



Turning Tragedy Into Advocacy

Turning Tragedy Into Advocacy

Coming Together On A Mission
To Make Truck Crashes More
Survivable

Turning Tragedy Into Advocacy

Two Moms On A Mission To Make
Truck Crashes More **Survivable**



Would **YOUR** car fit under a truck?
STOPunderrides.org



**BETTER GUARDS ON BIG TRUCKS CAN
PREVENT UNDERRIDE CRASHES.**

TELL YOUR LEGISLATORS TO SUPPORT
THE **#STOPUNDERRIDES** BILL.



stopunderrides.org



Their deaths were preventable.

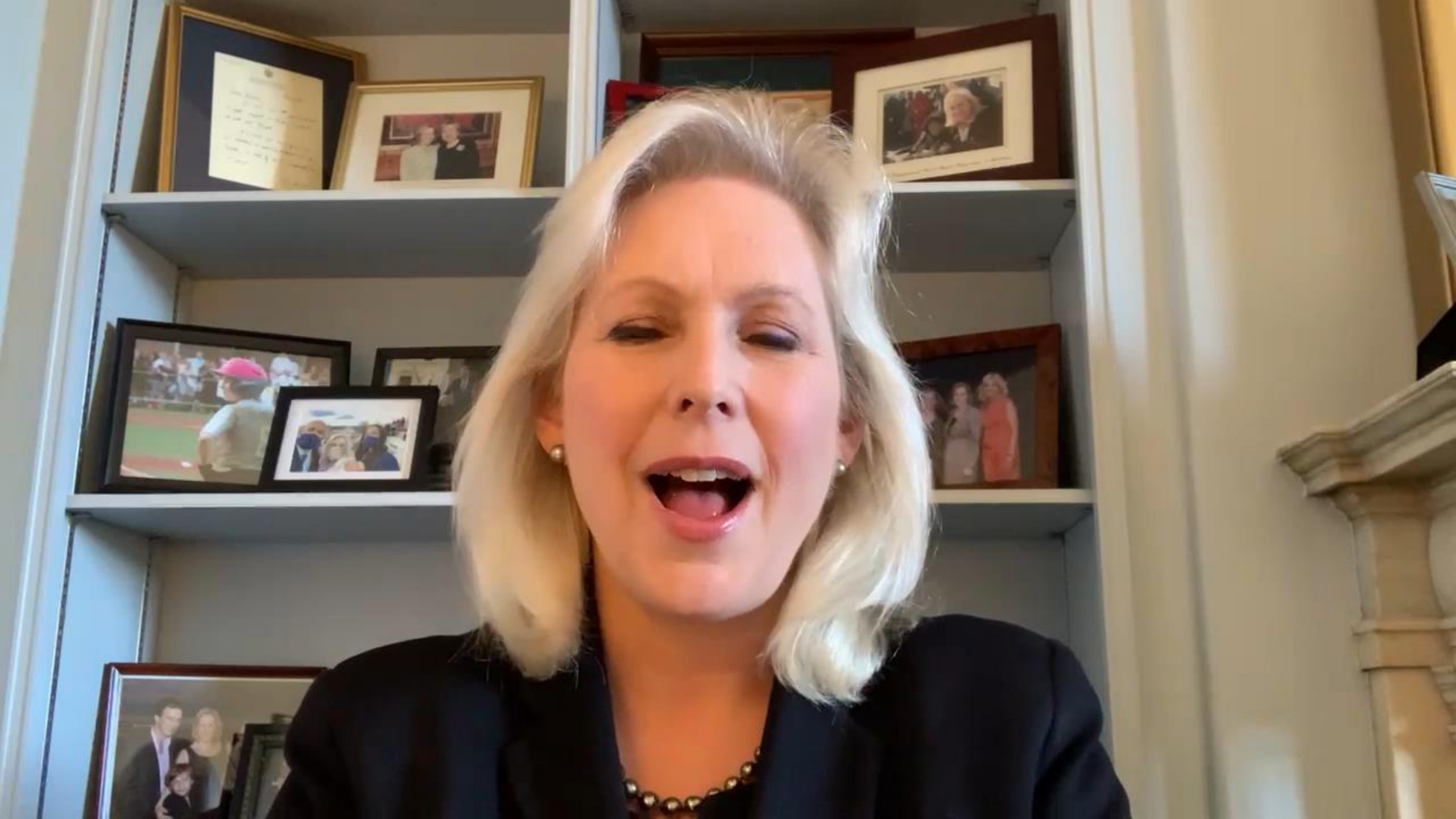
- **Please put yourself on Mute & make sure that we can see your name.**
- **There will be a Q&A near the end.**
- **The meeting will be recorded & video file made available later.**

We will be posting a PowerPoint and video of the news conference on our websites:

- annaleahmary.com
- stopunderrides.org

You can also email marianne@annaleahmary.com and ask for them, as well as contact information for interviewing override families.

Thank you for coming and for helping to raise awareness about these preventable tragedies and the solutions available to end them.



