

DISTRACTION



"Driver distraction occurs when inattention leads to a delay in recognition of information necessary to accomplish the driving task"¹.



In-vehicle distraction has been shown to represent a specific risk for professional drivers, with an estimated 10-30% influence on collisions⁴.



Studies show that secondary tasks that demand the driver's visual attention for more than two seconds increase crash risk three-fold^{2,3}.



Mind wandering, whether it is daydreaming, future event anticipation, or rumination on a stressful issue, leads to reduced alertness and less attentive driving^{5,6}.

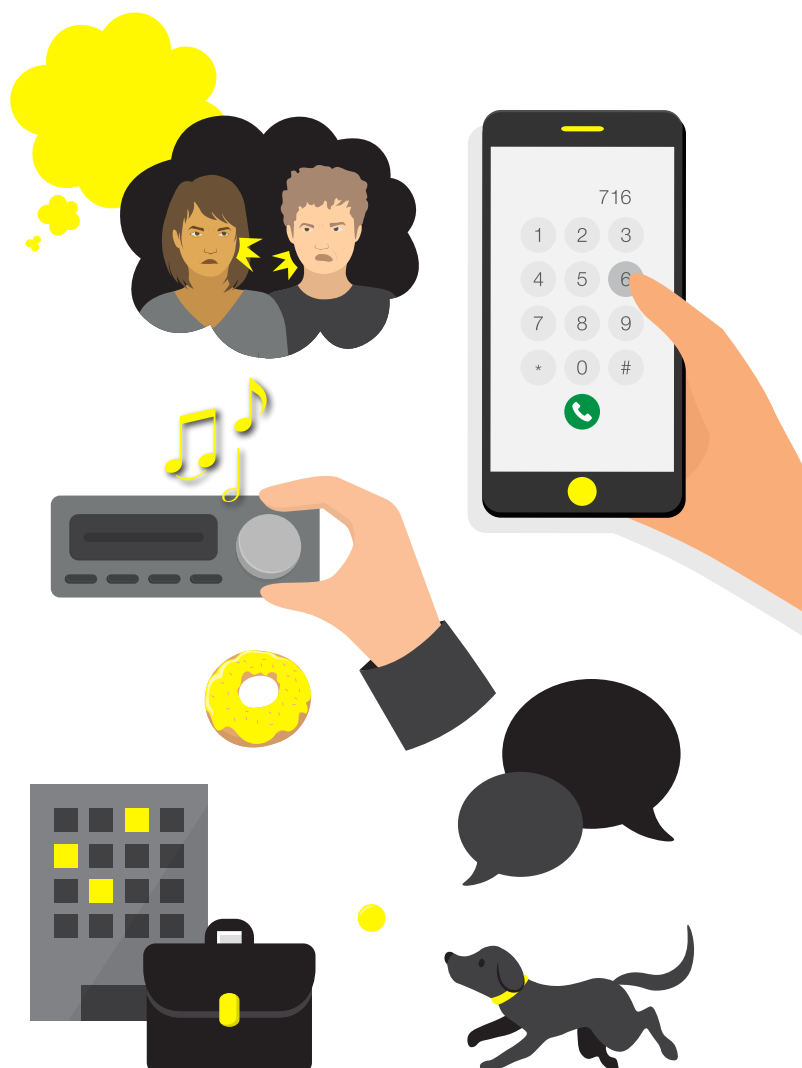
THE ISSUE

HV driving is in nature a solitary activity, with drivers often experiencing loneliness, boredom, and declining vigilance, leading them to engage in secondary tasks^{3,7}.

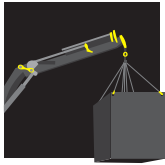
Driver distraction can be defined as something that can occur in situations where the driver allocates resources to a non-safety critical activity. It has been classified as vehicle-external or vehicle-internal distraction^{8,5}.

According to the generating source, distraction-related factors are usually categorized into five groups: mobile phone, mind wandering, passenger, outside events, and in-vehicle activities⁹.

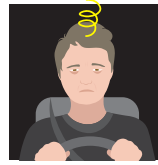
When interrupting activities that demand concentration, simple events or tasks can grab the worker's attention increasing the risk of making a mistake⁷.



BEFORE & AFTER DRIVING

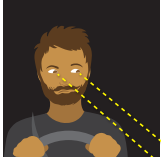


HV drivers may face unexpected situations and constraints when loading or unloading, which may lead to last-minute decisions and risks^{10,11}. Additionally, the interruption or alteration of loading/unloading operations can increase their complexity, making drivers face more constraints¹⁰.



