



Driver distraction and inattention

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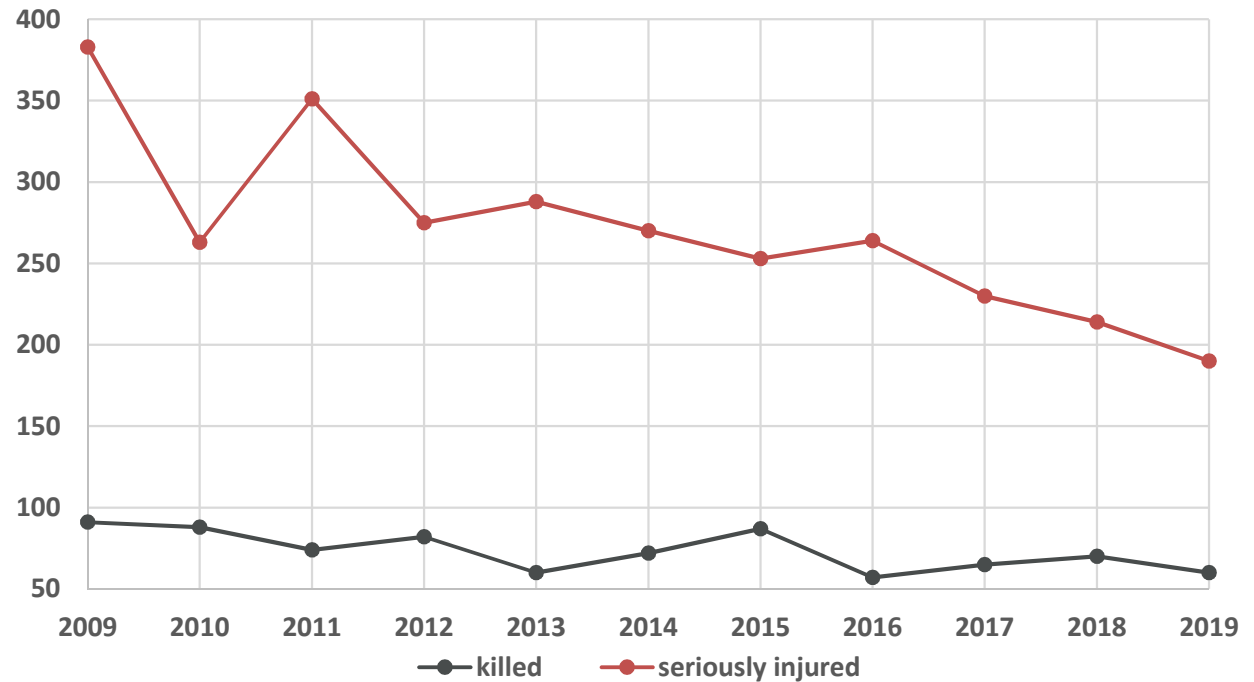
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Number of victims due to driver distraction (generally)