A Timeline of Underride Safety



AnnaLeah Karth

1995 - 2013

Mary Karth

1999 - 2013

2013



Roya
2004

3/8/2021

-mom,
First of all, I want to say that I love you so much. I'm so appreciative that I have you as a wonderful mom and as a faithful friend. Thank you for your integrity, sacrifice and abundant love which you display





Mary 2013

Dear Marcus
I ♥ U I Hope you like the
Book Don't forget me



Aunt
Mary



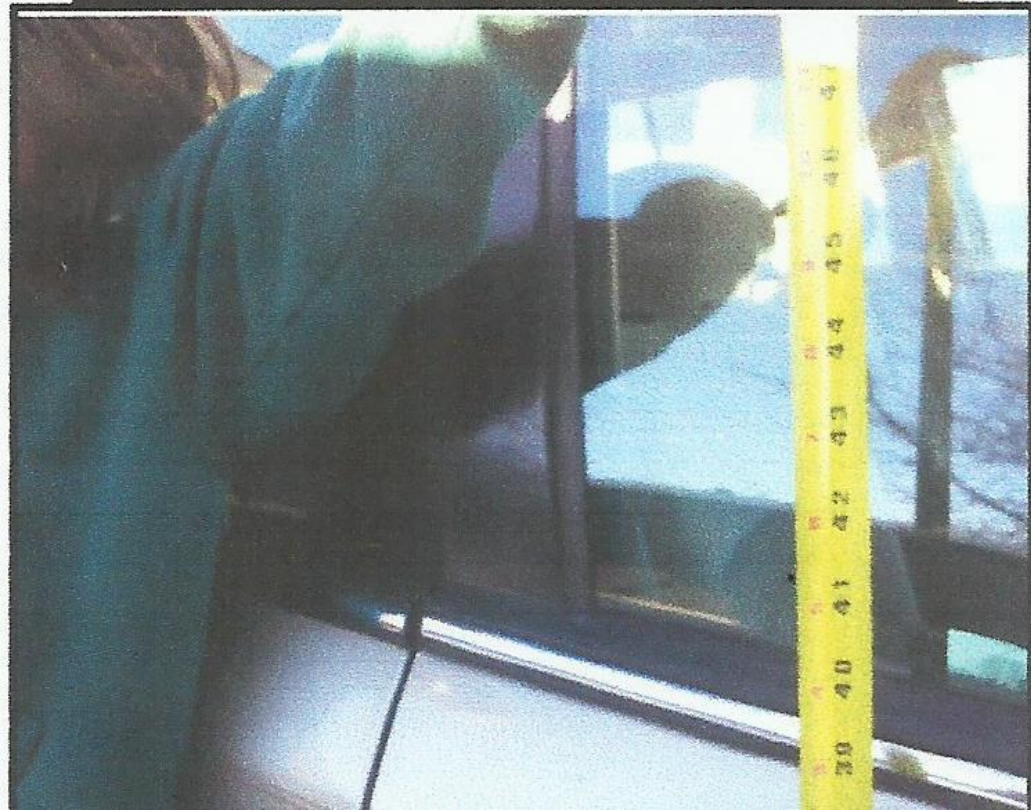
AnnaLeah 2013



3/8/2021



The distance from the floor of the trailer to the pavement is 41 inches, and the height of this car's hood is about 33 inches.





3/8/2021

Fifty years is too long to wait.

If trucks can be made safer,
what should we do about it?

“It is anticipated that the proposed Standard will be amended, after technical studies have been completed, to extend the requirement for underride protection to the sides of large vehicles.”

