

CAR BUYERS GUIDE



AMY'S
FOUNDATION



ANCAP
SAFETY



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A Safer Choice: What to Ask Before You Buy

Why This Guide Exists

Buying a car is one of the most important safety decisions you'll ever make—not just for you and your passengers, but for everyone you share the road with. This guide helps you understand which safety features matter most, what questions to ask when buying, and how to ensure your next car is designed to protect vulnerable road users, including cyclists and pedestrians.



Understanding Vehicle Safety Today

What is ANCAP and Why it Matters

Q: What does a 5-star ANCAP rating mean—and is it enough?

- A 5-star ANCAP rating shows a vehicle has met high safety standards at the time it was tested.
- **But:** ANCAP testing criteria evolve over time—older 5-star cars may not have modern safety tech.

Q: What are the four pillars of ANCAP testing?

1. Adult Occupant Protection
2. Child Occupant Protection
3. Vulnerable Road User Protection (cyclists, pedestrians)
4. Safety Assist Technologies (systems that prevent crashes)



Look for 5-star ratings awarded within the last 3-6 years for the most up-to-date protection.

The Four Pillars of ANCAP Safety Testing

When it comes to choosing a safer car, one of the most important tools available to you is the **ANCAP safety rating**. ANCAP SAFETY is an independent organisation that rigorously tests and assesses the safety of new vehicles sold in Australia and New Zealand.

Each vehicle is given a safety rating of up to **5 stars**, but the rating isn't based on just one test. ANCAP evaluates cars using **four key pillars of safety**, each representing a different way your vehicle should perform in the real world. Here's what each pillar means—and why it matters.

1. Vulnerable Road User Protection

This is one of the most important areas for people who care about community safety. It assesses how well the vehicle protects people **outside the car**, including **pedestrians, cyclists, and motorcycle riders**.

What's tested:

- Injury risk to the head, pelvis, upper legs, and lower legs of pedestrians in a collision
- Front-end design (how “aggressive” the car is when it strikes a person, cyclist or other vehicle)

- Presence and effectiveness of Autonomous Emergency Braking (AEB) for pedestrians and cyclists (including at intersections)
- Forward detection and braking systems that can prevent a crash entirely

Why it matters:

Road safety isn't just about protecting the people inside the car. Vehicles with high VRU (Vulnerable Road User) scores are actively designed to reduce deaths and injuries in the broader community.

2. Safety Assist

This pillar measures the car's ability to avoid a crash in the first place, thanks to advanced driver assistance systems (ADAS).

What's tested:

- **Autonomous Emergency Braking (AEB)** – detects vehicles, pedestrians, and cyclists and motorcyclists
- **Lane Keep Assist** – helps you stay in your lane
- **Speed Assistance Systems** – detect speed signs and help the driver maintain the signposted speed
- **Blind Spot Monitoring** – warns of vehicles, cyclists and motorcyclists you might not see
- **Driver Monitoring Systems** – detect fatigue or inattention
- **Rear Cross Traffic Alert, Emergency Lane Keeping**, and more

Why it matters:

Most car crashes are caused by human error—distraction, fatigue, or just not seeing something in time. These technologies are designed to act as a second pair of eyes, helping to prevent crashes before they happen or minimise the severity of a crash.

3. Adult Occupant Protection

This pillar measures how well the car protects the driver and adult passengers in the event of a crash.

What's tested:

- Frontal offset crash (simulates hitting another car head-on)
- Side impact crash (a vehicle hitting the side of your car – T-bone)
- Pole test (simulates hitting a pole or tree side-on)
- Whiplash protection (especially in rear-end collisions)
- Rescue and extrication (how easily emergency services can access occupants)

Why it matters:

Most serious injuries and fatalities in vehicle crashes involve the vehicle's occupants. This score tells you how well the car's structure, airbags, seatbelts, and restraint systems protect people in common crash scenarios.

4. Child Occupant Protection

This score evaluates how well the vehicle protects **children** sitting in approved child restraints.

What's tested:

- Performance of the vehicle in protecting child occupants in frontal and side impact crashes
- Availability and quality of **ISOFIX anchor points** and **top tether anchors**
- Size and layout of the rear seat to support a range of restraint types

Why it matters:

Children are not small adults—they require specially designed restraint systems and seating positions to protect them properly in a crash. This score tells you how safe your car is for children of different ages and sizes.

How the Star Rating is Calculated

ANCAP combines scores from all four pillars to create an overall star rating out of five. However, to achieve 5 stars, a vehicle must perform well across all four areas—there are no shortcuts. A vehicle might score highly for one pillar, for example, but fail to reach 5 stars if it lacks cyclist-detecting AEB or child seat anchors.

Interpreting ANCAP Star Ratings Over Time

It's easy to assume that all 5-star cars are equally safe—but that's not the case. ANCAP's testing standards evolve over time to reflect the latest technology, performance, and real-world crash scenarios. This means that a 5-star car from say 2014 is not directly comparable to a 5-star car from 2024.

