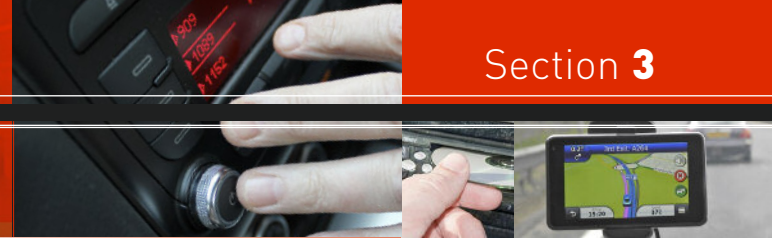


Driven to distraction



IN-VEHICLE TECHNOLOGY

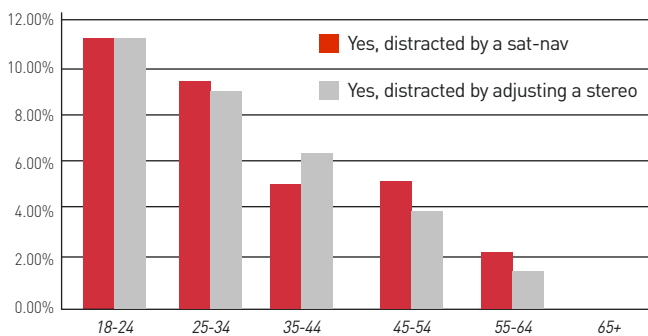
Q1: In the past year, have you braked suddenly or swerved because you were slow to notice a hazard when distracted (e.g. because you didn't notice the car ahead stopping in time)?

Fiddling with a sat-nav, stereo or other in-car technology is one of the most common forms of distraction that can put drivers at risk of causing a devastating crash. One in 14 drivers (7%) admit to having had a near miss, either braking suddenly or swerving, because they were distracted by a sat-nav, and the same proportion admit a near miss because they were adjusting their stereo.

Younger drivers are more likely to have had a near miss caused by in-vehicle technology. One in 10 (11%) 18-24 year olds admitted being distracted by both sat-navs and stereos, falling to only 2% for sat-navs and 1% for stereos among 55-64 year olds.

- 7% said yes, distracted by a sat-nav
- 7% said yes, distracted by adjusting the stereo
- 3% said yes, distracted by a mobile phone
- 2% said yes, distracted by food or drink
- 12% said yes, distracted by passengers
- 6% said yes, distracted by kids in the back
- 21% said yes, distracted by something else
- 60% said no

Figure 1: In the past year, have you braked suddenly or swerved because you were slow to notice a hazard when distracted (e.g. because you didn't notice the car ahead stopping in time)? (responses by age group)



THE FACTS: IN-VEHICLE TECHNOLOGY

- There is some evidence that using a sat-nav can increase driver speed and reduce observation¹. However, research has also found that voice-based in-vehicle navigation is safer than using a visual display or paper map, as it allows the driver to navigate without looking away from the road².
- Listening to loud music has been found to slow drivers' reaction times, and encourages aggressive driving³. It can also prevent drivers hearing what is going on around them. Adjusting the controls of radios or music players can be very dangerous. Several studies have found that operating a stereo while driving leads to slower reaction times and more errors such as lane departure⁴.
- Voice-operated controls to allow the driver to complete tasks such as operating the radio are intended to reduce distraction by removing the need for the driver to look away from the road. However, research has found that these devices also harm drivers' ability to concentrate⁵, and some speech-to-text systems can be even more distracting than a phone call⁶.
- Devices such as cruise control, aimed at reducing the driver's workload, can have the unintended side-effect of making drivers less attentive and more susceptible to fatigue⁷, and can cause slower reaction times⁸.
- Some vehicles now come equipped with entertainment and communications technology that enables drivers to carry out tasks, or access information or entertainment, completely unrelated to driving, such as checking social media. Research showing the dangers of accessing information or engaging in communications via mobile phones (see section 2 of this report) suggests that using such technology at the wheel would pose a significant danger.
- Trying to carry out any secondary activity at the wheel is shown to make you two to three times more likely to crash, with more complex activities posing a higher risk⁹.