Management of queuing and waiting for loading/unloading has been proven to influence the fatigue risk for HV drivers, especially if it extends work hours or alters drivers' rest periods¹².

DURING THE DRIVE



The frequency and duration of simple tasks, represent a high risk when combined. The associated cognitive and visual demand of performing them have been found to contribute to critical situations (crashes and near-crashes).

Also, studies show that a task not requiring visual attention does not mean drivers will not look away from the roadway when performing them⁷.



External situations or elements, such as electronic billboards, attract drivers' attention for more often and longer glances than regular traffic signs¹³. Additionally, interaction with other road users, sometimes can result in various forms

of aggression, has been identified as a major cause of stress for drivers¹⁴, which can also affect their focus on the road.



Daydreaming, mind wandering and ruminating while driving represent a type of in-vehicle distraction⁹. Day-dreaming or boredom are common among HV drivers, and the engagement in secondary activities is usually

used as a strategy to stay awake and remain vigilant. Nonetheless, these in turn result in distraction³.



Music selection (e.g. tempo and intensity) can have positive or negative effects in relation to in-vehicle distraction. On one hand, listening to music has been documented as a strategy to reduce stress and remain vigilant while driving.

On the other hand, studies have also showed drivers can be twice as likely to make bad judgements, increase their speed or even have an accident, when they listened to fast music, compared to slow or medium tempos¹⁸.



Vehicle manuals or services can differentially impact the mental load drivers face when accessing information. In-vehicle information systems requiring sustained interaction, such as handbooks, have been demonstrated

to contribute up to an increase of 30% of crash risk¹⁵. Currently, the development of in-vehicle information panels and Intelligent Transport Systems addresses distraction in human-machine interaction as a critical issue where information should enhance the driving experience without creating an overload and stress^{16,17}.

RECOMMENDATIONS

SELF-AWARENESS

Know YOURSELF



What type of physical activity do you enjoy the most for short-breaks? (i.e. walking around your truck, HILT, chronic pain or previous injury that requires specific exercise)

What type of music improves your concentration, without altering your mood? (i.e. instrumental, electronic)

What do you get most often distracted by? (i.e. day dreaming, talk shows)

What are the usual secondary tasks you engage in when countering drowsiness/boredom? Are they benefiting you?



Every time you are about to start a new journey, ask yourself:

How alert am I today for the job/task?

How well did I sleep (last night and last week)?

Is there a big issue distracting my thoughts/focus?

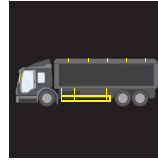
This can allow you set your personal baseline and adjust your task demand accordingly, e.g. drive 5-10 km/slower, give yourself more time to complete the task.

Know YOUR ROUTE (ENVIRONMENT)



Reduce complexity, options, visual and information clutter/overload¹⁵.

Know YOUR VEHICLE (WORK SPACE)



Double-check directions, weather and traffic conditions before the start of the journey. Identify areas where you could safely stop and take a break if required.

SAFETY CULTURE



Foresee and plan: address how to respond in unexpected situations. Even if the situation cannot be defined, a general protocol can be put in place. Guidelines about how to proceed in this type of events. Also, consider driver needs when

creating schedules, so they can focus on driving knowing time for other activities has been allocated already.

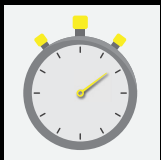
Provide an accompanying service: having a 24/7 driver-support service accessible by call that can provide information or have answers, as a way to deal with possible in-vehicle information/choice overload¹⁵.

MANAGEMENT



Management: make sure safety is experienced at all levels and the organisational structure is positively shaping everyone's attitude towards safety. Take advantage of the camaraderie among workers to know their distraction-related experiences and strategies, and work together to keep safety as the priority¹⁹. Tailor general guidelines and good practices to your company's size, available resources and operational characteristics.

TO REMEMBER



Secondary tasks that demand visual attention for more than two seconds increase crash risk three-fold^{2,3}.



The visual and mental demand of simple tasks have been found to contribute critical situations. Their frequency and duration represent a high risk when combined⁷.



In-vehicle distraction represents a specific risk for professional drivers, with a 10-30% influence on collisions⁴.



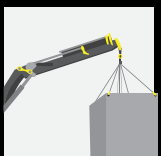
Know your triggers. Pay attention to how music, weather, interactions on the road, daydreaming and your own self-talk affect you on the road.



Even simple events or tasks that grab a driver's attention increase the risk of making a mistake⁷.



