

istracted driving is the new drunk driving according to international driving, safety and behavioral experts speaking at the Driven to Distraction Conference in Toronto earlier this year.

"Not that long ago, if you saw a vehicle weaving, erratically slowing down or speeding up, you wondered if the driver had been drinking-more recently, we assume they're texting, talking on the phone or programming a navigation system," said Antonio Avenoso, executive director, European Transport Safety Council (ETSC), based in Belgium, at the event which was co-sponsored by the Canadian Automobile Association and the Traffic Injury Research Foundation (TIRF).

It's a timely observation in view of research from the Transport Research Laboratory (TRL) in the UK which shows reaction times for drivers using hands-free and handheld phones are

worse than for drivers over the blood legal alcohol limit.

"Ninety percent of total collisions involved one or more drivers identified as committing a driver error-very few are environmental or mechanical." said Shaun Hammond. assistant deputy minister, Transportation Safety Services Division, Alberta Transportation. Hammond has been a key player in the battle to implement Alberta's distracted driving legislation which went into effect on September 1, 2011.

Distractions, which can occur inside or outside the vehicle and can be manual, visual or mental, are anything that's not directly related to driving. "A driver is distracted if their attention is on anything other than the task of driving," says Robyn Robertson, the president and CEO at TIRF. "Distraction reduces the driver's awareness, decision-making and/or

performance and reaction time, leading to an increased risk of corrective actions, nearcrashes, or crashes."

Doing anything but driving and thinking about anything but the road may be enough to result in a collision, but not thinking about driving may be equally hazardous as several experts posed the rhetorical question: Haven't we all arrived at our destination or covered 25 kilometres and wondered how we got there?

Distracted driving, regardless of the specific behaviour behind it, is a significant road safety issue. It is generally estimated that distraction is a factor in 20 to 30 percent of crashes. In fact, TIRF's data shows that distraction played a role in 13 to 16 percent of fatal crashes and 23 to 27 percent of injury crashes.

These data should be interpreted with extreme caution, as distraction may be under- or over-estimated in some jurisdictions due to



differences in reporting definitions and protocols. In addition, a 100-car Naturalistic Study, the first large-scale instrumented-vehicle study undertaken with the primary purpose of collecting pre-crash and near-crash naturalistic driving data by the VirginiaTech Transportation Institute, showed that distraction had something to do with 33 percent of crashes and 27 percent of near-crashes. Nearly 80 percent of all crashes and 65 percent of all nearcrashes involved driver inattention (due to distraction, fatigue or just looking away) just before—within three seconds—of the onset of the accident.

"We don't like delivering death notices or attending post-mortems which are so often the result of one or more of the big four: distracted driving, aggressive driving (speed, lane changes), no seatbelt or impaired driving," says Staff Sergeant Chris Whaley, provincial manager of specialized patrol. Highway Safety Division, Ontario Provincial Police. He

ruefully jokes about the drivers who text: "lol no im nt bsy im only drvng".

"Distracted driving can lead to death, permanent disability and injury, but drivers tend to believe that because they have yet to crash while driving when distracted, they never will," he savs.

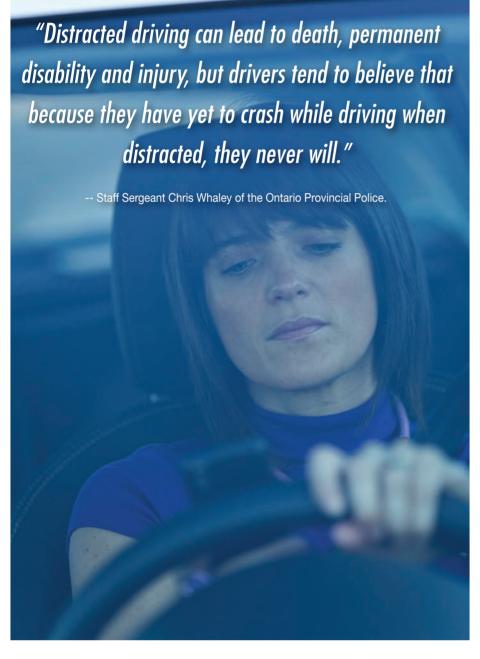
ETSC's Avenoso notes that in Europe, 60 percent of the work accidents resulting in death are road crashes, in which people were driving for work or commuting to and from work. Using the roads is part of everyone's daily business and as ETSC states in a report, it's unacceptable that an ordinary activity leads to an incredibly high level of injury and death.

"Corporate social responsibility needs to address road safety and distracted driving because it's the right thing to do, but when it comes to corporate fleets the economic lever will always be paramount. Fleet managers must make a business case that looks at the potential costs and liability of distracted driving," says Avenoso. "Road safety is an occupational health and safety issue that needs to go beyond legal compliance."

But even legally speaking, it's a challenge, if not impossible to determine if-let alone to what extent-distraction affected the crash or near-crash. While law enforcement officials and employers can access phone and other records, it may be tough to pinpoint the precise moment of impact, then link it to the block of time the driver was using a communications device. And as police officers, researchers and corporate executives point out: after a crash, no one is going to voluntarily admit that they dozed off or were texting, talking on the phone, applying make-up, eating a muffin, flossing their teeth or inserting a CD.

