

# Crash Tests

## New Car Safety

### HOLDEN VECTRA (LHD)

2004 on (AU) Front+side+head airbags

#### Overall Evaluation



**Overall score** 29.86 out of 37

Variant: Sedan (Europe) Eng: 4Cyl 1.8 litre (Europe).

Kerb weight: 1365 kg Category: MEDIUM CAR

Vehicles built: 2002 Test by Euro NCAP

**Important note:** The left-hand-drive 1.8 litre sedan was tested by Euro NCAP. Australasian specifications may vary and therefore models sold in Australasia might provide different levels of protection to those described on this page.

#### Model History and Safety Features

The Vectra tested by Euro NCAP had side curtains. At the time of publication these were only available on the Australian Vectra CDXi hatch. This variant has a 3.2 litre V6 engine.

Dual front airbags, side airbags and ABS brakes are standard on all variants. Head-protecting side curtains and electronic stability control are standard on the CDXi variant but are not available on other variants.

The front seat belt buckles are mounted on the seats and the upper anchorages are adjustable. These features improve the fit of the seat belt. Pre-tensioners are fitted to the front seat belts to reduce slack in the event of a crash. A three point seat belt is fitted to the centre rear seat. This provides better protection than a two point seat belt.

#### OVERALL EVALUATION : 4 Stars

The Vectra scored 12.1 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious chest and leg injury was marginal for the driver.

The vehicle scored 15.76 out of 16 in the side impact crash test. There was a slight risk of serious chest injury for the driver. A further 2 points were scored in the optional pole test

#### FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck 4pts, chest 2.46pts, upper legs 2pts, lower legs 3.64pts.

The passenger compartment held its shape well. The brake pedal moved rearwards by 49mm and downwards 5mm. The steering wheel hub moved rearwards 10mm, upwards 31mm and sideways 2mm. The front ("A") pillar moved 30mm rearwards. The width of the driver's doorway shortened by 23mm. All doors remained closed during the crash. After the crash all doors could be opened with normal effort.

The airbag cushioned the head of the driver and contact was stable. Dash/fascia components were a potential source of injury for the driver's knees and the passenger's left (inboard) knee. The passenger's head was cushioned by the airbag.

#### SIDE IMPACT CRASH TEST

Body region scores out of 4 points each: Head 4pts, chest 3.76pts, abdomen 4pts, pelvis 4pts.

The vehicle was eligible for an optional pole impact test, since it had head-protecting side airbags and scored four points for the head in the side impact test. The manufacturer decided to go ahead with the pole test and the vehicle earned a further two points.



Offset crash test at 64km/h

#### INJURY MEASUREMENTS

Refer to the information sheet "How the test are done"	Offset Crash Test at 64km/h (v4)		Side Impact Crash Test at 50km/h (v4)
	Driver	Passn	Driver
Head HIC	442	163	53
Acceleration (g for 3ms)	56.18	31.26	21.89
Neck - Shear (kN)	0.42	0.15	-
Tension (kN)	0.33	0.37	-
Extension (Nm)	7.75	10.4	-
Chest Accln (g for 3ms)	-	-	-
Compression (mm)	32.79	28.99	23.22
Viscous criterion (m/s)	0.14	0.11	0.19
Abdomen - Force (kN)	-	-	0.59
Pelvis - Force (kN)	-	-	2.2
Upper legs Force (kN)	Left 0.6 Right 0.62	Left 1.9 Right 0.9	
Knee displ (mm)	Left 0.35 Right 0.51	Left 7.04 Right 0.24	
Lower legs Force (kN)	Left 1.91 Right 2.1	Left 2.34 Right 2.35	
Index (Upper/Low)	Left 0.27/0.48 Right 0.27/0.47	Left 0.35/0.22 Right 0.29/0.19	

#### Bonus points (maximum 5)

Pole Test: 2 pts Seat belt reminders: None

#### Modifiers for offset test scores

Head	No deduction
Chest	No deduction
Upper leg Variable & conc. loading	Drv 2 pt deduction L & R Passn 1pt deduction L
Lower leg	No deduction
Foot score	Score 4 points

#### Pedestrian rating (v4)

4.69 points out of 36



Child head impacts 1.08pts; adult head impacts 3.6pts; upper leg zero pts and lower leg impacts zero pts.



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