



**Havarikommisjonen**  
for vejtrafikulykker

# Truck accidents

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# Danish AIB

Created in 2001

The purpose of AIB is to:

- Compile knowledge
- Raise awareness
- Make recommendations
- Encourage preventive actions
- Not to determine the question of guilt





# Organisation

## Board:

- Road Administration (member and chair)
- National Police
- Transport Authority
- Danish Technical University (Dep transport)
- University Teaching Hospital

## Crash investigation:

- Police
- Medical doctor
- Vehicle inspector
- Road engineers
- Psychologist

## Secretariat:

- Project manager
- Team-coordinator
- Individuals from the Road crash investigation team





# Method

- Collection of accident data within a certain theme
- Accident reports (20-40)
- Thematic report incl. recommendations







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# Truck accidents

- 30 accidents (2014)
- Launched Nov 2016
- 4 main types of accidents (urban/rural areas)



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## Ulykker med lastbiler

Temarapport nr. 13  
2016





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# Scope

- Truck accidents with personal injuries
  - Whole country
  - All type of roads
  - Data from 2014
- 
- 5 killed
  - 10 seriously injured
  - 30 moderate injuries





# Urban areas

- Accidents **involving cyclists and pedestrians** (9)





# Accidents involving cyclists and pedestrians



- 4 right-turn accidents
- 2 left-turn accidents
- 2 accidents square
- 1 accident involving a crane
- Complex to "see all" in mixed busy traffic
- Distribution of goods difficult





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# Examples of safety measures

- Take sufficient time to look for other especially vulnerable road users
- Survey on how people use the mirrors and windows
- Obligatory stop before turning
- Separation of phases at intersections





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# Other potential measures

- Those hiring transport companies must demand higher road safety standards e.g. in cities with many bikes, - e.g. lower windows
- Government should lead
- Establish safer environment for delivering goods in cities.



# Rural areas



- Accidents on **road sections** (8), often on long, straight stretches of motorways or dual carriageways (rear-end collisions, drifting)
- Accidents **when crossing and turning** (6), truck turning in front of another vehicle.
- Accidents where the truck **was accidentally hit** (7). Truck drivers or trucks played no part in causing the accident.





# Accidents on road sections



- Motorway and dual carriageways
- 5 rear-end collisions
- 3 drifting of the road
- Improper attention
- Sleepiness
- Speed
- Weak edges of the road





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# Examples of safety measures

- Campaigns focusing on staying attentive while driving
- Better road safety policies in companies
- Road edges to be stronger
- Safety equipment in trucks to include automatic emergency brakes with pedestrian detection, ISA, sleep detector etc.



# Accidents when crossing and turning

- 2 lane roads
  - 3 accidents when turning onto a bigger road
  - 2 accidents when turning away from the bigger road
  - 1 accident /intersection
- 
- Improper orientation
  - Speed





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# Examples of safety measures

- Enough time to orientate
- Better marking of little side roads and driveways
- Campaigns on attention





# Trucks accidentally hit

- 4 rear-end collisions
- 2 head-on accidents
- 1 acc entering main road
- Orientation error from the other part