Why the Rating System Evolves:

- Vehicle technology advances quickly. New features like pedestrian-detecting AEB or lane-keeping assist didn't exist in many older cars.
- Crash data improves. ANCAP now uses more accurate simulations of injuries and real-world crash outcomes.
- International harmonisation. ANCAP and Euro NCAP share common test and rating protocols which are updated every few years to ensure global best practice.

How to Check an ANCAP Safety Rating:

- **Check the year the rating was awarded.** ANCAP's safety label includes the year of assessment. A star rating from 2021 reflects tougher standards than a star rating from 2015.
- **Look beyond the stars.** ANCAP publishes detailed score/performance breakdowns in four key areas: **Adult Occupant Protection**, **Child Occupant Protection**, **Vulnerable Road User Protection**, and **Safety Assist**. You can use these to see where the vehicle excels—and where it might lag.
- **Consider the features tested.** For example, ANCAP began scoring cyclist protection and AEB for VRUs in 2018. A car tested before these protocols came in may have scored well but never faced those tests.
- **Use ANCAP's search & filter tool.** Visit [ancap.com.au](https://www.ancap.com.au) to search, filter and sort vehicles by score, rating year, and specific technologies.



Always look at the “TESTED” rating year and make sure you're comparing cars assessed to similar criteria. If safety is a priority, favour newer 5-star ratings from the last 3–6 years.

Technologies Impacting Vulnerable Road User (VRU) Protection Scores

Vulnerable Road Users (VRUs)—including pedestrians, cyclists, and motorcyclists—are at greater risk of serious injury in a crash. ANCAP recognises this and gives dedicated scores for how well vehicles protect VRUs. This includes both passive design and active safety technology.

Pedestrian Impact Safety (Passive Design)

These tests evaluate how the car's exterior design affects the severity of injury if it strikes a pedestrian.

- Bonnet deformation and energy absorption – a softer bonnet reduces head injury risk
- Bumper design – a flat front design provides improved protection
- A-pillar and windscreen base – these areas are tested for head trauma
- Pop-up or active bonnets – these raise the bonnet to create space between the bonnet and engine block, reducing head injury in a crash

Cyclist and Pedestrian Detection (Active Safety Systems)

Modern vehicles use forward-facing sensors (cameras, radar, or LiDAR) to detect people on the road—and brake before impact.

- **AEB Pedestrian – Day and Night**—Assesses how well the car detects pedestrians in daylight and at night
- **AEB Cyclist – Daylight** – Measures the system's ability to detect a cyclist moving across the path or ahead of the vehicle
- **AEB Cyclist – Intersection Assist** – Tests whether the vehicle can detect and stop for a cyclist approaching from the side when turning across an intersection
- **AEB Motorcycle** – Tests whether the vehicle can detect and prevent a crash with a motorcyclist approaching from in-front or behind

Additional Relevant Technologies

- Exit Warning Systems (Anti-Dooring Alerts) – warns drivers and passengers if opening a door might hit a passing cyclist. Some systems can also intervene to prevent the car door being opened into the path of a passing cyclist.
- Reversing AEB with pedestrian detection – reduces back-over incidents in driveways and carparks **Rear Cross-Traffic Alert** – detects people or cyclists approaching from the side when reversing

Intersection Turning Support and Emergency Lane Keeping

These functions protect VRUs in urban traffic and multi-lane roads.

- Turn-Across Path Assist – detects pedestrians, cyclists or motorcyclists while the vehicle is turning across oncoming lanes
- Emergency Lane Keeping (VRU version) – prevents the vehicle from drifting into a pedestrian or cyclist zone

Why This Score Matters:

A vehicle's VRU protection score tells you how much it contributes to community safety—not just occupant safety. High-scoring vehicles are less likely to kill or seriously injure someone outside the car, especially in cities and towns with lots of pedestrians or bike riders.

If you're choosing a new car, especially for city driving, look for models that have:

- A high VRU score
- AEB for both pedestrians and cyclists
- Safe front-end design and reversing tech

Protecting Vulnerable Road Users (VRUs)

Top 10 Questions to Ask Before You Buy a Car

Use ANCAP's website to compare vehicles. A safer car might cost less than you think.

[ancap.com.au](https://www.ancap.com.au)

Cyclists, pedestrians, and motorcyclists – are the most vulnerable road users, so at the most at-risk. Modern cars must be designed to keep them safe too.

1

What is the ANCAP safety rating for this specific model and variant, and when was it tested?

A 5-star rating is most meaningful when awarded recently. Testing protocols evolve regularly—aim for a rating awarded within the last three to six years.

6

Is there a Driver Monitoring System to help prevent distraction and drowsiness?

These systems detect if you're not paying attention—one of the leading causes of crashes.

2

Are all key safety features standard or do I need to pay extra for them?