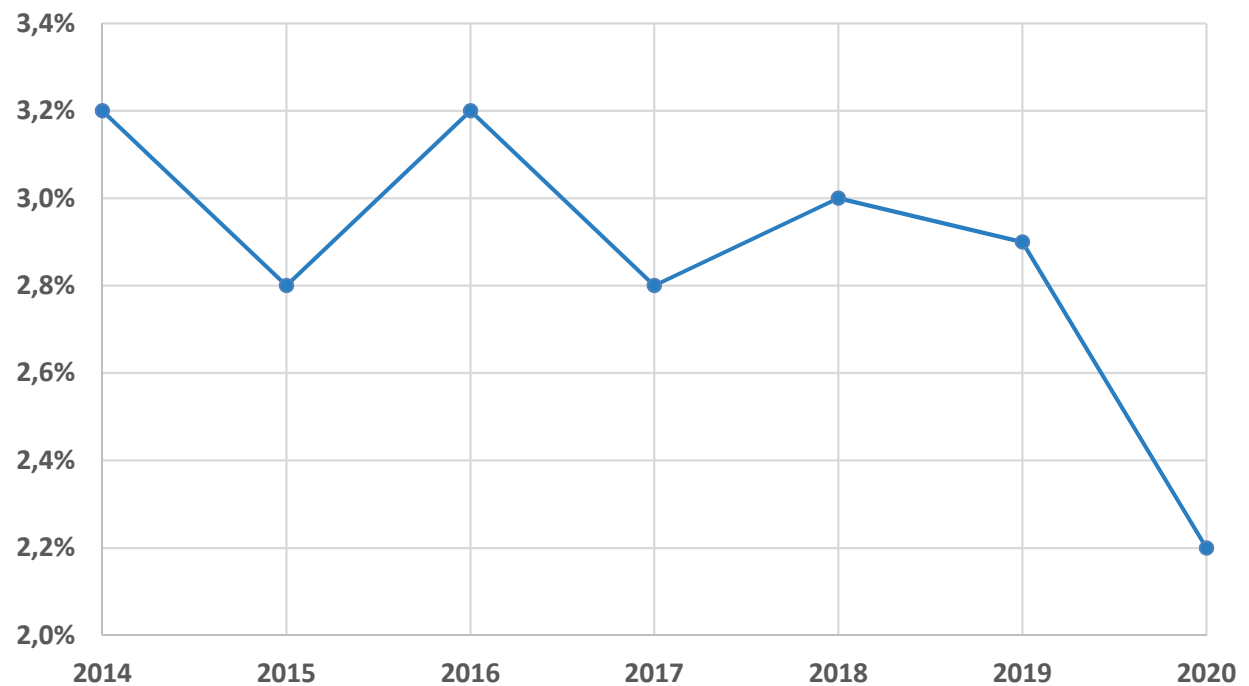
Approximately 11% of all fatal and serious accidents

The Czech Traffic Police register only accidents with a **distraction effect in general**, but not with a mobile phone distraction in particular.



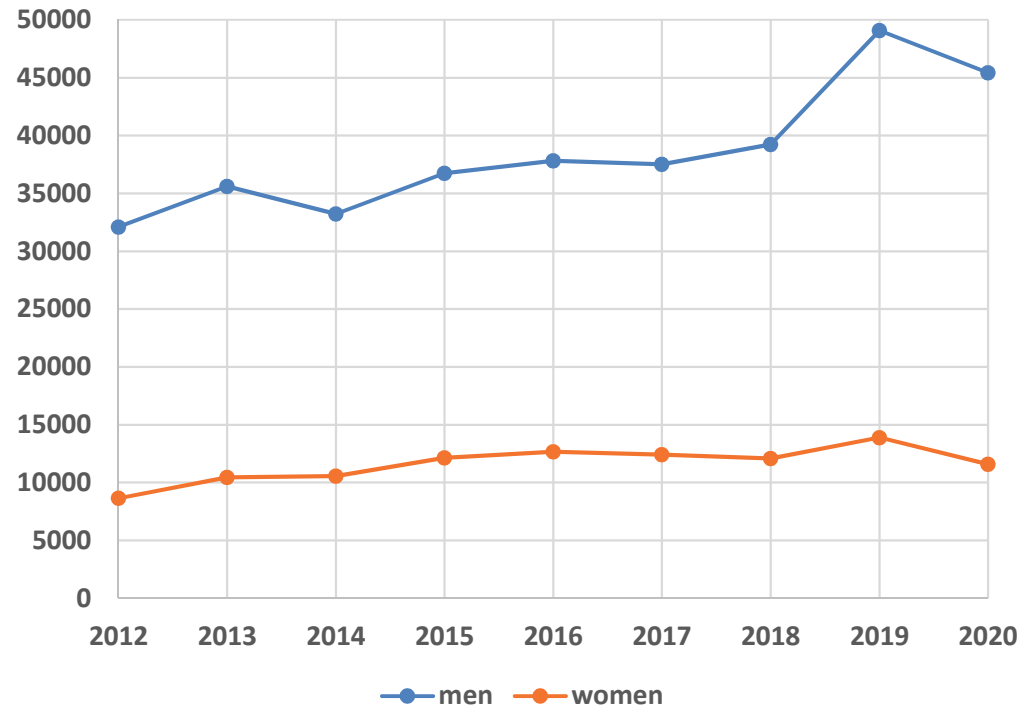
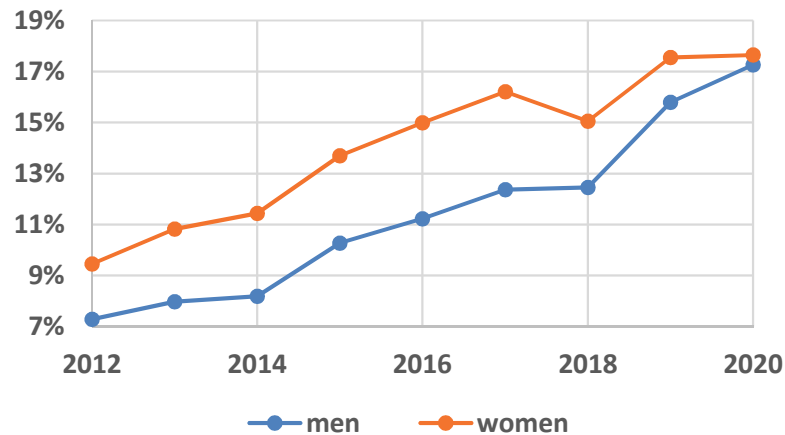
Share of drivers phoning by driving