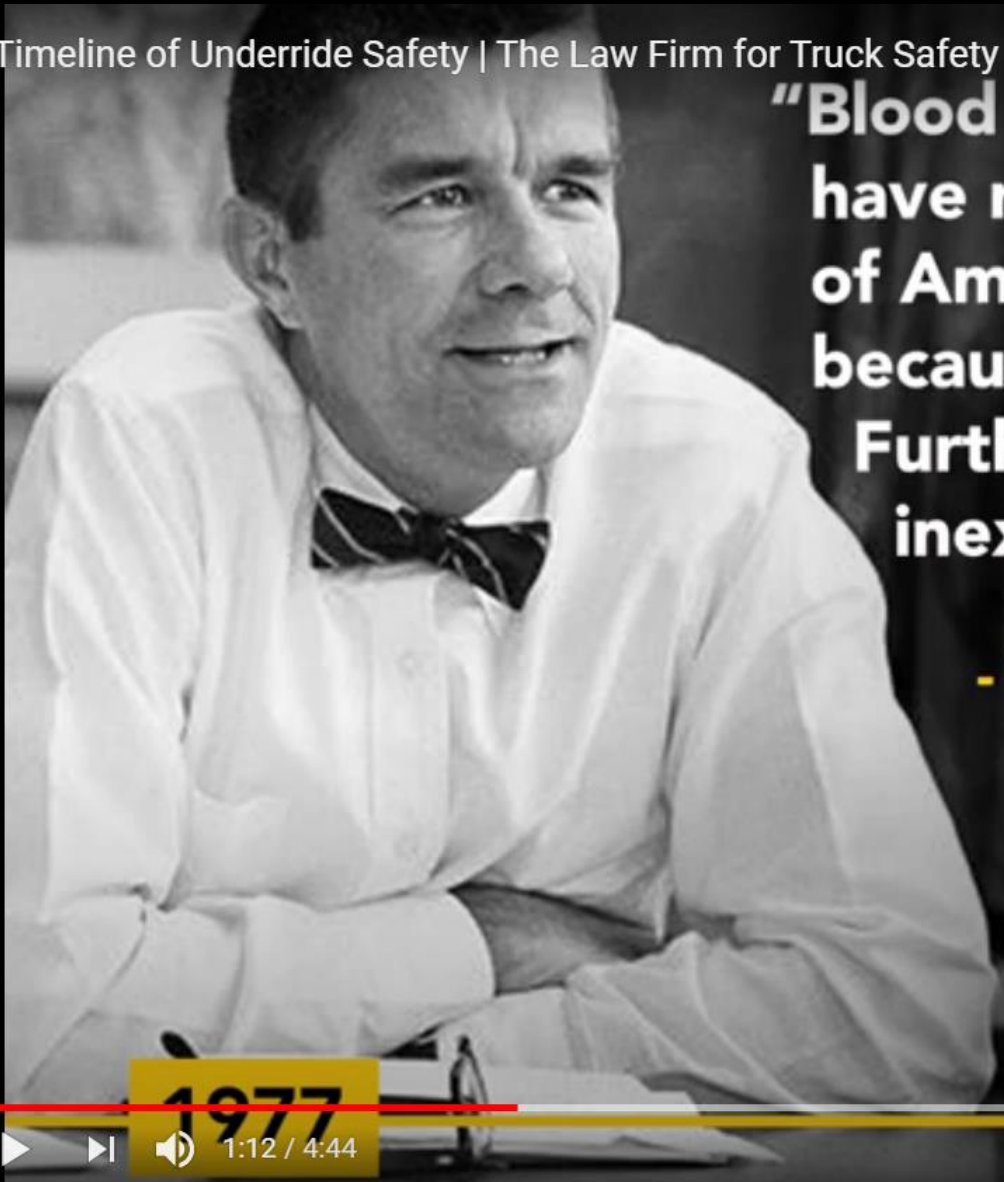
Federal Register, Vol. 34, No. 53 —
Wednesday, **March 19, 1969**

Act now to
STOP Underrides!



3/8/2021

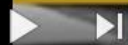
17

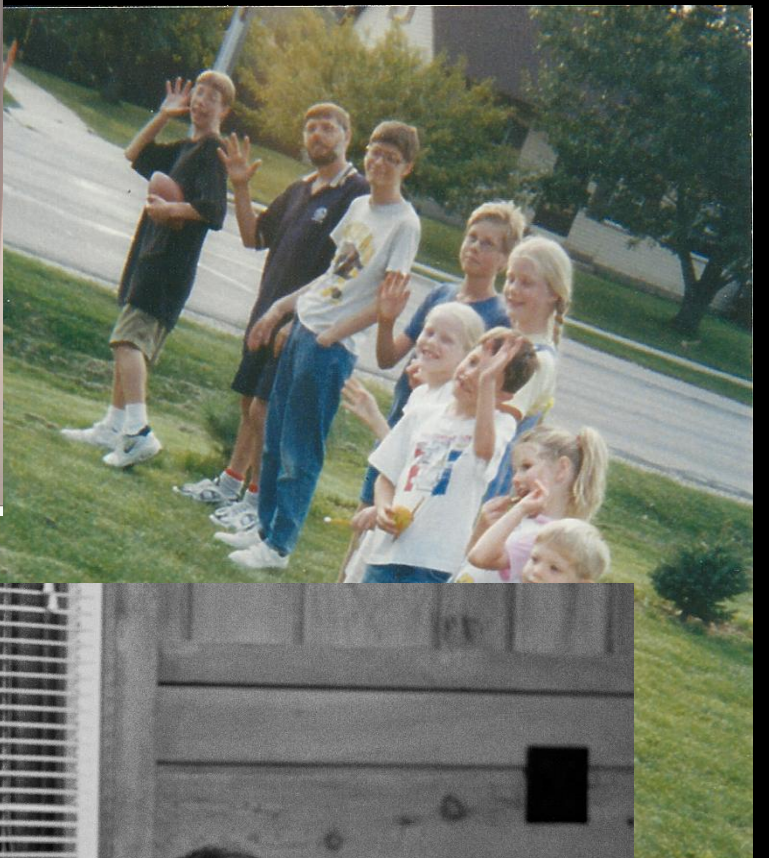


“Blood has been shed, heads literally have rolled and countless thousands of Americans have been injured because these agencies did not act. Further inaction would be inexcusable.”

- William Haddon, M.D.

