



Havarikommisjonen
for vejtrafikulykker

Head on collisions

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Survey

Head on collisions:

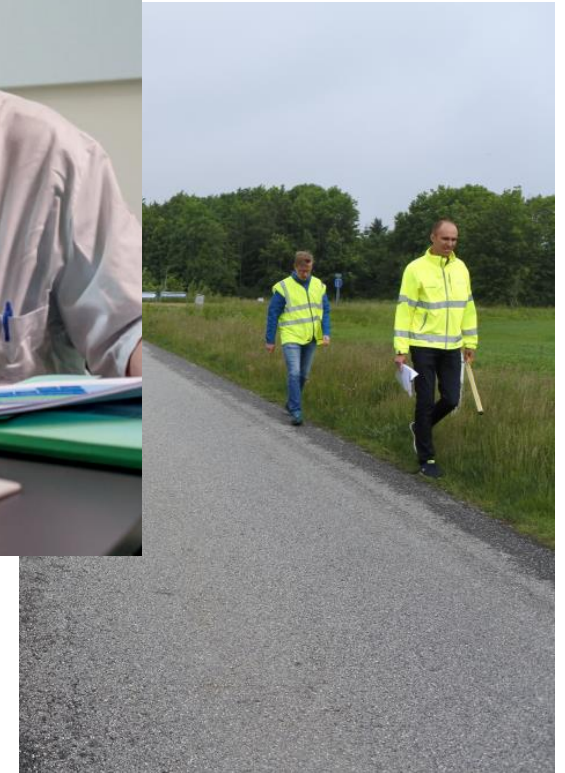
- Between motor vehicles
- With serious injury
- Outside urban areas
- 28 crashes
- September 2020 to November 2021



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When the crash happens





28 drivers and 33 counterparts

Førerne i forkert vognbane

-  20 personbiler
-  5 varebiler
-  3 motorcykler

Modparterne

-  19 personbiler
-  8 lastbiler
-  4 varebiler
-  1 motorcykel
-  1 traktor



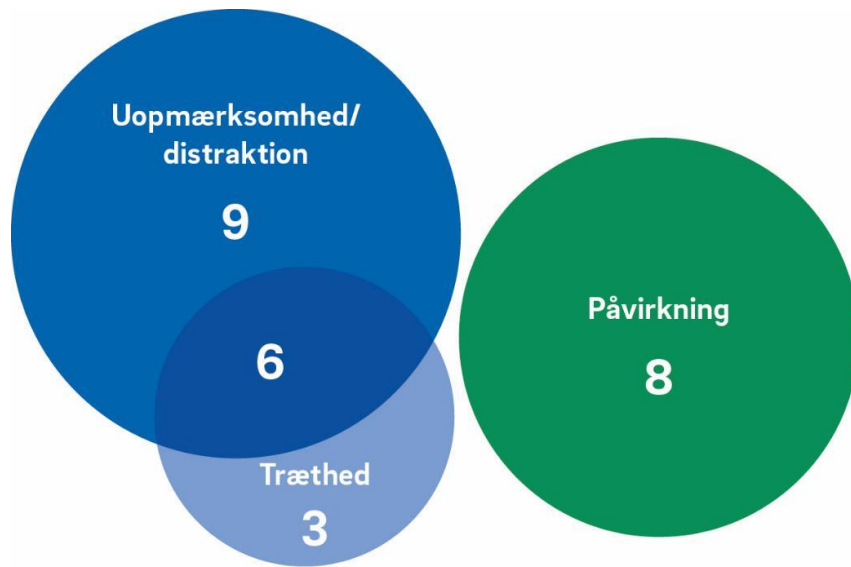
Why did the drivers end up in the opposite lane?





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The 3 most common causes



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Inattention/ distraction

- **More than 50% of the accidents**
- Uncomplicated stretches of road
- Both curves and straight road
- Technology distracted the driving
- Others were in their own mind
- Fatigue did affect the driving



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Fatigue

- **In one third of the crashes**
- Not complicated road environment
- Trips not longer than 1,5 hours
- Young men (18-20) – lack of sleep, big work load
- 55+ men on excursion/leisure trips
- Very often with sleeping passengers



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Under the influence

8 of the drivers ending up in the wrong/opposite lane were driving under the influence

- Narcotics, medicine, alcohol – in some cases – a mix
- Indications of abuse



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Some drivers lost control

Often in combination with inattention/high speed

Examples:

- Tall van on slippery road, with heavy winds
- Caused by inattention one driver ended up, with a set of wheels off the road
- Motorbike driving with too high speed into a sharp curve



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2 drivers steered to the opposing lane on purpose

- A risky overtaking maneuver
- Another driver cut the corner, not seeing the other vehicle coming – maybe because of high grass?



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The counterparts

A man with short brown hair, wearing a light blue button-down shirt and a silver watch, is driving a car. He has his hands raised in the air, palms facing forward, with a wide, joyful smile on his face. The car's interior is visible, including the black steering wheel in the foreground and a ceiling-mounted light fixture. The window shows a bright, overcast sky and a lush green field with some white flowers in the distance.

