# **Improving Car Safety**



















### **Outline**

- Who is ANCAP
- What crash tests are conducted
- Benefits of ANCAP
- Challenges
- The future



















### **ANCAP Mission**

- Encourage improvements in vehicle occupant protection through:
  - crash testing
  - publishing results
  - consumer education
  - influencing buying decisions
  - encouraging early introduction of more crashworthy cars into the fleet



















### **Benefits**

 Improved vehicle occupant protection has the potential to reduce the road toll by 10% (170 lives per annum)

Source: National Road Safety Strategy (NRSS).

 Results now available for more than 70% of new cars in both Australian & New Zealand markets

















### **ANCAP**

ANCAP started in 1992

Current partners:

NSW, QLD, VIC, SA, WA, TAS and NZ governments

All Australian motoring associations (through the AAA) and NZAA

















### **New Partners**





transport accident commission

















### **Overseas NCAP**

• USA: NHTSA

IIHS

• Europe: Euro NCAP

Japan: JNCAP

Korea: Korea NCAP













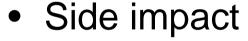






### **Crash Tests**

- Offset frontal
  - 64 km/hr into deformable barrier
  - 2 adult dummies, 2 child dummies (3 y/o and 18 month)



- 50 km/hr, mobile deformable barrier
- Adult driver dummy,2 child dummies (3y/o and 18 month)



















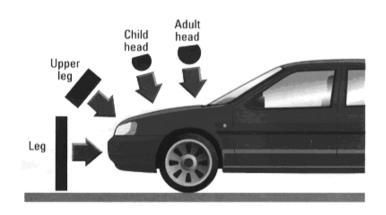


## **Crash Tests**

- Pole test (optional)
  - 29km/hr, driver dummy



- Pedestrian Test
  - Subsystems: adult head, child head, upper leg, leg















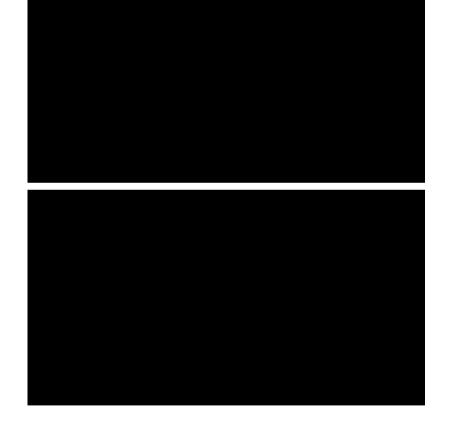




# **Specific Benefits from ANCAP**

more than 10 years and 100's of tests

- Improved occupant protection
- Vehicle upgrades
  - airbags as standard equipment
  - advanced seat belts
  - improved body structures
- Cars now designed for good ANCAP scores
  - 03/04 Aust manufactured cars received 4 stars



















## **BMW Response to NCAP**

"...with established consumer tests like IIHS, Euro NCAP, US NCAP, Japan NCAP and Australian NCAP (which are well received by the public) the general vehicle passive safety performance considerably exceeds current legal requirements."

"For example, European legal requirements would receive a 1.3 star rating by Euro NCAP standards. However, current state of the art rating is a 4 star rating."

















# **BMW Response to NCAP**

"...one important trend in automotive business: it's not just legislation but mainly a private/public partnership, which paves the way to successful results."

"This proactive industrial behavior leads to intense collaborations between legislative parties, consumer organizations and the automotive industry."

Source: BMW 2003 Enhanced Safety Vehicles Conference, 2003.













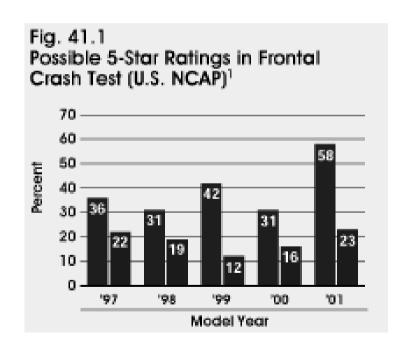


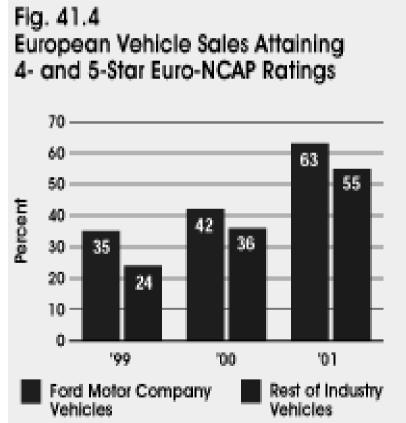


# Ford US Response to NCAP

Safety performance fundamental to marketing success

Source: Ford US website, 2003.





















## **Australian Examples**





"A Laguna was the world's first car to win a perfect 5 stars in the Euro-NCAP Crash Test Programme."



Source: Renault Australia website, 2003.



