

SUICIDE BY CRASHING INTO A HEAVY VEHICLE

The focus on professional drivers



Suicides in traffic

- Under-the-train suicides are common worldwide
- Every train driver with a prospect of a 30-year-long career might expect to experience at least one under-the-train suicide
- Train drivers are aware of the risks that somebody might jump in front of their train

- What about heavy vehicle drivers?

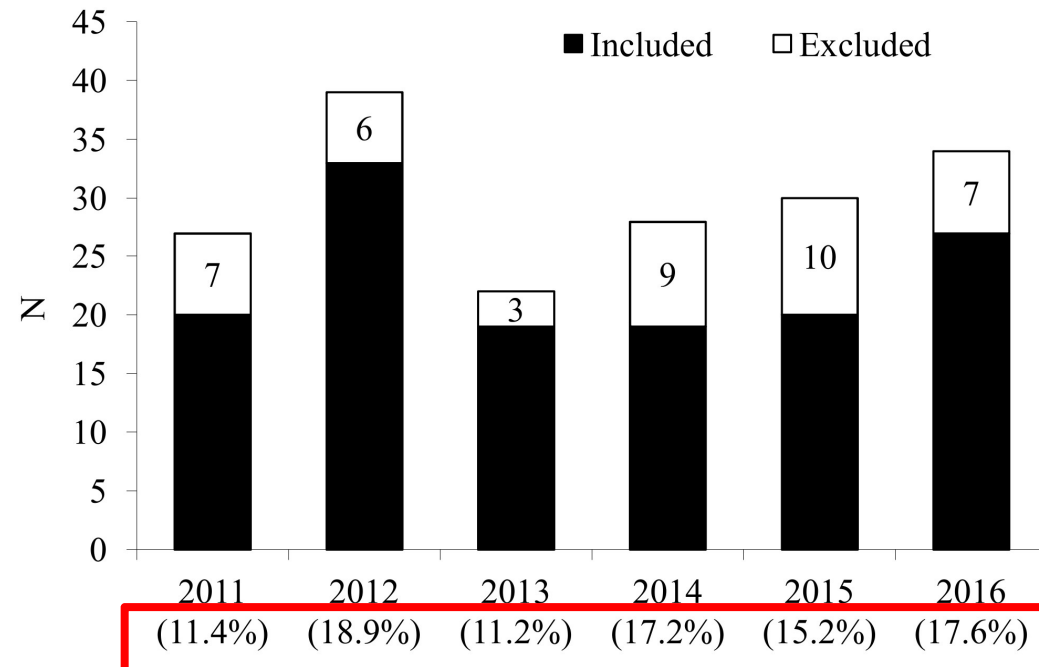


Our project

- Suicide crashes (2011–2016; N=138; Finnish crash data institute)
- Insurance consequences (for these 138 cases)
- Follow-up survey study (N=15)
- Focus group study (N=6)
- Survey (representative sample; N=863)








Suicide crashes (2011–2016; N=138; Finnish crash data institute)



Number of included (N=138) and excluded cases (N=42) by year.
Percentages in brackets represent the proportion of suicide cases of each year's motor vehicle fatal crashes.



Suicide crashes (2011–2016; N=138; Finnish crash data institute)

 N=122	 N=2	 N=10	 N=2	 N=2
119 car drivers & 3 van drivers died	2 car drivers died Passengers: 1 died & 1 serious injuries	10 car drivers died	2 car drivers died	2 car drivers died
Heavy vehicle drivers: 86 uninjured 35 minor injuries 1 serious injuries	Heavy vehicle drivers: 1 uninjured 1 minor injuries	Heavy vehicle drivers: 7 uninjured 2 minor injuries 1 serious injuries	Heavy vehicle drivers: 2 uninjured	Heavy vehicle drivers: 1 uninjured 1 minor injuries
		Passengers in a heavy vehicle: 7 uninjured 3 minor injuries	Passengers in a heavy vehicle: 4 uninjured	



Consequences

- 41 (30%) were injured (2 had serious injuries)
- 32 (23.2%) reported sick leave. No info in 72% cases; 5% went back to work immediately after the crash
- Sick leave from 2 to 161 days (mean 30 days, median 14.5 days); 12/32 were still on sick leave
- The average injury compensation paid was 9,016€ (0 to 214,430€).
- The average material compensation paid was 70,520€ (6,400€ to 272,230€).