1977
1:12 / 4:44





3/8/2021





3/8/2021

21



3/8/2021

22



3/8/2021

23



3/8/202

Families fight for tractor-trailer regulations



TRACTOR TRAILER REGULATIONS



02:00 / 03:08

IMG_2339.jpg

Show all



3/8/20



3/8/20

The **STOP** Underrides Act

- Strengthen the requirements for rear underride guards, add the requirement to single unit trucks and ensure that these standards are based off of crash testing
- Require all new trailers, semi-trailers, and single unit trucks are equipped with side guards
- Require all new truck-tractors and single unit trucks are equipped with front guards



Single Unit Trucks

Single unit trucks are not required to follow the Federal standard



New York Garbage Truck Underride

The front of a truck can go over a car



Ford Windstar

Hyundai Sonata

Kia Spectra





3/8/2021

33





3/8/20

Vulnerable Road Users are also at risk

Motorcyclist suffers garbage truck

28

Shares



Pedestrian Hospitalized After Tractor Trailer In West Melbou

By Space Coast Daily // July 18, 2019

INCIDENT HAPPENED ON WEST HAV

SPACE COAST
DAILY.com
BREAKING

47abc NEW

Peo
Str

UPDATE:
bicyclist

July 17, 2019 by Sarah Ash



www.twomen.c

artment of Labor said.

drum accident

FEATURES ON YOUR SIDE CHIME IN WATCH

23 Antenna Upgrade

e woman killed by tractor-trailer in ified

day, July 19th 2019





3/8/2021

The **STOP** Underrides Act

would establish a committee, to monitor the underride rulemaking process, that is composed of: manufacturers, **road inspectors**, motor vehicle engineers/technicians, **motor vehicle crash reconstructionist specialists**, traffic safety organizations, **truck and auto insurance industry representatives**, law enforcement crash investigators, **emergency medical service providers**, public health/injury prevention professionals, and **families who have been impacted by underride crashes.**

In Summary, the Trucking Industry & the Federal Government Can Advance Underride Protection On a Fast Track By Adopting & Implementing:

- **The IIHS TOUGHGuard Standard for rear underride guards**
- **The Consensus Side Guard Standard**
- **The UNECE-93 Front Underride Protection Standard**

**Thanks to IIHS tests,
trailer manufacturers have
improved their underride guards.**

Consensus Side Guard Standard

A side underride guard shall be considered to meet the performance standard if it is able to provide vehicle crash compatibility with a midsize car, to prevent intrusion into the occupant survival space, when it is struck at any location, at any angle, and at any speed up to and including 40 mph.





Front Underride Protection Crash Test

Hurdles to Reach Comprehensive Underride Protection RAMCUP

How often
does underride
happen?

STATUS INSURANCE INSTITUTE FOR HIGHWAY SAFETY REPORT

Vol. 27, No. 9

July 11, 1992

Death Count May Be Too Low

How often do cars and other passenger vehicles slide into and under the rear of big trucks, killing the people in the passenger vehicles? Underride crashes may happen more than twice as often as the National Highway Traffic Safety Administration (NHTSA) recognizes.

Institute researchers analyzing NHTSA data files have discovered that many states don't identify any fatal rear-end truck crashes as involving underride. These omissions lead researchers to conclude that many more deaths may be occurring in underrides than the average of 72 annually that NHTSA recognizes.

In California, for example, 24 percent of all 1989 passenger vehicle occupant deaths that occurred in rear-end truck and parked vehicle crashes are identified in NHTSA data files as involving underride. But, in 36 states and the District of Columbia, not a single one of the 400 passenger vehicle occupant deaths in such crashes is identified as involving underride. (See table on page 2.)

Institute researchers scrutinized police reports for the 1989 California crashes identified as underrides and verified them as such. "It's more than likely a coding problem that's keeping more crashes nationwide from being properly identified as underrides," says Institute President Brian O'Neill. Police reports don't always include enough information to determine whether individual crashes involve underride, so the crashes don't get coded as such in NHTSA's data system.

As many as 151 deaths in underride crashes may be occurring each year — not the 72 NHTSA recognizes — if the proportion of underride crashes in California holds true for the nation as a whole.

"If underrides are underreported, and it appears they are, then it's all the more reason to get on with federal rulemaking for improved underride guards," O'Neill says. NHTSA's recent proposal to require lower, stronger guards on truck trailers is the agency's sixth announced plan to upgrade a 1953 underride regulation that's still in force. Proposals were issued — then abandoned — in 1967, 1969, 1970, 1977, and 1981. (See *Status Report*, Vol. 27, No. 2, Feb. 8, 1992.)

