Designs Sought for Improved Heavy Vehicle Underride Prevention Structures

Current truck underride regulations too often do not prevent underride crashes—which led to 2401 fatalities in 2013.

Engineering students and professionals will take on the challenge of creating an underride prevention system that will surpass the current U.S. and Canadian standards. Key design interests include offset impact, misaligned vehicle paths, and occupant survivability.

The objective is to attain underride prevention up to 50 mph at any degree of offset along the back of the trailer. The designs must be demonstrated to be practical in the context of the trucking environment. The hoped-for outcome is saved lives.

For more information about the underride issues go to: http://annaleahmary.com/ underride-guards/



See our story and crash test results from many years of testing truck underride guards by the Insurance Institute for Highway Safety (IIHS). http://tinyurl.com/mcayk5k



<u>Top photo</u>: Rear impact guard prevented underride <u>Bottom photo</u>: Guard did **not** prevent underride

The Best Possible Protection

The Best Possible Protection

Underride
Guards in the
Trucking
Industry:
A Quest
for the Best

AnnaLeah & Mary for Truck Safety



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Underride Guards: Our Story

Marianne Karth lost her two youngest daughters, AnnaLeah (17) and Mary (13), due to a truck crash on May 4, 2013, when she was driving from their home in North Carolina to family celebrations in Texas.

While on I-20 in Georgia, a trucker hit their Crown Vic when traffic was slowed for a prior crash--spinning the car so that it went backwards into the rear of a truck ahead of them.

The underride guard did not withstand the crash and the back of our car went under the tractor trailer. Mary and AnnaLeah were in the back seat. AnnaLeah, only a week from her eighteenth birthday, died instantly from mechanical asphyxia. Mary, 13, had severe facial trauma (multiple facial fractures) and several strokes and died four days later from the swelling in her brain.

While Marianne and her son, in the front seat, did survive, they, and the rest of the family, are utterly devastated by the loss of AnnaLeah and Mary.



Raising Awareness

The Karth family has since raised awareness about the need to strengthen the federal standards for underride guards,in order to prevent other families from facing similar unbearable grief.

Research & Discussion

To encourage research and discussion, we are organizing an Underride Roundtable in the Spring of 2016. Through the Society of Automotive Engineers (SAE) social media, we are asking students to research underride and calling for professionals to submit research proposals.

http://tinyurl.com/napsp2g

RESEARCH PROJECT

As a family, we have asked for and received a proposal for an underride prevention system from Dean Sicking, an engineer at the University of Alabama-Birmingham.

Dean is well-known for his lead role in creating the SAFER Barrier used at NASCAR race tracks to save many lives. He is convinced that he can, likewise, create a safer barrier at the back of tractor-trailers to prevent underride of a passenger vehicle upon collision. http://tinyurl.com/pge3mtk

For more information:

http://annaleahmary.com/

RAISING MONEY FOR RESEARCH

AnnaLeah & Mary for Truck Safety will be raising funds for underride research in order to discover how to design underride prevention systems which will provide the best possible protection. The results of the research will be made available to regulators and manufacturers so that more effective standards can be written and safer trucks can be put on the road.

Please help us prevent future unnecessary deaths due to underride crashes. Every \$1 contributed to this cause will help us toward our goal of supporting underride research and saving other families the heartache of such tragic loss.

AnnaLeah & Mary for Truck Safety is a 501(c)(3) non-profit organization. Your contribution is tax-deductible, and you will receive a receipt after providing us with contact information.

To donate online, go to: http://fortrucksafety.com/