This parameter is observed by the CDV as one of the **key performance indicators (KPI) in the road safety.**



Number of offences due to phoning by driving

Phoning has a larger share in offences of women not men, but these numbers are gradually approaching, and in 2020 this share reached 17 % of all offences of women than men



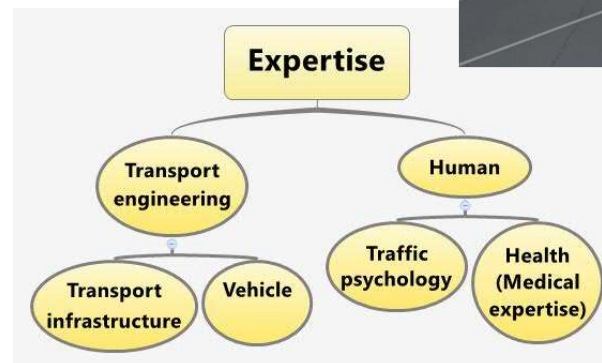
Czech In-depth Accident Study (CzIDAS)

Data from In-depth Accident Analysis

- provide a comprehensive view of all the factors related to a particular accident,
- serve to identify the characteristics leading to the crash occurrence and affect its consequences.

The in-depth accident investigation teams document all relevant information on

- traffic environment
- vehicles
- human factor



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Inattention risk factors

Inattention – one of the most frequent factors contributing to the accident occurrence

Classification of inattention causes (based on psychologist interview)

The most frequent inattention risk factors (all road users)

- **Overloading attention/multitasking** – 32 %
- **Distraction** (external and internal) – 17 %
- **Routine and monotonous ride**

Age characteristics

- **Children** – inattention – insufficient ability to process large information flow from road traffic environment
- **Seniors** – inattention due to overloading attention especially in comprehensive road situation – more frequent intersection accidents

Vehicle – pedestrian accidents (vehicle driver 45 %, pedestrian 37 %)