Referring to the likely underreporting of underrides, the Institute says NHTSA should amend its data-gathering processes to more accurately identify such crashes. Plus, Institute researchers have identified the following shortcomings in NHTSA's proposed underride guard requirements:

Guards Too High The proposed 22-inch maximum ground clearance for rear underride guards is preferable to the 30 inches now allowed, but it's still way too high. It'll fail to prevent many underrides and won't take full advantage of automobile safety technology like air bags, the Institute says. A 20-year-old NHTSA



Crash Year by Initial Impact Point on the Large Truck	Passenger Vehicle Compartment Intrusion?			Total
	Compartment	No	Compartment	

2011

2012

2013

2014

2015

1994-2015

VARIABLE LISTING OF CASE # 130366 VEHICLE DATA FILE
 FATAL MOTOR VEHICLE TRAFFIC CRASH ON MAY 4, 2013 IN GREENSBORO, GA
 FATALITY ANALYSIS REPORTING SYSTEM(FARS) 2013 ARF

Extent of Damage	Vehicle Removal	Most Harmful Event	Related Factors- Vehicle Level	Related Factors- Vehicle Level 2	Fire Occurrence
Disabling Damage	Towed Due to Disabling Damage	Motor Vehicle In-Transport	None	None	No or Not Reported
Disabling Damage	Towed Due to Disabling Damage	Motor Vehicle In-Transport	None	None	No or Not Reported
Disabling Damage	Towed Due to Disabling Damage	Motor Vehicle In-Transport	None	None	No or Not Reported
Emergency Use	Travel Speed	Underride/Override	Rollover	Location of Rollover	Initial Contact Point
Not Applicable	Not Reported	No Underride or Override Noted	No Rollover	No Rollover	1 Clock Point
Not Applicable	Not Reported	Underriding a Motor Vehicle In-Transport, Underride, Compartment Intrusion Unknown	No Rollover	No Rollover	11 Clock Point
Not Applicable	Not Reported	No Underride or Override Noted	No Rollover	No Rollover	6 Clock Point
Driver Presence	Driver's License State (FARS Only)	Driver's ZIP Code	Non-CDL License Status	Non-CDL License Type	Motor Vehicle License Status
Yes	California	90025	Valid	Full Driver License	Valid
Yes	North Carolina	27804	Valid	Full Driver License	No (CDL)
Yes	Florida	34420	Valid	Full Driver License	Valid



Under-reporting:
a major problem

This report was generated by SAS.

file:///U:/_Eas

Crash Y

Indiana *FARS*

Crash Year by Initial Impact Point on the Large Truck	Passenger Vehicle Compartment Intrusion?			Total
	Compartment Intrusion	No Compartment Intrusion	Compartment Intrusion Unknown	
Rear	0	0	1	1
Total	1	0	3	4

Vehicle Compartment Int



Roya

FULL FIELD DATA DUMP OF 2004 FARS CASE 180748 - VEHICLE FILE
 FATAL MOTOR VEHICLE TRAFFIC CRASH OCCURRING ON NOVEMBER 24, 2004 IN INDIANA
 THE CRASH INVOLVED A BMW AND A TRUCK TRACTOR
 2004 FATALITY ANALYSIS REPORTING SYSTEM (FARS) - FINAL

ST_CASE	VEHICLE #	VIN	VIN_1	VIN_2	VIN_3	VIN_4	VIN_5	VIN_6	VIN_7	VIN_8	VIN_9	VIN_10	VIN_11	VIN_12	STATE	OCCUPANTS	MAKE	MODEL	BODY TYPE
180748	1	WBABN33441JW	W	B	A	B	N	3	3	4	4	1	J	W	Indiana	2	BMW	34	2dr Sedan/HT/Coupe
180748	2	1FUJBCK94LN	1	F	U	J	B	B	C	K	9	4	L	N	Indiana	1	Freightliner	883	Truck/Tractor

ST_CASE	VEHICLE #	REGISTRATION STATE	REGISTERED VEHICLE OWNER	ROLLOVER	JACKKNIFE	TRAVEL SPEED	HAZARDOUS CARGO	TOWED TRAILING UNIT	VEHICLE CONFIGURATION	NUMBER OF AXLES	CARGO BODY TYPE	SPECIAL USE	EMERGENCY USE	IN IM
180748	1	Illinois	Driver Not Owner	No Rollover	Not Articulated	Unknown	No	No	Not Applicable	Not Applicable	Not Applicable	No Special Use	No	Cl
180748	2	Multi-In State	Business or Govt	No Rollover	No	Unknown	No	Yes/1 Unit	Tractor/Semi	5	Van/Enclosed Box	No Special Use	No	C

ST_CASE	VEHICLE #	PRINCIPAL IMPACT	UNDERRIDE/OVERRIDE	DEFORMATION	VEHICLE ROLE	MANNER LEAVING SCENE	FIRE OCCURRENCE	RELATED FACTOR 1	RELATED FACTOR 2	VEHICLE MANEUVER	CRASH AVOIDANCE MANEUVER	MOST HARMFUL EVENT	FATALS IN VEHICLE	EVENT 1
180748	1	Clock 12	No Under/Override	Disabling	Striking	Towed Away	No Fire	None	None	Going Straight	No Maneuver	Veh in Transp	1	Veh in Transp
180748	2	Clock 3	No Under/Override	Disabling	Struck	Towed Away	No Fire	None	None	Going Straight	No Maneuver	Veh in Transp	0	Veh in Transp

