

# ANCAP Safety Rating

## TOYOTA C-HR (December 2016 - onwards)



Toyota C-HR

### This ANCAP safety rating applies to:

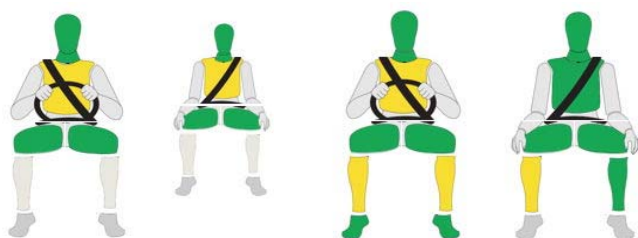
Make / Model	Toyota C-HR
Year Range	December 2016 - onwards
Variant(s)*	All variants
Vehicle Type	Small SUV

The tested model of Toyota C-HR was introduced in Australia and New Zealand in February 2017. This ANCAP safety rating is based on tests conducted by Euro NCAP and applies to all C-HR variants built from December 2016. C-HR models built from October 2017 are fitted with an updated autonomous emergency braking (AEB) system which introduces pedestrian detection capability as standard.

Dual frontal, side chest, side head airbags (curtains) and a driver knee airbag are standard. Autonomous emergency braking (AEB), lane support systems (LSS) and pre-crash systems are fitted as standard on all variants. A full list of safety features and technologies can be viewed within the *Safety Features & Technologies* table on page 2 of this report.

### Injury Outcomes.

**Full Width Frontal**  
Driver      Rear Passenger      **Frontal Offset**  
Driver      Front Passenger



**Side Impact**  
Driver



**Pole**  
Driver



**Whiplash Protection**  
Rear



Front



### Test Results Summary.

<b>Airbags</b>	Dual Frontal, Side, Head, Knee
<b>Adult Occupant Protection</b>	87% (33.18 out of 38)
- Full Width Frontal Test	7.62 (out of 8)
- Frontal Offset Test	6.91 (out of 8)
- Side Impact Test#	8.00 (out of 8)
- Pole Test#	8.00 (out of 8)
- Whiplash Protection Test	2.65 (out of 3)
- AEB (City)	0.00 (out of 3)
<b>Child Occupant Protection</b>	77% (38.03 out of 49)
<b>Safety Assist</b>	68% (8.18 out of 12)
- Speed Assistance System	0.00 (out of 3)
- Seat Belt Reminders	3.00 (out of 3)
- Lane Support System	2.50 (out of 3)
- AEB (Interurban)	2.68 (out of 3)
<b>Pedestrian Protection</b>	65% (27.44 out of 42)
<b>ANCAP Safety Rating</b>	★★★★★
<b>Rating Year^</b>	2017

\* Scaled scores. Total test score out of 16.00 points.

### Adult Occupant Protection.

#### Full Width Frontal Test

Each body region is scored out of 4 points

Driver	Rear Passenger
Head: 4.00 points	Head: 4.00 points
Neck: 4.00 points	Neck: 4.00 points
Chest: 3.83 points	Chest: 2.67 points
Upper legs: 4.00 points	Upper legs: 4.00 points

There was a slight risk of serious chest injury for the driver and rear passenger in the full width frontal test.

#### Frontal Offset Test

Each body region is scored out of 4 points

Driver / Front Passenger (lesser of each)
Head / neck: 4.00 points
Chest: 2.75 points
Upper legs: 4.00 points
Lower legs: 3.07 points

The passenger compartment held its shape well in the frontal offset test. Pedal and steering wheel displacements were well controlled.

#### Side Impact Test

Each body region is scored out of 4 points

Side Impact Test	Pole Test
Head: 4.00 points	Head: 4.00 points
Chest: 4.00 points	Chest: 4.00 points
Abdomen: 4.00 points	Abdomen: 4.00 points
Pelvis: 4.00 points	Pelvis: 4.00 points

Good protection was provided for all body regions for the driver in both the side impact and pole tests.

#### Whiplash Protection

Front / Rear: 1.90 points
Rear: 0.75 points
AEB (City): 0.00 points

C-HR models built from October 2017 are fitted with an upgraded AEB system, which offers improved performance in low speeds typical of city driving. This system performed well in testing, scoring 3.00 points. Vehicles built prior to October 2017 do not feature this same functionality and score 0.00 points.

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### Child Occupant Protection.

#### Crash Test Performance

6 year old child: 11.01 points  
10 year old child: 10.77 points

#### Child Safety Features & Child Seat Installation

Safety features: 5.00 points  
Installation check: 11.25 points

**NOTE:** The child restraints tested by Euro NCAP are relevant to the European market. For Australasian consumers, this information should be used as a guide to vehicle features only. For more detailed information about Australian child restraints visit [childcarseats.com.au](http://childcarseats.com.au).