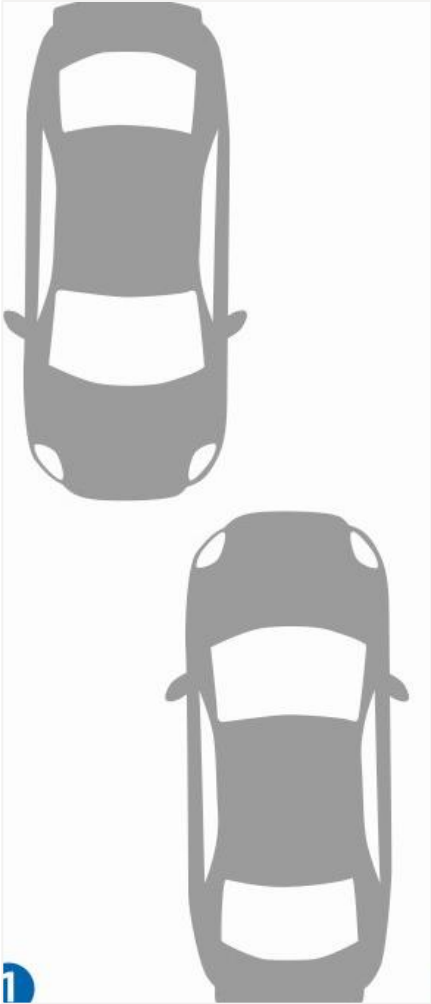


In best cases, they only had a few seconds

- About half of the counter parts had less than 1,5 second to react – which means there were no time to react.
- Others had 2-4 seconds and managed to brake more or less.

The injuries





Small "overlap" of 10%

Injuries worse than expected.

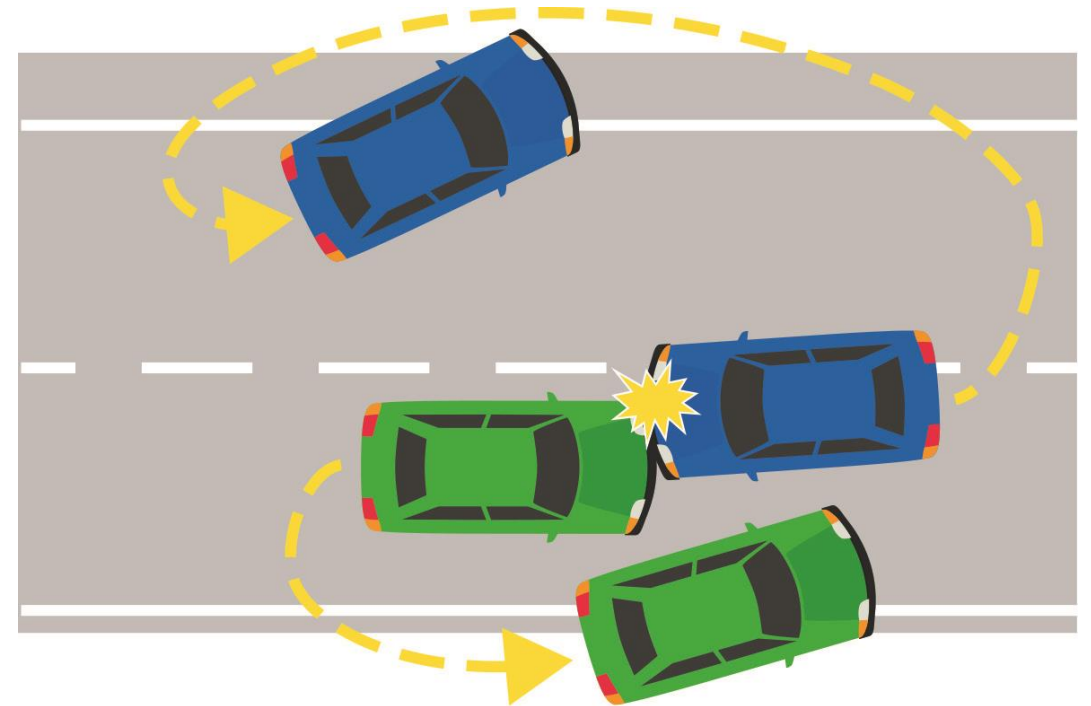
The vehicles' ability to absorb the energy were limited

- The A-post were pushed into the cabin
- While the panel and driving wheel are pushed towards the driver
- At the same time the driver were pushed forward



A little less serious at overlaps up to 50%

- Vehicles better at absorbing the forces
- The vehicles typically rotated after the initial "touch" – reducing the personal injuries





Weight determines the level of injuries too



In 12 cases, one part was much heavier than the other – personal vehicles hitting a truck and a motorcycle hitting a car.

Typical more than 50% overlap.

11 killed in the 12 crashes



High speed and errors in seatbelt use

- Rural road speeds in itself are dangerous.
- In 5-6 crashes the injuries got even worse because of speeding
- In 6 cases the seat belt were not used properly, resulting in injuries
- In one case the truck driver was harmed too.





Sitting too close to the steering wheel

In 3 cases, the driver were sitting too close to the steering wheel, resulting in injuries to the face when the airbag went off.

A photograph of a wet asphalt road, likely after rain, with a white dashed line running along the edge. A large blue circular graphic is overlaid on the left side of the image. The word "Recommendations" is written in white text across the blue circle.

Recommendations



Inattention and fatigue

Campaigns

- Focus on the driving, even if the driving seems to be very easy
- React if you are tired
- Powernaps
- Short breaks – stretch the legs
- As a passenger – speak to the driver, be a responsible passenger





Driving under the influence



- Campaigns
- Focus on the abuse/misuse – f.x. support the police in their effort to introduce treatment opportunities (when caught)



Safety equipment and rumble stripes

- **Up to 70 %** of the 28 crashes could potentially have been avoided if the lane assist (ELKS) was available/used
- **Up to 40 %** of the 28 crashes could potentially have been avoided with rumble stripes





Strengthen EU legal requirements

Testing also with "overlap" of 10%

Alternatively make it a part of the Euro NCAP's testing.



Questions?