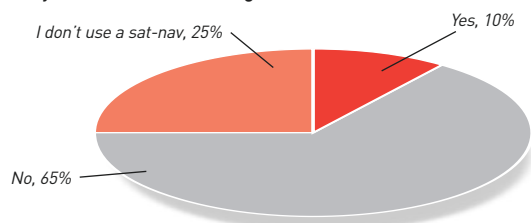
Driven to distraction

Q2: In the past year, have you made an illegal or risky manoeuvre to rectify a mistake when following sat-nav instructions?

Sat-navs are there to help drivers focus on the road, rather than having to worry about directions. However, they can have unintended and risky side-effects if the driver becomes over-reliant and less alert to where they are going. Worryingly, more than one in seven (15%) drivers who use a sat-nav admit to making an illegal or risky manoeuvre to correct a mistake while following its instructions.

- One in 10 (10%) said yes (15% of those who have used a sat-nav)
- Two thirds (65%) said no (85% of those have used a sat-nav)
- A quarter (25%) said they don't use a sat-nav

Figure 2: In the past year, have you made an illegal or risky manoeuvre to rectify a mistake when following sat-nav instructions?



ADVICE FOR DRIVERS: STAY FOCUSED

Many modern vehicles come equipped with technology aimed at making the driver safer or more comfortable. However, some in-vehicle technology can pose a dangerous distraction.

If you use a sat-nav, programme it before starting your journey and never while driving. Fiddling with the sat-nav will take your eyes and mind off the road with potentially lethal consequences. Don't rely on your sat-nav to notify you of problems ahead – stay alert.

Remember, a sat-nav is there to help you keep focused on driving rather than worry about directions, but it's not there to make all the decisions for you. You still need to look at signs, particularly those warning of hazards or speed limits, and watch for people and hazards.

Some other technologies now being fitted in vehicles enable drivers to carry out tasks, or access information or entertainment, that are completely unrelated to driving, such as checking social media. Just like using a mobile phone, using these functions can pose a significant danger, so you should avoid them completely while driving. You might think you can get away with multi-tasking at the wheel, but research shows otherwise.

THE CONSEQUENCES

On 15 February 2005, Pauline Rogers, 52, from Birmingham, was halfway across a zebra crossing when a car hit her. The driver admitted he didn't see Pauline as he was changing a music tape. Pauline was knocked unconscious. Her face and head took brunt of the crash and almost every bone in her face was broken. She now has metal plates in her head and her mouth had to be wired together as both her jaw and nose were broken. She was in a coma for three weeks. The driver was banned from driving for six months, and fined just £200 with £80 court costs.

Pauline says: "My life was turned upside down for the sake of changing a tape in the car. I urge every driver to wake up to the fact that they are driving a potentially lethal weapon. They should be concentrating 100% on the job of driving at all times if they want to get from A to B safely. Changing the radio, eating, phoning or looking at a sat-nav takes your eyes and mind off the road so you could quite easily miss a pedestrian on a zebra crossing, like me."

End notes

1. *Can sat navs reduce drivers' performance?* Royal Holloway University of London, 2012
2. *Voice-based navigation is a safer way to get around*, Virginia Tech Transportation Institute, 2011
3. *Contractile Activity and Noise Impair Simple and Complex Vigilance Tasks*, Memorial University of Newfoundland, 2004
4. *Driver distraction: a review of the literature*, Monash University Accident Research Centre, 2003
5. *Listening and responding to questions harms drivers' ability to focus*, University of Toronto, 2013
6. *Speech-to-text systems distract drivers more than talking on a mobile phone*, AAA Foundation for Traffic Safety, 2013
7. *Cruise control may cause drivers to be less attentive and more susceptible to fatigue*, VINCI Autoroutes Foundation, 2013
8. *The influence of Cruise Control and Adaptive Cruise Control on driving behaviour*, Technical University Braunschweig, 2011
9. *The impact of driver inattention on near-crash/crash risk*, National Highway Traffic Safety Administration, 2006