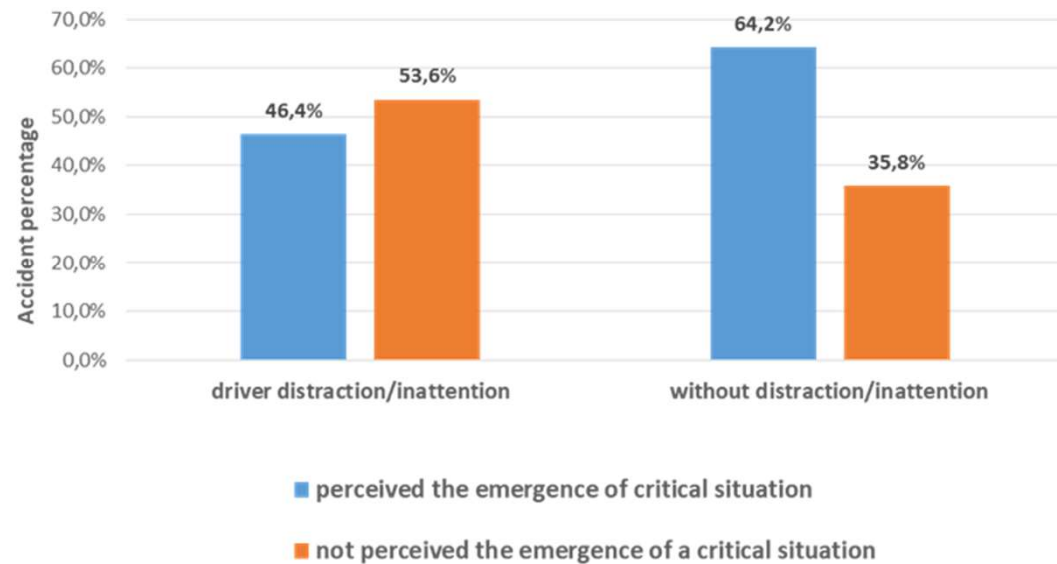
Driver perception and reaction

Drivers perception and reaction could be affected by various factors

- Age
- Gender
- Inattention, etc.

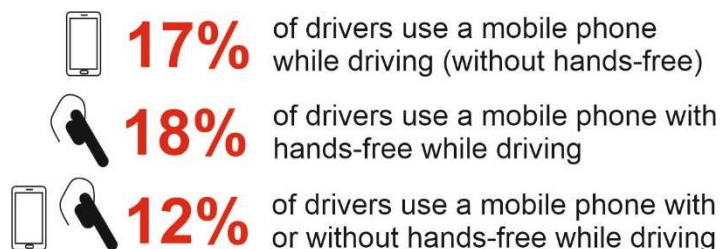


Driver perception of critical situation in real road traffic



Using of mobile phone while driving

- Mobile phone use affects a wide spectrum of variables involved in safe driving (motoric aspect – holding/manipulating, visual attention, auditory and cognitive aspects)
- **Using mobile phone while driving: hands-free/hand-held**
- Cognitive attention is influenced by phone conversation itself (including hands-free calls)
- Especially dangerous are comprehensive and emotionally demanding phone calls
- **CzIDAS data** – focus on accident participants



Using mobile phone without handsfree

- Phone conversation (3 % often, 11 % rarely)
- Texting, etc. (17 % often, 6 % rarely)



Using of mobile phone while driving: age

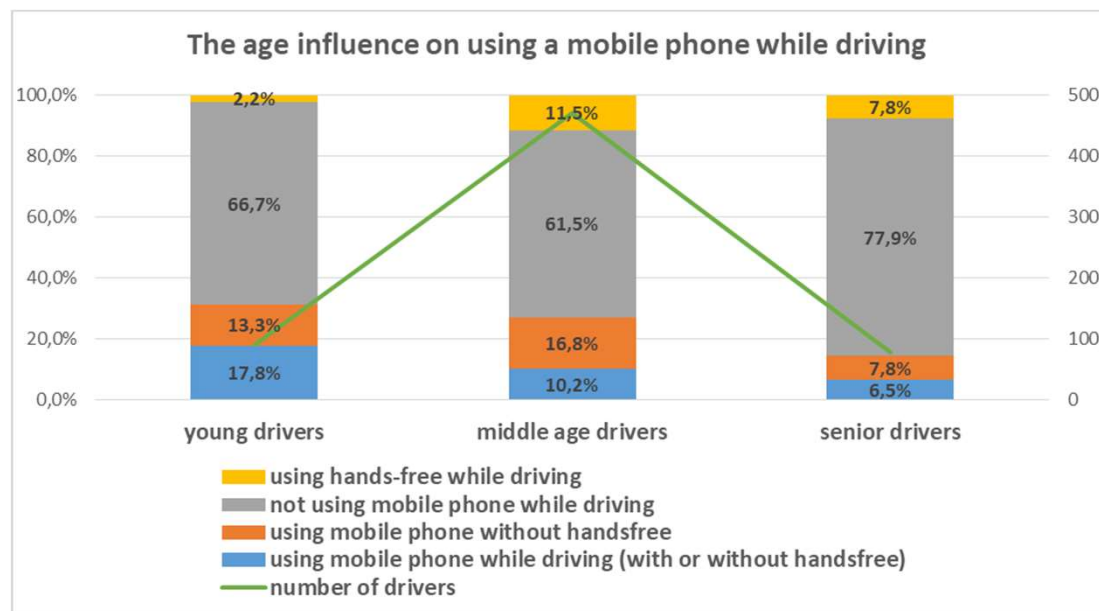
Young drivers between 18-24 years use hands-free up to 2.5 times more often (46 %) than a group of drivers with age over 65 years (17.6% cases). Young drivers also use mobile phones more often than middle-aged drivers.