ST_CASE	VEHICLE #	EVENT 2	EVENT 3	EVENT 4	EVENT 5	EVENT 6	VIN LENGTH	BUS USE	GVW RATING	VEHICLE MODEL	MODEL YEAR	VIN MODEL	VIN SERIES	VIN_BT	MOTOR CARRIER ID	TRUCK FUEL CODE	WHLBASE SHORT-AUTO	WHL LONG-A
180748	1	Unknown	Unknown	Unknown	Unknown	Unknown	17	Not Used a Bus	Not Applicable	BMW 3-series	2001	5CI	***	CP	000000000000	*	1073	
180748	2	Unknown	Unknown	Unknown	Unknown	Unknown	17	Not Used a Bus	26,001 or more	FRHT COE hi ent	2004	ST2	CON	DS	5780806	D	9999	

ST_CASE	VEHICLE #	CC DISPLACEMENT	VIN WEIGHT-AUTO	TRUCK WEIGHT CODE	DRIVER PRESENCE	DRIVER DRINKING	LICENSE STATE	NON-CDL LICENSE TYPE	NON-CDL LICENSE STATUS	COMM MV LICENSE STATUS	COMPLIANCE W/LIC ENDORSEMENTS	DRIVER LICENSE TYPE COMPLIANCE	COMPLIANCE W/LIC RESTRICTIONS	VIOLATION CHARGE 1
180748	1	0	3252	0	Driver Operated	No Drinking	Illinois	Full License	Valid	No (CDL)	No Endorsements	Valid	No Restrict,N/A	None
180748	2	0	0	8	Driver Operated	No Drinking	Michigan	Full License	Valid	Valid	No Endorsements	Valid	Complied	None

Under-reporting: major problem

**FIELD DATA DUMP OF 2016 FARS CASE 120918 - VEHICLE FILE
 L. MOTOR VEHICLE TRAFFIC CRASH OCCURRING ON MAY 7, 2016 AT 4:40PM IN
 CRASH INVOLVED A TESLA AND A TRUCK TRACTOR
 FATALITY ANALYSIS REPORTING SYSTEM (FARS) - FINAL**



Executive Number	Vehicle Number	Travel Speed	Underride/Override	Rollover Type	Location of Rollover	Areas of Impact - Initial Contact Point	Extent of Damage										
120918	1	035 MPH	No Underride or Override Noted	No Rollover	No Rollover	9 Clock Point	Functional Damage										
120918	2	065 MPH	No Underride or Override Noted	No Rollover	No Rollover	12 Clock Point	Disabling Damage	Towed Due to Disabling Damage	Motor Vehicle In-Transport	None	None	No or Not Reported	Yes	Ohio	44705	Valid	Full Driver License

Joshua Brown Tesla Side Underride Crash

Under-counted and under-reported

- Inconsistency in police reports
- **No checkbox** for underreport in police reports
- Poorly understood by law enforcement
- Looking for reason for crash - not reason for **fatalities**.
- Looking at driver behavior instead of **dangerous design** of trailer.
- Lack of awareness
- Well-documented **inaccuracy of data**

How Reporters Can Help To Improve Underride Reporting

- When reporting on a truck crash, ask the investigating officer underride-related questions.
- Find out the manufacturer & year of *both* the truck-tractor *and* the trailer (VIN).
- Find out if there was any Passenger Compartment Intrusion (PCI) which often occurs with underride, i.e., were doors, windshields, or the roof caved-in or sheared off?
- Was there entrapment?
- Were the car's crashworthy features triggered, e.g., crumple zone, airbags, seatbelt tensioners?
- Use the term underride, as well as phrases like "car crashes into trailer, "goes underneath the trailer," or "directly into and underneath."
- If there are multiple occupants in the passenger vehicle, indicate where they each were sitting and whether they were trapped or injured or killed.
- Follow-up to see if people, who are transported to the hospital, died or were left with debilitating injuries.

Potential Side Guard Operational Issues

Weight of Side Guards:

- Effect on fuel cost
- Effect on trailer's frame

Road Clearance:

- Ability to navigate loading docks
- Ability to clear rail grade crossing

Effects on Under-Trailer Equipment/Access:

- Do side underride guards limit access to or displace equipment?
- Do side underride guards inhibit inspection of vehicle

Cost Benefit Analysis



Turning Tragedy Into Advocacy

Riley 2015

2015

Forever Loved, Always Missed
RILEY ERIC HEIN
1999-2015
"We didn't realize we were making memories,
we just knew we were having fun."

