Safety features to consider when buying a car

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| **Safety feature** | **How it works?** | **Benefits** | **Consideration** |
| **Active** | | | |
| **Anti-lock Braking System (ABS)** | ABS reduces the risk of tyres skidding under heavy braking. ABS uses sensors to detect when a wheel is about to lock. ABS selectively releases and applies the brake to prevent the wheel from locking.  When this happens there may be a vibration or shuddering through the car and the brake pedal may pulsate. For ABS to work properly keep constant firm pressure on the brake pedal. | ABS helps drivers to:   * stop the car quickly and safely on most surfaces * steer and brake heavily at the same time * reduce speed faster (crashing at a lower speed may reduce impact and injury). | Essential (where available) |
| **Electronic Stability Control (ESC)** | ESC reduces the risk of a car going off-path or losing control. ESC uses intelligent sensors to detect when a car has deviated from its steered direction, then reduces engine torque and selectively applies the brake to individual wheels to bring the car back on track.  ESC is also known as: Electronic Stability Program (ESP); Dynamic Stability Control (DSC); Vehicle Stability/Swerve Control (VSC) or Active Stability Control (ASC). | ESC reduces the risk of single car crashes by:  • correcting over steering or under steering  • stabilising the car during sudden movements (eg. swerving)  • improving handling on gravel and unmade roads (eg. road shoulders)  • improving traction on slippery or icy roads. | Essential (where available) |
| **Intelligent Speed Assistance (ISA) or speed alert system** | ISA is an emerging safety technology that uses GPS (Global Positioning Systems) and digital speed maps to alert drivers when they speed. | ISA can act in two ways, as a passive warning device or as an active speed limiter. | Optional |



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| **Safety feature** | **How it works?** | **Benefits** | **Consideration** |
| **Passive** | | | |
| **Airbags** | Front airbags are designed to stop your head hitting the dashboard, steering wheel and windshield. | Front airbags can lower the chance of life threatening head injuries when used with seat belts. | Essential |
| Side curtain airbags are usually found in the roof rails above the doors. They deploy downwards, creating a ‘curtain’ that covers the side windows. | Side curtain airbags protect your head from hitting the side of the car. They can stop you being injured if your car rolls over.  Crash testing shows that side curtain airbags can reduce the risk of injury or death by up to 45%. | Essential (where available) |
| **Cargo barrier** | A cargo barrier separates the passenger area from the back storage area/boot. | In a crash, even light objects can become deadly missiles if they are not properly secured. | Essential(if appropriate) |
| **Daytime running lights and/or automatic headlamps** | Daytime running lights turn on automatically when you start your car. Using lights during the day makes you more visible to other road users.  Automatic headlamps turn on automatically in response to changing lighting conditions. | Research shows that daytime running lights can reduce the chances of a daytime crash. | Optional |
| **Head restraints** | Head restraints are extensions of the car's seats. They limit head movement during a rear-impact crash. | Head restraints reduce the probability of neck injury in the event of a rear-impact crash. | Essential |
| **Seatbelts and seatbelt warning system** | In the event of a crash, seatbelts are designed to keep you inside the car.  Lap sash seatbelts are the most effective. Seatbelt warning devices help you and your passengers remember to buckle up. | Seatbelts are the single most effective way to protect yourself in a crash. They also reduce the risk that you or your passengers will collide with parts of the car (eg. the steering wheel, dashboard, windshield, or even other occupants). | Essential |