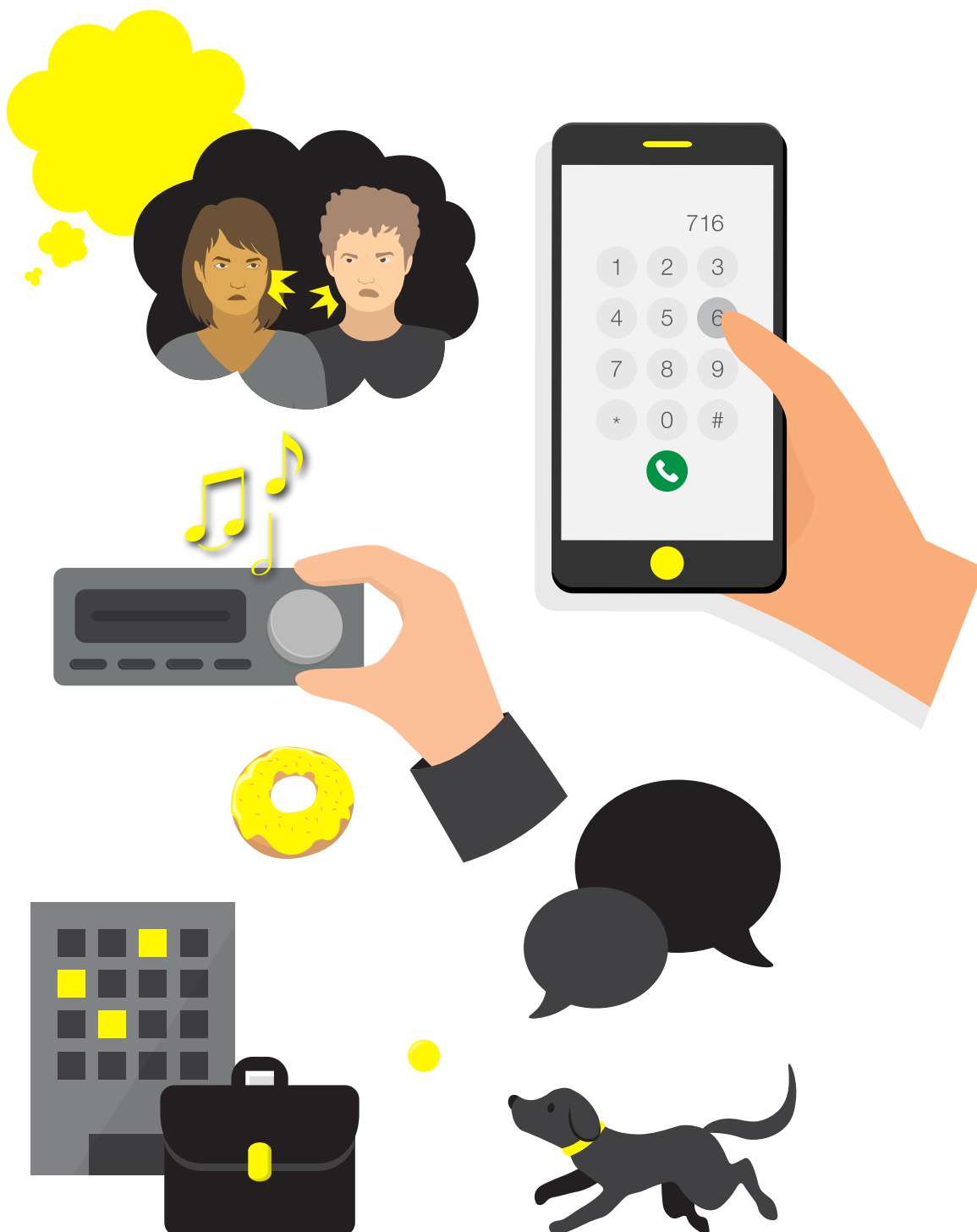
As a company, plan and allocate time for drivers' required activities. This way, they don't have to multitask when driving.



When loading or unloading drivers may face unexpected and complex situations leading to last-minute decisions and risks^{10,11}.



Make sure safety culture is experienced at all organisational levels, encouraging drivers to share their experiences.



Make sure your vehicles and practices comply with the Heavy Vehicle National Law and the regulations that apply for each state or territory you operate in and drive through. Please reference Chapter 1a – Safety duties.

Additionally, please check the Master Industry Code of Practice Chapter 8 – Vehicle Standards – Risk Types and Suggested Controls.