Young drivers (18-24 years old)

- use more frequently mobile phone while driving (with or without handsfree)
- less frequently use mobile phone only with handsfree

Senior drivers (more than 65 years old)

- less frequently use mobile phone while driving

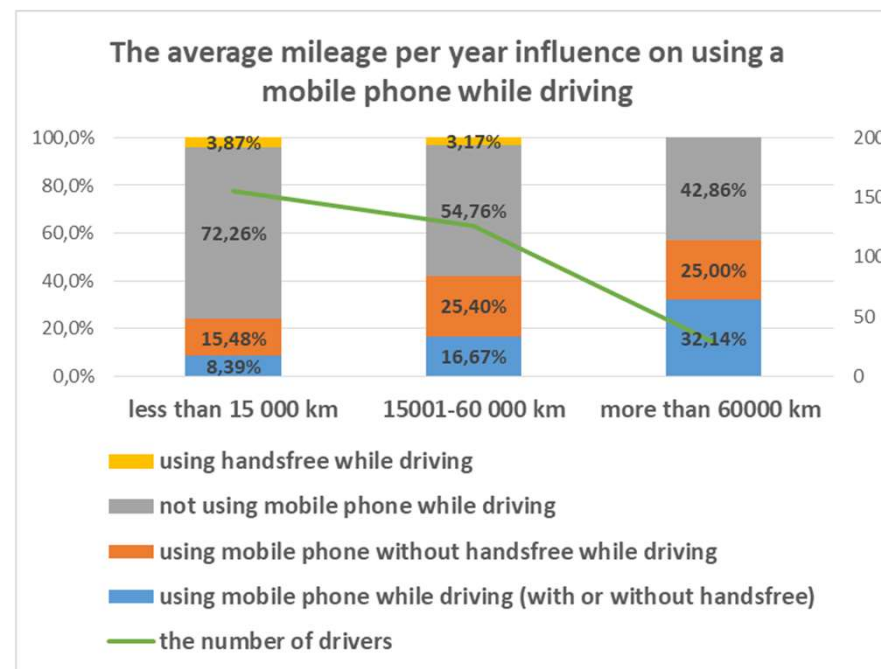


Using of mobile phone while driving: milleage

Annual milleage

- The frequency of mobile phone usage rises with the increasing annual mileage.
- Drivers who drive more than 15.000 kilometres a year more likely use mobile phone while driving

Mileage per year	Not using	Handheld phone	Handling phone
< 15.000	++	○	○
15.000-60.000	○	○	+
>60.000	--	+	○



Using of mobile phone while driving: personal habits

Personal characteristics:

- Driving style – the tendency to risk (risky drivers, aggressive driving style) is related to more frequent use of mobile phone
- Driving skills self-assessment – higher self-assessment of driving skills is related to more frequent use of mobile phone