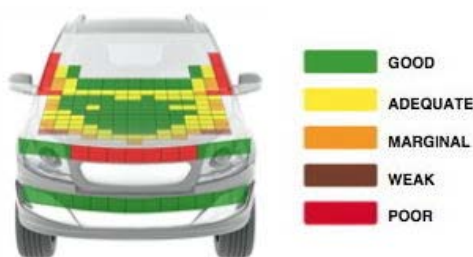
### Pedestrian Protection.

#### Pedestrian Test

Scored out of 42 points

Adult & child head impacts: 18.40 points  
Upper leg impacts: 3.04 points  
Lower leg impacts: 6.00 points  
AEB (VRU): 0.00 points

This vehicle scored 27.44 out of 42 points (Acceptable). Tests of the protection offered by the bonnet to the head of a struck pedestrian showed good or adequate results in most locations. The bumper provided good protection to pedestrians' legs at all test locations. Protection of the pelvis area was good in places but poor in others. C-HR models built from October 2017 feature an upgraded AEB system offering pedestrian detection. Testing of this functionality showed good performance, scoring 4.78 points. However, vehicles built prior to October 2017 do not offer this functionality and 0.00 points were awarded. (Tested by Euro NCAP v8.3)



### Score Deductions.

#### Deductions from full width frontal test scores

Neck: No deductions  
Head: No deductions  
Chest: No deductions  
Upper legs: No deductions

#### Deductions from frontal offset test scores

Head / neck: No deductions  
Chest: No deductions  
Upper legs: No deductions  
Lower legs: No deductions

#### Deductions from side impact test score

All: No deductions

#### Deductions from pole test score

All: No deductions

### Safety Features & Technologies.

Descriptions of each of these safety features and safety assist technologies (SAT) and detail on fitting requirements for each star rating level can be found at [ancap.com.au](http://ancap.com.au).

Safety Feature / Safety Assist Technology	Availability
Seat belts (three-point, lap/sash) for all forward-facing seats	S
Seat belt pretensioners & load limiters (front)	S
Seat belt pretensioners & load limiters (rear outboard)	S
Intelligent seat belt reminder (driver)	S
Intelligent seat belt reminder (front passenger)	S
Intelligent seat belt reminder (2 <sup>nd</sup> row seats)	S
Airbag - Frontal (driver)	S
Airbag - Frontal (passenger)	S
Airbag - Side, chest protection (front seats)	S
Airbag - Side, chest protection (2 <sup>nd</sup> row seats)	X
Airbag - Side, head protection (front seats)	S
Airbag - Side, head protection (2 <sup>nd</sup> row seats)	S
Airbag - Knee (driver)	S
Airbag - Knee (front passenger)	X
Head restraints for all seats	S
Adaptive cruise control (ACC)	S
Antilock braking system (ABS)	S
Autonomous emergency braking (AEB)	
- City	S
- Interurban	S
- Vulnerable road user	S*
Automatic headlights	S
Automatic high beam	S
Blind spot monitoring (BSM)	S
Daytime running lights (DRL)	S
Electronic brakeforce distribution (EBD)	S
Electronic stability control (ESC)	S
Emergency brake assist (EBA)	S
Hill launch assist	S
Lane support system (LSS)	S
Pre-crash systems	S
Rain-sensing wipers	S
Reversing collision avoidance	S
Speed assistance - automatic / intelligent speed limiting (ISA)	X
Speed assistance - manual speed limiting	E
Speed assistance - speed sign recognition & warning	X
Tyre pressure monitoring system (TPMS)	X

**S** = Standard on all variants.

**O** = Optional on base variant. May be standard on higher variants.

**V** = Not available on base variant but standard or optional on higher variants.

**X** = Not available on any variant.

**E** = Available in Europe but not available on any Australasian variant.

\* = Standard on vehicles built from October 2017. Not available on vehicles built prior to this date.

These specifications are subject to change. Please check with the manufacturer for the latest specifications.

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## Safety Assist.

### Speed Assistance System (SAS)

Scored 0.0 out of 3 points

Speed information:	[Not available]
Speed assistance (manual):	[Not available]
Speed assistance (automatic / intelligent):	[Not available]

### AEB (Interurban)

Scored 2.68 out of 3 points

Autonomous emergency braking (AEB):	1.47 out of 1.5
Forward collision warning (FCW):	0.96 out of 1.0
Human machine interface (HMI):	0.25 out of 0.5

### Seat Belt Reminder (SBR)

Scored 3.0 out of 3 points

Driver and passenger:	Pass
Rear:	Pass

### Lane Support Systems (LSS)

Scored 2.5 out of 3.00 points

Type:	Lane Keep Assist & Lane Departure Warning
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Vehicles built from October 2017 feature an updated autonomous emergency braking (AEB) system. Tests of this system at highway speeds showed good performance, with collisions avoided or mitigated in all test scenarios. Vehicles built prior to this offer different performance, however ANCAP was provided with technical information to show the results are similar and do not affect the overall rating. A lane support system (LSS) featuring lane departure warning and lane keep assist are standard on Australasian C-HR models. Speed assistance systems (SAS) are not available on Australasian models.