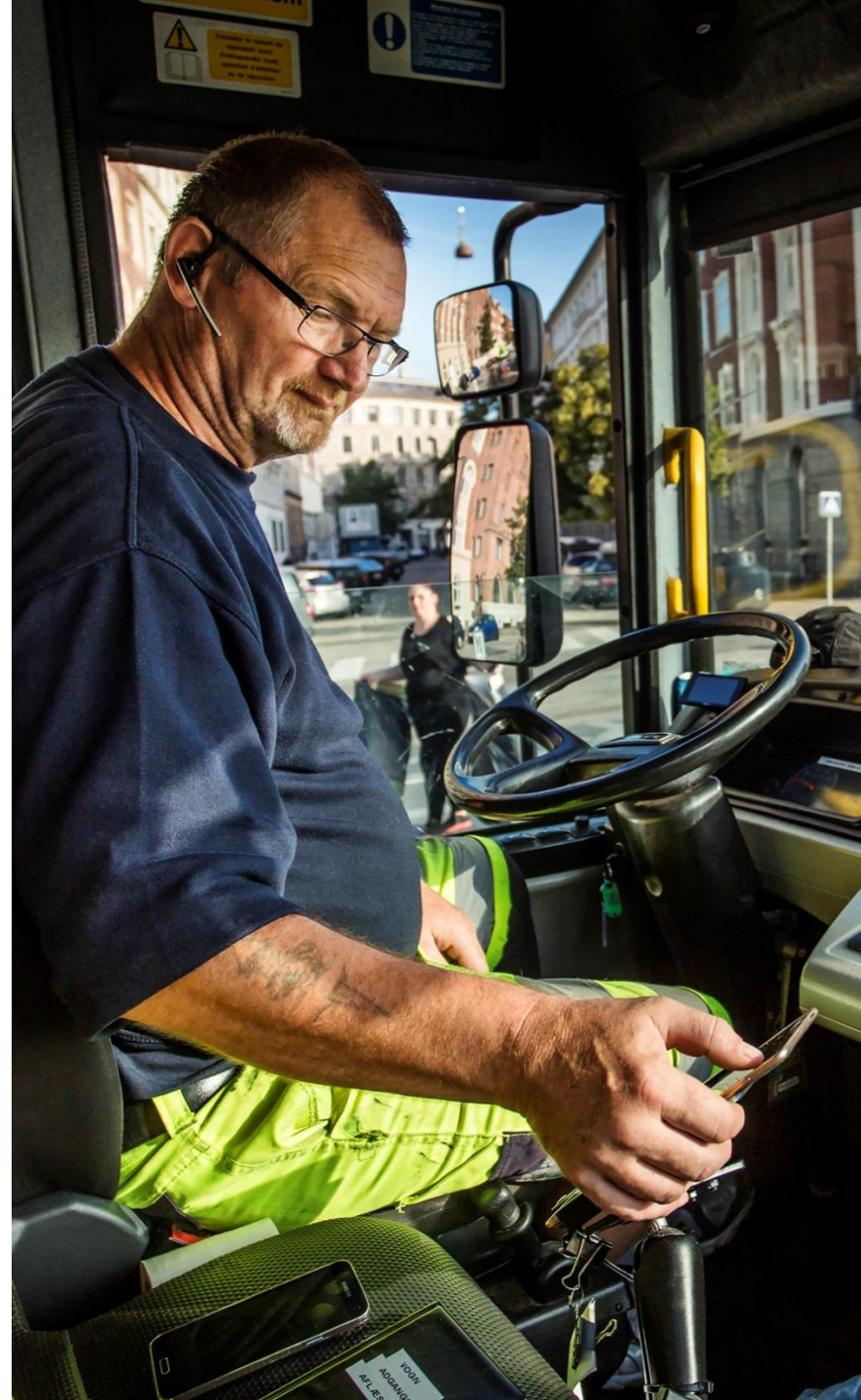




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# Working conditions

- Primarily haulage
- Many stops
- Experienced drivers
- Long working days
- Trucks need to be in good standards and well-maintained





# The Trucks



- 4 vehicle errors leading to crash
- 4-5 mirrors not adjusted
- Things in the way for direct vision
- Not the latest safety equipment e.g. emergency braking systems or lane changing alarms



# Main points

- Insufficient orientation/attention 22/30 accidents, drivers and other parties
  - Rushed orientation in complex situations
  - Inattention and sleepiness in "easy" situations
- Trucks with direct vision could have eliminated the accidents in 4/9 accidents with bikes and peds
- Vehicle errors and illegal driving (speeding, resting time etc.) counted for 1/3 of the accidents
- 19/30 could have been prevented with better safety equipment, like ped detection, automatic braking systems.



# Key recommendations



- Drivers must take the necessary time for orientation and keep their focus on driving. Complex/monotonous traffic situations
- Those hiring transport companies must demand higher road safety standards, and the government should lead by example
- Increased control of companies, trucks and drivers