### Subaru Forester

Melbourne Motor Show Source: Subaru Australia, 2003.

















# Australian Manufacturers' Response to ANCAP

"...single unit vehicle crash testing is inaccurate and misleading as a consumer guide."

Source: FCAI Annual Report, 2003.

FCAI is out of touch!

















# **Challenges Facing ANCAP**

- Significant improvements in frontal crashes
  - but many Australian models "de-specified"
  - need to now address side crashes
  - IIHS report showing benefits of head-side airbags
- Adoption of existing and new safety technology
  - active safety / ITS
  - Australia lagging on passive safety technology

















### What manufacturers should do...

- Safety features should be supplied as standard across model ranges
  - a Mazda 6 sedan with side airbags costs \$10,000 more than base model
- Consistent safety standards between models
  - Holden Vectra has side airbags as standard, but Commodore does not
- Advertise safety features!
  - Commodores have a seat belt warning system but it is not advertised

Sources: Mazda Australia and Holden websites, 2003.

















### Cars here are different to those overseas

"...the campaigners against ethanol seem to believe that car engines in Australia work differently from those everywhere else in the world."

John Anderson, Minister for Transport, September 2003.

- This is true; car engines do work differently here
- There is also a clear difference in safety features

















### Australia vs UK

### **Standard Passive Safety Features on Base Models**

Vehicle	Location	Front Airbags		Side Airbags	
Source: Manufacturer's websites, 2003.		Driver	Passenger	Torso	Curtain
Honda Accord	Australia	Yes	Yes	Yes	No
"Euro"	Europe	Yes	Yes	Yes	Yes
Ford Focus	Australia	Yes	No	No	No
	Europe	Yes	Yes	No	No
Holden / Vauxhall	Australia	Yes	Yes	Yes	No
Vectra	Europe	Yes	Yes	Yes	Yes
Mazda 6	Australia	Yes	Yes	No	No
	Europe	Yes	Yes	No	Yes
Toyota Corolla	Australia	Yes	No	No	No
	Europe	Yes	Yes	Yes	No
Volkswagen Golf	Australia	Yes	Yes	No	No
	Europe	Yes	Yes	Yes	No
Holden / Vauxhall	Australia	Yes	Yes	No	No
Comm / Omega	Europe	Yes	Yes	Yes	No

















## Australia vs UK

### **Standard Active Safety Features on Base Models**

Vehicle	Lagation	ADC	Brake Force Dist.	Brake Assist
Source: Manufacturer's websites, 2003.	Location	ABS	EBD	EBA
Honda Accord	Australia	Yes	Yes	No
	Europe	Yes	Yes	Yes
Ford Focus	Australia	No	No	No
	Europe	Yes	No	No
Holden / Vauxhall	Australia	Yes	Yes	Yes
Vectra	Europe	Yes	Yes	Yes
Mazda 6	Australia	Yes	Yes	No
	Europe	Yes	Yes	No
Toyota Corolla	Australia	No	No	No
	Europe	Yes	Yes	No
Volkswagen Golf	Australia	Yes	Yes	No
	Europe	Yes	Yes	No
Holden / Vauxhall	Australia	Yes	No	No
Comm / Omega	Europe	Yes	No	No

















## Holden

### **Sedans vs Utes**

Holden Vehicles	ABS	Froi	nt Airbags	Side Airbags	
		Driver	Passenger	Torso	Curtain
Equipe	Yes	Yes	Yes	No	No
Acclaim	Yes	Yes	Yes	Yes	No
Ute	Yes	Yes	No	No	No
One Tonner	No	Yes	No	No	No
Rodeo	No	No	No	No	No

Source: Holden website, 2003.









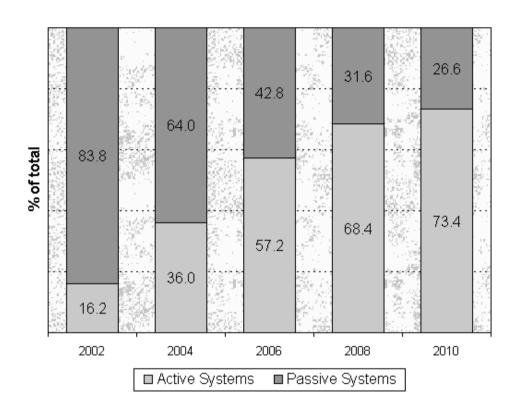








## **Active Safety**



Role of active safety features will become increasingly important

Source: ITS America News, 2003

















# **ANCAP Forward Strategy**

- Continue with offset frontal and pedestrian tests
- 2. Compare Australian and overseas performance
- 3. Introduce pole test as standard from 2005
- 4. Introduce active safety features assessment

















### **Conclusions**

- Occupant protection continues to improve
  - but much more can be done
- Customers insist on improvements
- No one should be hurt on the roads
- Don't forget the concept of Vision Zero!











