Manzano student identified as person killed in I-40 crash

BY NICOLE PEREZ / JOURNAL STAFF WRITER
Monday, November 16th, 2015 at 6:46pm

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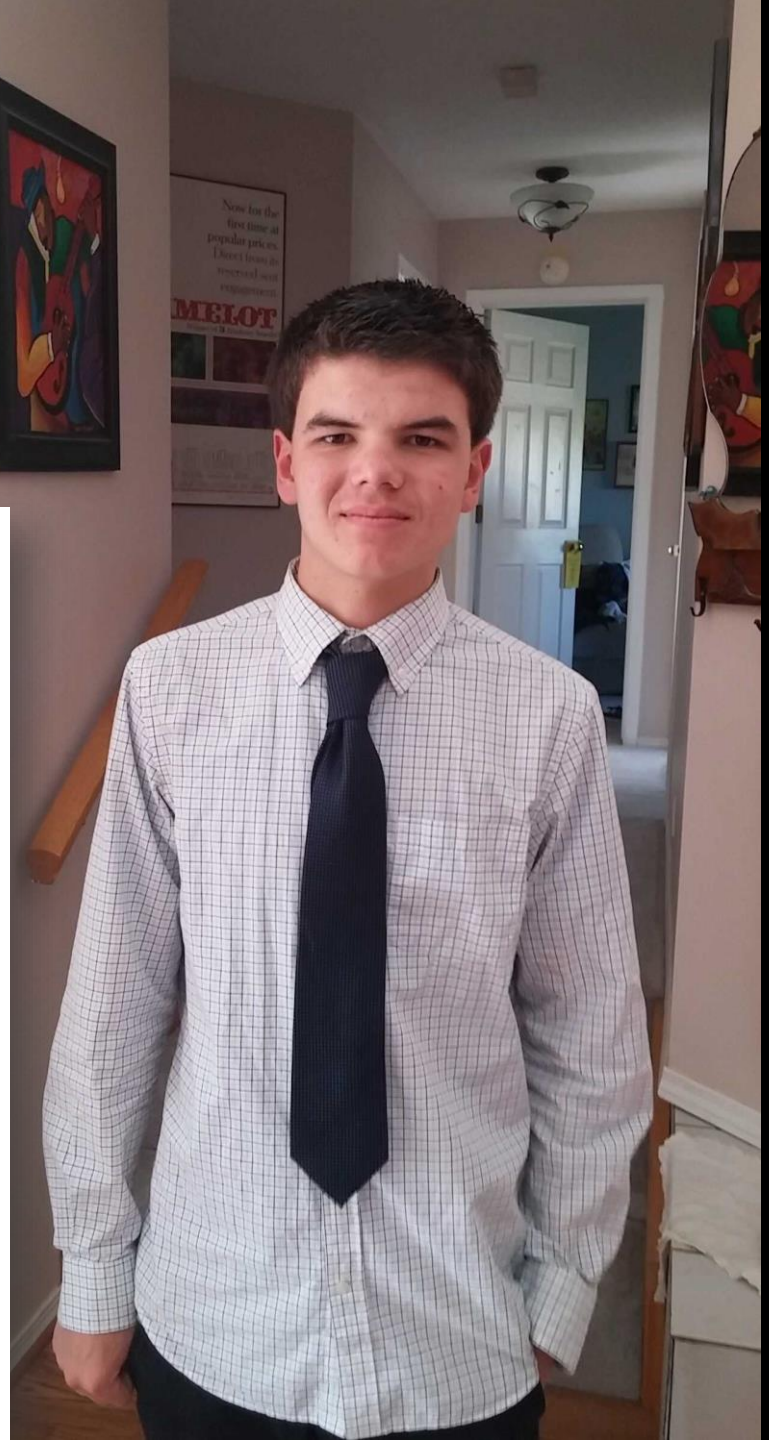
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ALBUQUERQUE, N.M. — The person killed in a fiery crash that closed I-40 Friday morning is Manzano High School junior Riley Hein, school officials confirmed Monday.

Bernalillo County Sheriff's Office deputies were called to westbound I-40 near the Tijeras exit around 6:30 a.m. for a crash between a car and a semi-trailer. Authorities closed westbound lanes of traffic all morning while they investigated.

Sheriff's Office spokesman Aaron Williamson said a passenger car and a semi-trailer that were both driving on westbound I-40 collided with one another at a curve, and the passenger car got trapped underneath the semi.

The semi dragged the car for a quarter mile, and when authorities arrived, the truck was on fire. The driver of the passenger car, whom school officials identified as Hein, was pronounced dead at the scene of the crash.



Leslie & Sophie 2018



Family petitions for more lights, no 'dark colors' on big rigs following fatal crash

By Ashley - October 13, 2020



From Cathy Forman's Change.org petition

A new petition is asking transportation officials to require several changes to commercial motor vehicles to make them more visible at night in hopes of saving lives.

The [Change.org petition](#) was created by Cathy Forman and is addressed to the National Highway Traffic Safety Administration and state transportation departments.

