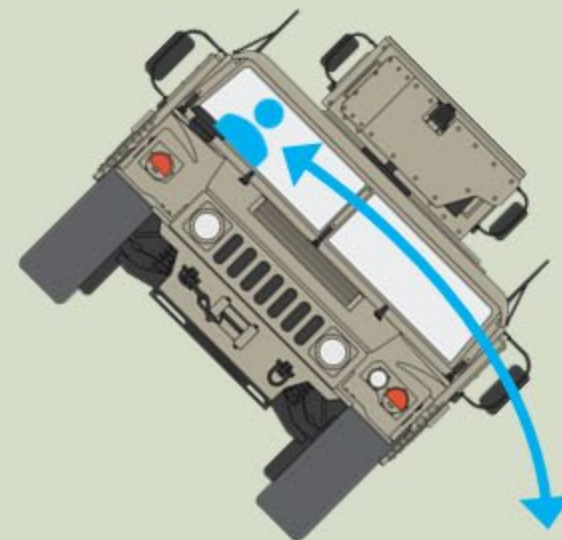
INJURY TYPE

NECK INJURY (NI)

TEST

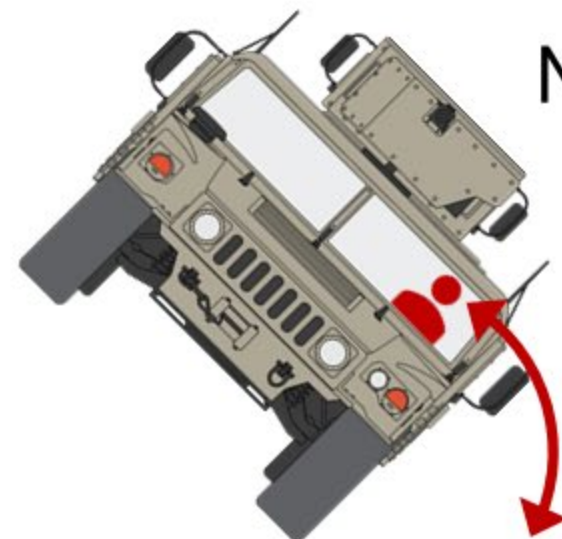


GREATEST RISK



Far Side
Rollover

TRAUMATIC BRAIN INJURY (TBI)



Near Side
Rollover



MARS MBRACE AND ROLLTEK SYSTEM



SENSOR



SEAT BELT TIGHTENS

SEAT PULL DOWN

4"
SEAT
PULL DOWN



MBRACE AIRBAGS





NECK INJURY RISK DURING ROLLOVER CRASH

3-POINT BELT



MARS  SYSTEM



UP TO
93%

Reduced Risk
of Serious Injury

123 DEATHS

NON-COMBAT CRASHES
2010 to 2019

MARS 

93%

REDUCED RISK

OF SEVERE INJURY
OR DEATH



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