

Vulnerable Road Users

Introduction

In recent years, more Australians have embraced walking and cycling, whether for commuting, leisure or exercise². This shift has increased interactions between different types of road users. Any person who lacks the protective shield of a vehicle such as a pedestrian, motorcyclist, personal mobility device user, or cyclist is classified as a vulnerable road user due to their heightened risk of injury in the road system.

Vehicle Design

Vehicle design also plays a critical role in protecting vulnerable road users. The shape of a vehicle's front end significantly influences its energy absorption capacity during a collision, with some designs better suited to protect the head upon impact. Similarly, in-vehicle safety technologies, such as [Advanced Driving Assistance Systems \(ADAS\)](#) and Vehicle-to-Everything (V2X) communication systems, are creating new opportunities to reduce injuries and enhance safety for vulnerable road users¹².

Types of front-end shapes:



Pedestrian Distractions

The increasing prevalence of personal devices competing for attention on the road has also become a significant risk. A study revealed that approximately 20% of pedestrians crossing streets in Melbourne's CBD were using smartphones¹³. In-ear headphones have long been recognized as a risk factor for crashes involving pedestrians and cyclists. Recent research confirms that these devices also pose dangers to light vehicle drivers by compromising awareness of surroundings and creating distractions that detract from the primary task of driving safely¹⁴.

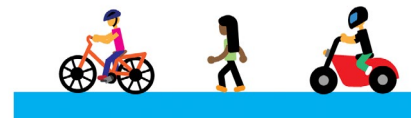


Recommendations

- **Stay Alert for Less Visible Pedestrians:** Some pedestrians, such as children or individuals using wheelchairs, may be harder to see due to their height. Others might be distracted by listening to music with noise-cancelling headphones or texting on their phones.



- **Respect the Right of Way:** Always yield to other road users, especially at intersections. Failing to do so can lead to serious crashes, particularly with motorcyclists.



- **Adjust to Road Conditions:** Drive at safe speeds—especially in areas with vulnerable road users. Speeds under 30 km/h allow for better communication through eye contact or gestures. Ensure other road users have noticed you.



- **Allow Safe Passing Distances for Cyclists:** When overtaking a bicycle rider, leave at least 1 metre on roads with speeds up to 60 km/h, and 1.5 metres on faster roads.