The petition describes an [October 2018 crash at Highway 21 and FM 1362 in Burleson County, Texas, that left Forman's sister Leslie Rosenberg, 62, and niece Sophie, 19, dead.](#)

Students, community remembering Aggie sophomore killed in car crash



(KBTX)

By Erika Fernandez

Published: Oct. 17, 2018 at 5:36 PM EDT

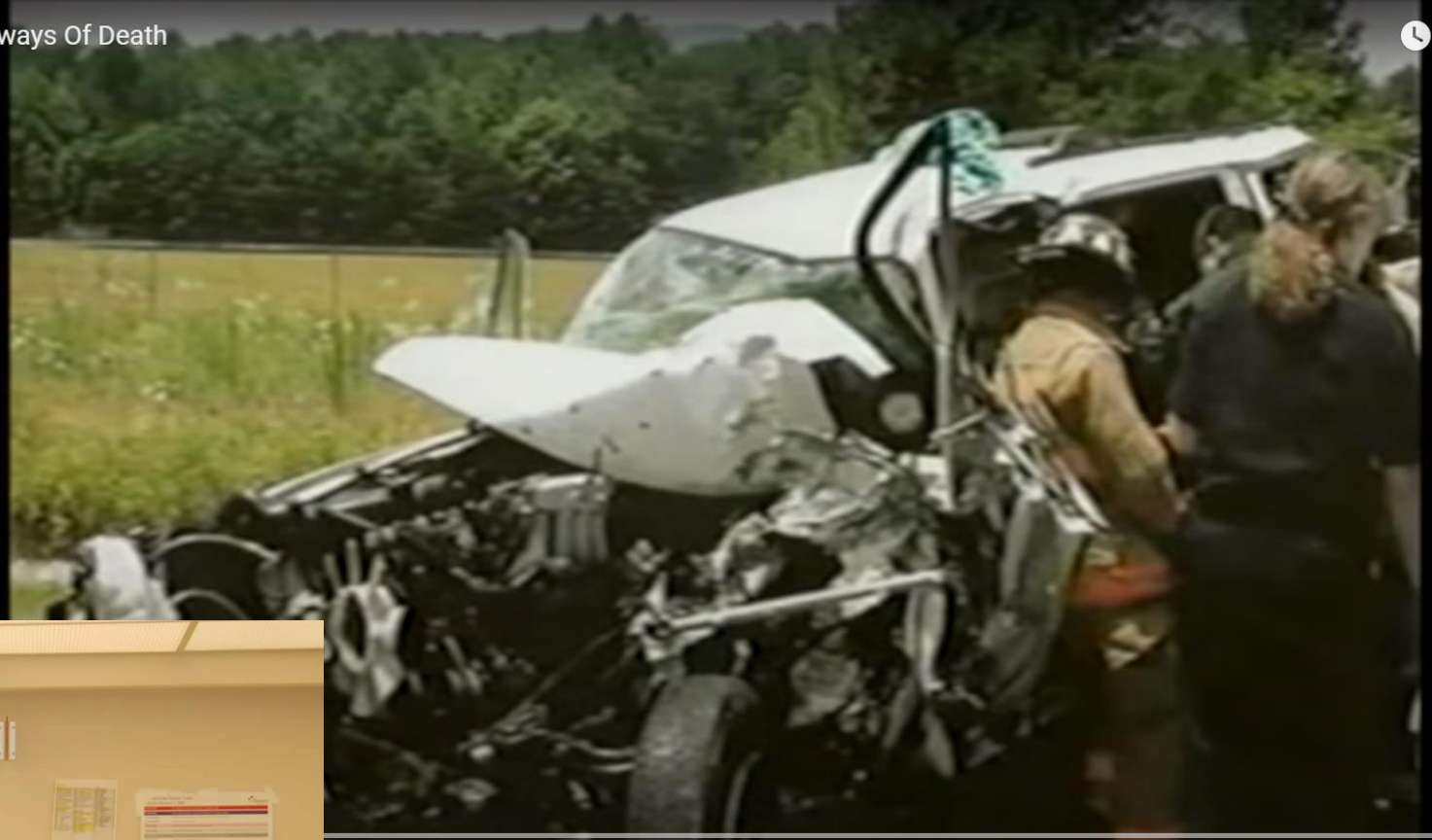


Michael

2014



Mike 2004





Q&A

A photograph of two young women standing outdoors, smiling and cheering with their arms raised. The woman on the left is wearing a white, green, and blue jacket and blue jeans. The woman on the right is wearing a blue hoodie and orange pants. They are holding hands and raising their arms in a celebratory gesture. The background shows a blurred outdoor setting with trees and a fence.

**"That's how
we're gonna win."**

**Not fighting what we hate
but saving what we love!"**

3/8/2021

**Trucking
Companies**

**Trailer
Manufacturers**

**The
Government**

▶ ⏪ 🔊 3:56 / 4:44 ⏩ ⏴ ⏵

A young girl with blonde hair, wearing a red long-sleeved sweatshirt with the text 'SINGING GRANDPAS' and blue jeans, is running happily on a paved path covered with fallen autumn leaves. The background is a forest with trees and sunlight filtering through the leaves.

**I have fought the good fight;
I have finished the course.**

3/8/2021

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- annaleahmary.com
- stopunderrides.org

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Thank you for coming and for helping to raise awareness about these preventable tragedies and the solutions available to end them.