### Approaching a stationary vehicle:

16.73 out of 18.00 points for Forward Collision Warning (FCW)



### Approaching a slow moving vehicle:

11.00 out of 11.00 points for Autonomous Emergency Braking (AEB), 11.00 out of 11.00 points for FCW



### Approaching a braking vehicle with short headway:

1.82 out of 2.00 points for AEB, 1.80 out of 2.00 points for FCW



### Approaching a braking vehicle with long headway:

2.00 out of 2.00 points for AEB, 2.00 out of 2.00 points for FCW



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**ANCAP**  
Safety ★★★★★



### Injury Values & Measurements.

Body Region	Frontal offset test at 64km/h (v7)		Full width frontal test at 50km/h (v1)		Side impact test at 50km/h (v7)	Oblique pole test at 32km/h (v7)
	Driver	Front Passenger	Driver	Rear Passenger	Driver	Driver
<b>Head</b>						
HIC	195.00	140.00	324.00	344.00	41.00	254.55
Acceleration (g for 3ms)	46.20	40.10	56.70	59.90	24.70	51.73
<b>Neck</b>						
Shear (kN)	0.49	0.31	0.33	1.00	-	-
Tension (kN)	1.78	0.82	1.50	1.64	-	-
Extension (Nm)	7.50	16.10	12.30	16.10	-	-
<b>Chest</b>						
Acceleration (g for 3ms)	-	-	-	-	-	-
Compression (mm)	28.27	18.82	19.04	25.98	12.70	21.72
Viscous criterion (m/s)	0.09	0.04	0.06	0.12	0.05	0.12
<b>Abdomen</b>						
Compression (mm)	-	-	-	-	12.57	24.03
<b>Pelvis</b>						
Force (kN)	-	-	-	-	0.63	0.84
<b>Upper legs</b>						
Femur force left (kN)	1.28	1.29	1.59	0.13		
Femur force right (kN)	1.12	0.15	1.51	0.18		
Knee displacement left (mm)	0.34	0.07	0.38	0.21		
Knee displacement right (mm)	0.61	0.03	0.25	0.30		
<b>Lower legs</b>						
Force left (kN)	1.39	1.77	-	-		
Force right (kN)	1.89	1.69	-	-		
Index (upper / lower) left	0.45 / 0.26	0.20 / 0.19	-	-		
Index (upper / lower) right	0.37 / 0.61	0.44 / 0.19	-	-		
<b>Intrusion Measurements</b>						
<b>Steering column</b>						
Forward (mm)	37	-	-	-		
Downward (mm)	10	-	-	-		
Sideways (mm)	1	-	-	-		
<b>Pedals</b>						
Accelerator - rearward (mm)	61	-	-	-		
Accelerator - upward (mm)	2	-	-	-		
<b>A-Pillar</b>						
Rearward (mm)	5	-	-	-		

\* **Model Variants:** ANCAP safety ratings do not automatically extend to variants that have different body styles, engine configurations, driven wheels or occupant restraint systems (e.g. fewer airbags). In these cases, ANCAP considers technical evidence submitted by manufacturers before deciding on extending a rating to additional variants of a model. For further information about the application of ANCAP safety ratings to model variants, see the ANCAP Variant Policy.

^ **Rating Year:** The Rating Year denotes the year requirements against which a vehicle has been assessed. The Rating Year is determined by ANCAP and may be based on the year in which a new vehicle model is first launched into the Australian and/or New Zealand markets; the year in which the vehicle was tested (if tested by Euro NCAP); or, for vehicles which hold an existing ANCAP safety rating, the year in which the rating was updated (or earlier applicable year).

### Assessment Details.

Tested Make / Model	Toyota C-HR Hybrid
Tested Vehicle(s) Built	2016
Tested Body Type	Wagon
Tested Vehicle Kerb Weight	1470 kg
Tested Vehicle Engine	1.8 litre Hybrid
Tested By	Euro NCAP
Assessed By	Euro NCAP
Document Reference	C-HR17
Document Created / Revised	March 2017 / March 2018
Rating Published	March 2017
Rating Updated	March 2018



Frontal offset test at 64km/h