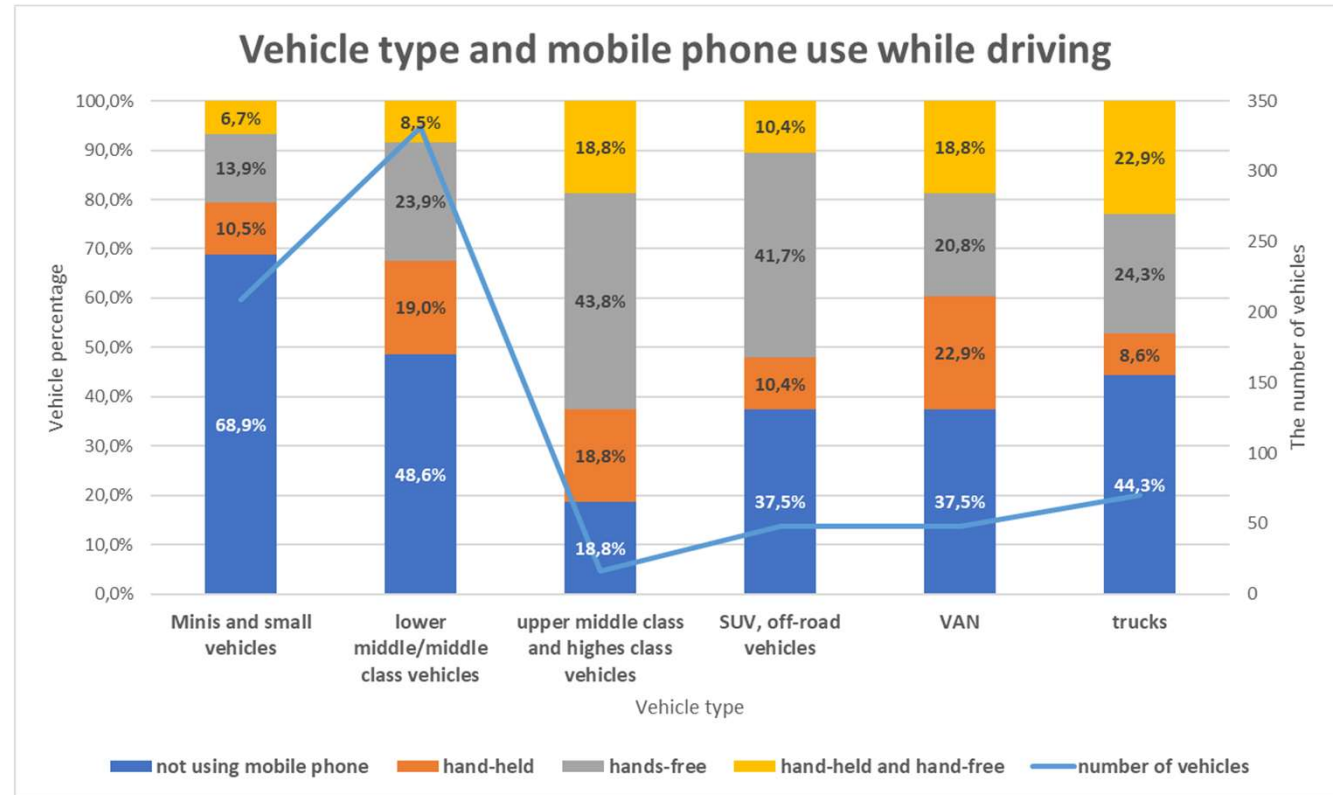
The typical user of mobile phone while driving has a tendency to risky driving and considers himself an excellent driver

Using of mobile phone while driving: vehicle characteristics

Greater sense of safety (driving of modern vehicle – more safety features: active/passive systems)

- Drivers of older vehicles (manufacture year up to 1995: 78 % do not use mobile phone while driving, manufacture year up to 2000 (1995 - 2000): 64 % do not use mobile phone while driving,
- Drivers of modern vehicles - manufacture year 2016 -2020: 30 % do not use mobile phone while driving)

Vehicle type: minimalisation of hand-held mobile phone use by increase of in-vehicle systems including integrated hands-free





Thank you for your attention

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