Safety shouldn't be an optional upgrade. Confirm which features are included in the model you're considering—not just what's available in brochures. Thanks to ANCAP, optional safety packs are now quite rare – with most safety features provided as standard.

7

Does the car have Speed Assistance Systems to help you stay within speed limit?

These systems use GPS or cameras to detect signs and provide alerts—or even actively help keep you legal.

3

Does this car's AEB system detect pedestrians and cyclists, including at night?

The most effective AEB systems detect vulnerable road users in real-world conditions, including in low light.

8

What is the visibility like from the driver's seat? Are there major blind spots?

Try it yourself. Look for thick A-pillars, B-pillars, C-pillars, high belt lines, or blind zones that might hide cyclists or small pedestrians.

4

Is there an "Exit Warning" or a ti-dooring alert for opening doors into bike lanes?

This alert helps prevent injuries to cyclists, especially in urban settings.

9

How does this car score on "Vulnerable Road User Protection" in the ANCAP breakdown?

ANCAP star ratings are made up of four separate pillar scores that focus on key areas of protection. Look specifically for the VRU Protection score to see how well the car protects people outside it.

5

Does the vehicle have rear cross-traffic alert, wide-angle reversing cameras, or 360° vision?

These features prevent collisions in driveways and car parks where pedestrians, prams, and bikes often pass behind the vehicle.

10

What is the ANCAP safety rating for this specific model and variant, and when was it tested?

How does this model compare with others in terms of safety—not just comfort, style, or price?



A safer car today is one that already meets tomorrow's standards.

Additional Safety Questions to Ask Driver, Passenger and Child Protection

These questions help you make sure the car will protect everyone inside it—whether you're the one behind the wheel or carrying precious cargo.

Driver Safety

1

Does the vehicle have a fatigue detection or Driver Monitoring System?

These systems monitor your behaviour for signs of drowsiness or distraction and give early warnings to prevent dangerous mistakes.

2

Is there a centre airbag between driver and front passenger?

This helps prevent serious injury from side collisions by reducing contact between occupants.

3

Are the seatbelt reminders loud, clear, and available for all seats—not just the driver?

Proper seatbelt use is still one of the most effective safety interventions, and reminders help enforce it.

Passenger Safety

4

How many airbags are there, and what zones do they cover?

A well-equipped car should include front, side, curtain, and (ideally) a centre airbag for better occupant protection.

5

Does the vehicle offer ISOFIX anchors and top tethers in rear seats?

For families with children, proper anchorage is essential for safely fitting child restraints.

6

Are the rear seat belts adjustable and fitted with pre-tensioners and load limiters?

These features improve crash outcomes by reducing slack and controlling force on the body in a crash.

Child Safety

7

What is the car's "Child Occupant Protection" score in the ANCAP breakdown?

ANCAP scores this separately. Look for high performance in both crash tests and installation of child restraints.

8

Is there enough space in the back for rear-facing car seats or booster seats?

Not all vehicles are practical for families—even if they score well in crash tests.

9

Are rear doors equipped with child locks and window control override?

Simple but essential features for safety-conscious families.

10

Are side curtain airbags present in the rear seats, where children typically sit?

Not all vehicles extend curtain airbags to the back. Check specifically if you regularly carry children or young passengers.

Future-Proof Your Choice

What's Coming Soon?

ANCAP protocols continue to evolve. Features being prioritised:

- Enhanced intersection testing with motorcyclists
- Physical driver controls to reduce driver distraction
- Additional assessment of autonomous braking with pedestrians wearing different clothing and in differing weather conditions

Glossary

Acronym	Definition
ANCAP	<i>Australasian New Car Assessment Program</i> – An independent vehicle safety organisation that rates the crash safety and collision avoidance performance of new vehicles sold in Australia and New Zealand.
AEB	<i>Autonomous Emergency Braking</i> – A technology that detects potential collisions and automatically applies the brakes to avoid or mitigate impact.
VRU	<i>Vulnerable Road User</i> – Refers to road users who are at greater risk in crashes, including pedestrians, cyclists, motorcyclists, and e-scooter users.
ISOFIX	<i>International Standards Organisation FIX</i> – A standardised system for installing child car seats using built-in anchor points.
GPS	<i>Global Positioning System</i> – A satellite-based system used for navigation and speed detection in vehicles.
NCAP	<i>New Car Assessment Program</i> – A general term for vehicle safety rating organisations globally (e.g., Euro NCAP, ANCAP).
A-pillar	<i>Not an acronym</i> – Refers to the vertical support on either side of the windshield, which can obstruct driver vision and impact VRU safety in collisions.

Keeping It Updated

This guide is designed to evolve. As safety technology and regulations change, Amy's Foundation and ANCAP will release periodic updates so you always have the most relevant information when you're in the market.



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This document reflects the latest information available as of August 2025.
Please note that updates may occur.