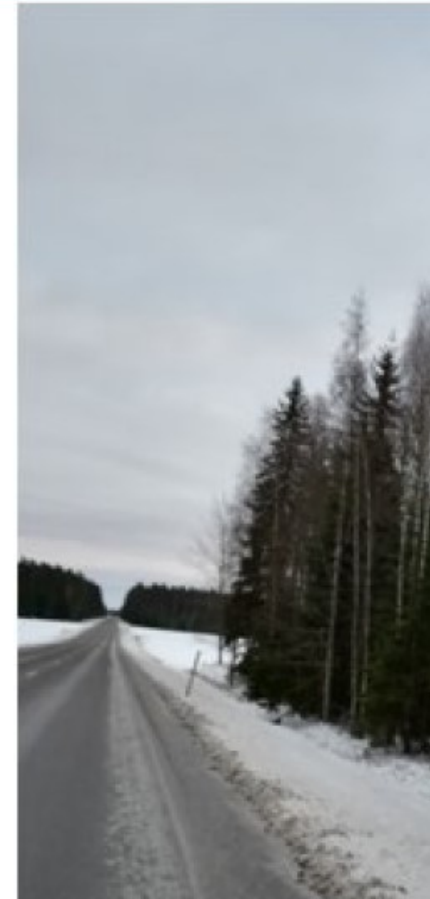


Consequences of the crashes for trucks

	Truck went off the road	Truck fell on its side	Ti
Completely	50 (36.2%)	15 (10.9%)	
Partly	53 (38.4%)	17 (12.3%)	
No	34 (24.6%)	106 (76.8%)	
Unknown	1 (0.7%)	0	
Total	138 (100%)	138 (100%)	



