



	Accidents with Injuries	Percent	Fatalities	Percent
All Rear-End Accidents	45,635	100%	249 (5,5 per 1000 acc.)	100%
Rear-End involving HGV	2,800	6,1%	128	51,4%
Rear-End caused by HGV*	1,571	3,4%	58 (36 per 1000 acc.)	23,3% <b>AEBS – R131</b>
Rear-End <u>not</u> caused by HGV	1,229	2,7%	70	28,1%

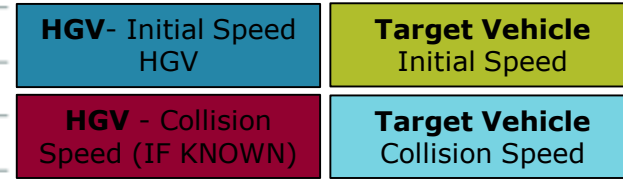
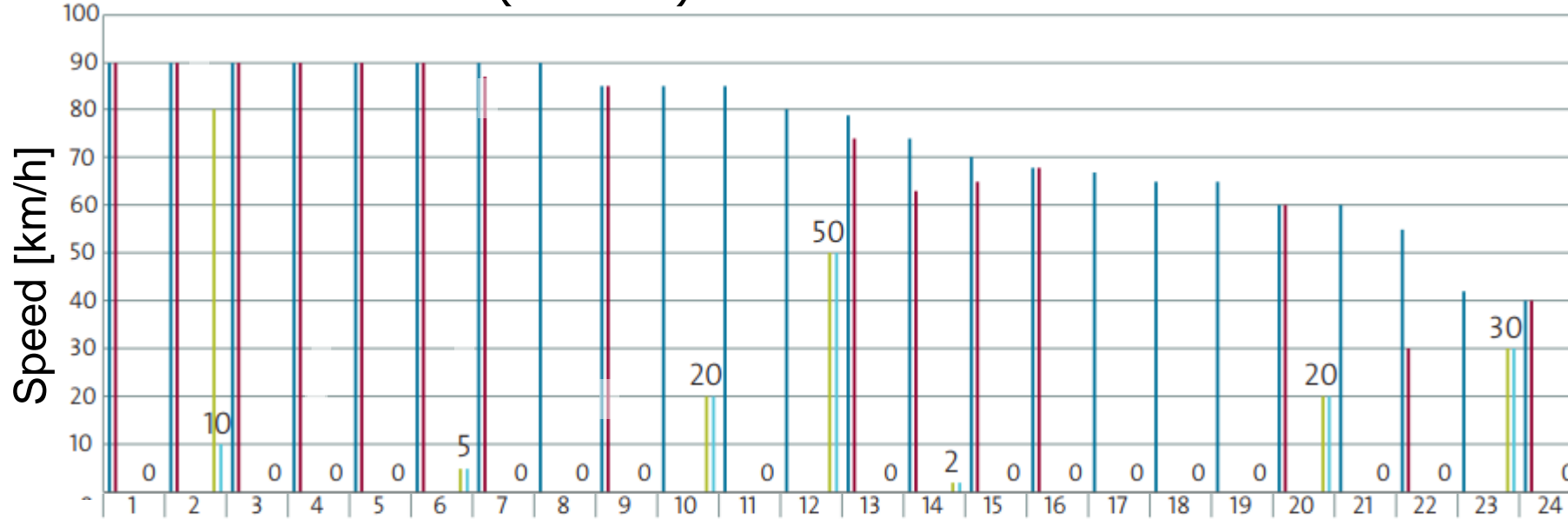
**Rear-End caused by HGV: about 1/30 of all rear-end accidents w/personal injury, but about 1/5 of all fatalities!**

Excerpts from Ad-Hoc AEBS-01-01

\* Official cause: 50%-50% Distance not sufficient – Speed too high



## 1. Insurance Cases (n = 24)



**In 75% struck vehicle is stationary**

Source: UDV (German Insurance Data)

## 2. Detailed investigations from Lower Saxony, 2017

n=57	Target moving	Target decelerating	Target stationary
All vehicles	11 (19%)	14 (24%)	32 (56%)
With AEBS	1 (6%)	4 (25%)	11 (68%)
Without AEBS	10 (26%)	9 (23%)	19 (50%)

Excerpts from GRVA-01-30



## **Observations**

1. Accident severity in rear-end accidents is much higher when these accidents involve trucks
2. In particular, rear-end accidents caused by trucks result in 36 fatalities per 1000 accidents (all rear-end: 5.5 per 1000)
3. In a large share of all truck-caused accidents, the struck vehicle is stationary (UDV → 75 % ; Lower Saxony statistics → 56 %)
4. AEBS seems to be highly effective for moving struck vehicles, but not for stationary (and stopped) struck vehicles

## **Conclusion**

1. Accidents caused by trucks striking a stationary vehicle are highly important
2. AEBS Requirements for speed reduction on stationary vehicles are not sufficient
3. Requirements need to be increased if possible