"If a police officer sees a driver whose vehicle is wandering in the lane, following too closely, speeding up and slowing down, the driver can be charged with careless driving," says Whaley. "If you have a collision, you may be charged with careless driving whether or not we know what distracted you."

Corporate policy, combined with legislation and enforcement, in the form of fines, tickets and demerit points, may increase awareness of the hazards of distracted driving and help reduce related behaviours. However, experts also note that peer pressure and social norms





must play a huge role in changing attitudes and actions as they have done with drunk driving and the wearing of seatbelts.

Distracted driving experts suggest that Canadians must effectively change their cultural approach to what is socially acceptable when it comes to distracted driving, much the way they have when it comes to seatbelts and drinking and driving. As several speakers pointed out, it took several decades, but most Canadians' attitudes and actions around driving under the influence and buckling up for safety's sake have changed dramatically.

Legislation varies across Canada, the US and around the world. As mentioned above, Alberta recently prohibited drivers from using hand-held cell phones, texting or emailing, entering information on GPS units, reading printed materials in the vehicle, writing, printing or sketching and personal grooming. They may not hold, view or manipulate an electronic communication device (ECD) that can send or receive phone calls, electronic data, electronic mail or text messages. They may use an ECD or cell phone in hands-free mode if it is activated by voice or a single touch to the device. They may also take a sip of coffee, chat with a passenger, blow their nose or call 911 on a hand-held phone.

In Ontario, Quebec, Manitoba, Nova Scotia, Prince Edward Island, Newfoundland and Labrador and New Brunswick, it is illegal to drive while using a handheld phone, though some also prohibit other handheld devices.

"Legislation must be practical, effective and enforceable," says Alberta's Hammond.

There is widespread concern that allowing the use of hands-free devices suggests handsfree communication while driving is a safe behaviour, even though research shows that hands-free and handheld phones tend to produce comparable impairment.

Researchers note that driver perceptions rarely match realities, since most believe they are better drivers with more skill and experience than anyone else on the road. When surveved, most drivers express deep concern at how other drivers put them at risk when they text or talk on the phone, yet many admit to doing those same things themselves.

"They tell us how they've nearly been run off the road by multi-tasking drivers, but refuse to

see that they're as much of a problem to others as they are to themselves," says Dr David Straver, a cognitive and neural sciences professor in the Department of Psychology at the University of Utah. "They also harbour a belief that the benefits of in-vehicle multi-tasking outweigh the potential risks."

A TIRF study notes that in 2010 and 2011 respectively, 75.2 and 73.5 percent of respondents say that distracted drivers are a very or extremely serious problem and 67.8 and 66.8 percent agree that cellphone use should be banned while driving. Yet in 2010 and 2011. 36.8 and 36.3 percent admitted to using a cellphone while driving within the past seven days.

Distracted driving naysayers ask why researchers, safety experts and law enforcement are targeting cellphone use rather than in-vehicle conversations between the driver and passenger(s). Strayer suggests it may be because a lone driver on a cell increases the odds of a collision by four while a driver with an adult passenger decreases the odds to 0.7.

For more than a decade, Strayer has been using sophisticated devices to track eye movement and brain activity in order to better understand the cognitive neuroscience of driver distraction.

Cellphone use, whether hands-free or handheld, produces impairment, while the presence of an adult passenger who knows

the rules of the road actually improves awareness. Strayer has found that when a person is talking on a cellphone, whether it's handheld or hands-free, traffic-related brain activity is reduced by half. However, an adult passenger who knows the rules of the road and can see what's happening around the vehicle, then react accordingly, for example, stopping the conversation or pointing out a hazard, is helping the driver to drive safely.

Distractions can produce inattention blindness, reduce the number of visual scans, decrease the use of mirrors and other instruments and also result in risky behaviours such as weaving, following too closely, inconsistent acceleration and deceleration and a failure to recognize hazards or obey signs.

In Strayer's tests, the eye tracker offers evidence of inattention blindness, which is the term used to describe what happens when the distracted driver looks right at something, but when questioned, doesn't remember actually seeing the object.

Evidently, there is plenty of solid scientific research to support the implementation of legislation and corporate policies around distracted driving. Experts believe that education and awareness also play a key role in changing consumer attitudes and behaviours so distracted driving becomes as socially unacceptable as drunk driving and forgetting to buckle up. c.a.r.

PREVENTING DISTRACTION

The American Society of Safety Engineers offers these tips to drivers:

- Program your device so you do not answer and notify the caller that you will be driving and are not available to respond at the moment. In an emergency, family should know to call 911 or other family members. If family or certain individuals urgently need to reach you, devise a procedure such as three rings, hang up, wait two minutes and call again, repeat once to allow time to pull over safely.
- Know your route in advance and, if using a navigation system, pre-program it.
- Prepare the vehicle cab and yourself for driving, including your management of any distraction, be they inside or outside of your vehicle.
- Focus on driving. Maintain safe spacing or move to a less obstructed lane.