Consequences of the crashes for trucks



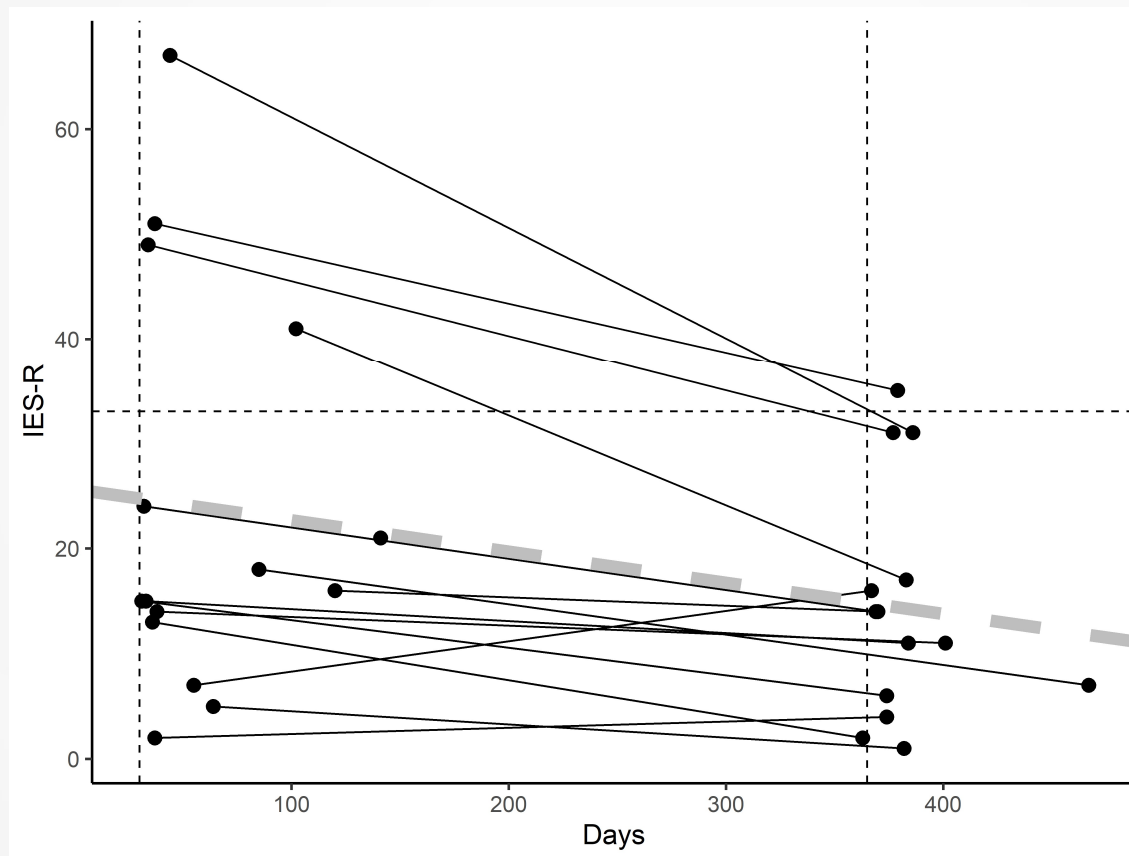


Follow-up study

- Suicides by crashing into a heavy vehicle (trucks and busses; 2017);
- In cooperation with Finnish Crash Data Institute
- 27 potential participants; 20 gave permission; 15 answered at T1 and 14/15 at T2
- Almost identical surveys one month and one year after the crash

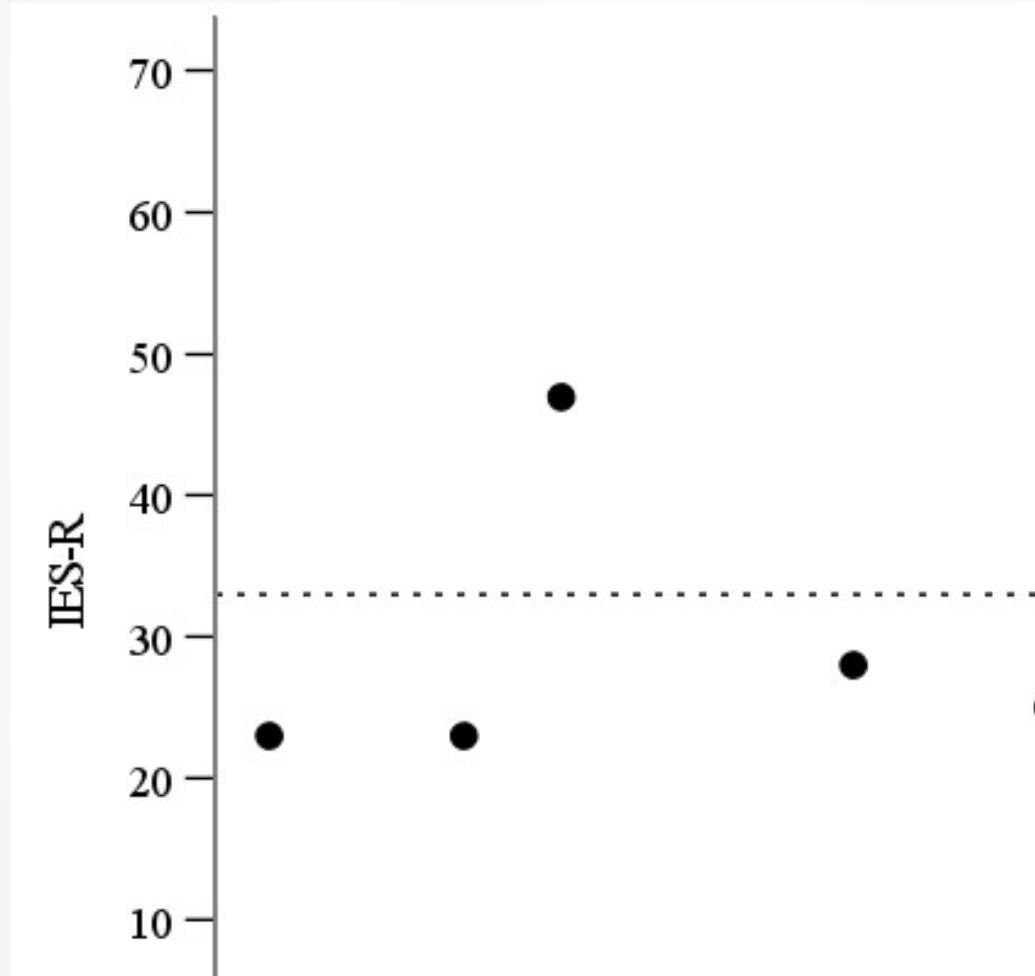


Follow-up study ($N_{T1}=15, N_{T2}=14$) Post-traumatic stress symptoms (IES-R)





Focus group study (N=6)



Cut-off score of 33



Follow-up study (N=15 at T1, N=14 at T2)

N	Injured	Sick leave (short up to 2 weeks; long: more than a month)	High IES-R score at T1	psy
1	+	short	+	
1		long	+	
1	+	long		
1	+	short		
1	+	short		
1		short		
1		short	+	
1			+	
2				
5*				



Representative sample (N=863)

	Are you afraid that someone will try to commit suicide by crashing into your vehicle?		Does thinking ab
	All sample (N=839)	Restricted sample* (N=763)	All sample (N=834)
Not at all	21.9%	21.6%	53.2%
Somewhat	51.1%	50.7%	37.2%
Moderately	18.5%	19.3%	6.5%
Quite a lot	6.2%	6.2%	2.3%
Extremely	2.3%	2.2%	0.8%
Total	100%	100%	834 (100%)



Representative sample (N=863)

- About 18% reported a suspected suicide attempt of a motor vehicle driver crashing into their vehicle, with 15% of these (i.e. 2.8% of the whole sample) also reporting a resulting crash.
- More than half reported personally knowing another professional driver who had experienced a crash caused by a suicidal driver.
- Overestimations or not -> Heavy vehicle drivers perceive road suicides as an occupational risk in their profession.



Conclusion/Discussion

- Road suicides are underestimated worldwide (Finland has multidisciplinary investigation teams)
- Heavy vehicle drivers might not get (seriously) injured, but psychological consequences...
- Seeking/getting help might not always be easy (e.g., one railway company vs. numerous small business employing heavy vehicle drivers)
- How to prevent road suicides?
- Classification is important



Publications

Radun, I. et al. (2019). **Suicide by crashing into a heavy vehicle: Professional drivers' views.** *Traffic Injury Prevention, 20*, 826–831.

Radun, I. (2019). **Suicide by crashing into a heavy vehicle: Focus on professional drivers using in-depth crash data.** *Traffic Injury Prevention, 20*, 575-580.

Radun, I., et al. (2019). **Endangering yourself to save another: A real life ethical dilemma.** *Transportation Research Part F: Traffic Psychology and Behaviour, 64*, 318-322.

Radun, I. et al. (2020). **Suicide by crashing into a heavy vehicle: A one-year follow-up study of professional drivers.** *Transportation Research Part F: Traffic Psychology and Behaviour, 73*, 318-324.

Radun, I. et al. (2021). **Suicide by crashing into a heavy vehicle: A focus group study of professional drivers.** *Industrial Health, 59*, 34–42.

Radun, I., et al. (2021). **Suicides in road traffic from the perspective of heavy vehicle drivers [in Finish].** Finnish Transport and Communications Agency Traficom



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