

Every year motorcycle riders are injured or killed in crashes. Some of these injuries could be prevented or reduced if all motorcyclists chose a safe helmet and wore the right helmet for their head size.

Choosing the safest helmet for you

Follow the guidelines below to ensure that you are choosing the safest helmet for you and using it correctly.

- ✓ All helmets sold in Australia must comply with the Australian Standard and are marked accordingly.
- ✓ Consider the protection and comfort ratings provided in this brochure.
- ✓ Choose a light colour helmet. A lighter coloured helmet offers better visibility to other vehicle drivers by day and night.
- ✓ You should not purchase a second-hand helmet, as it may have been involved in a crash or have experienced UV degradation, nor should you lend your helmet to others, as it can affect how the helmet fits your head when returned.
- ✓ Remember – helmets are produced in a range of sizes to satisfy a mass market. Your head shape and size are unique to you, so take the time to follow these steps when purchasing your new helmet:

In addition to a helmet, you will need to consider protective clothing to reduce the severity of injuries and time away from work. These include:

- Jackets and pants that are brightly coloured and provide protection against crashes as well as heat, cold and rain while still being comfortable.
- Gloves with leather at least 1mm thick with webbing between the little and ring fingers.
- Footwear that fully encloses the toes and heel. The RTA recommends proper motorcycle riding boots wherever practicable.

STEP 1 Have your head size measured before you try on a helmet. Measure around the largest part of your head just above the ears, taking the measurement at the forehead. The measurement will correspond to a particular size in the model range you are interested in. This is a good starting point. If you want a particular brand or model, do not be tempted to go for another size if yours is out of stock – wait and get the correct size.

STEP 2 Once you have the helmet in the recommended size, place it firmly onto your head. Secure the chin-strap so that you can fit two fingers between it and your jaw. If the helmet has a quick release buckle, take time to adjust the strap. Once fitted, you should be able to feel the inside of the helmet against all parts of your head. Once you are happy, wear the helmet for a few minutes to make sure it is comfortable.

STEP 3 Try to rotate the helmet from side to side with the strap secured. Make sure the helmet does not rotate on your head. The cheek-pads should provide a firm, comfortable fit. Next tilt the helmet forward and back. It should stay in position and not move. If it slips forward or back it is the wrong size and you will need to choose a different helmet.

STEP 4 Finally, check that the helmet won't come off easily in a crash. Tilt your head forward and have someone try to roll the helmet off your head by carefully applying an upward force to the rear of the helmet at its base. If it can be rolled off in the showroom with the chin-strap done up, it will most likely come off in a crash.



By law, motorcyclists **MUST** wear an approved helmet when riding on a motorcycle. As a rider or pillion passenger, you should choose a helmet that provides the highest available level of protection, as well as ensure it fits your head and is fastened correctly.

The helmets tested and included in this brochure were some of those available for purchase that complied with AS/NZS 1698:2006 at the time of testing, and selected to suit a head circumference of 60 centimetres.

The testing of the helmets and production of this brochure has been conducted by the NSW Centre for Road Safety, Roads and Traffic Authority (RTA).

Brochures are available from:

RTA – 1800 060 607 or from the RTA website: www.rta.nsw.gov.au under myResources.



Roads and Traffic Authority

© The information in this brochure is intended as a guide only and is subject to change at any time without notice. It does not replace the relevant legislation.

For further enquiries
www.rta.nsw.gov.au

March 2010
RTA/Pub. 10.037A



safer
motorcycle
helmets

Your guide to choosing and
buying motorcycle helmets



Helmets decrease the severity of head injuries, the likelihood of death, permanent disability, and the time recuperating from injury.

Helmets are designed to cushion and protect the wearer's head from the impact of a crash. Research estimates that properly worn motorcycle helmets reduce the likelihood of a crash fatality by 37 per cent. Helmets are highly effective in preventing brain injuries, which often require extensive treatment and may result in lifelong disability, but no helmet can guarantee prevention of injury in all crashes.

All motorcycle helmets sold in Australia must comply with the Australian/New Zealand Standard AS/NZS 1698 Protective Helmets for Vehicle Users. The tests conducted by the RTA show that some helmets provide injury protection levels well in excess of those required by the Standard. Other than the injury protection levels provided in this brochure, the two most important factors to consider when purchasing a new helmet are fit and comfort. Any protection that a helmet can offer is of no value if it is not worn properly.

A number of helmets have been tested and assessed under the Helmet Evaluation Program (HEP).

This brochure provides guidelines for you to follow when buying a helmet as well as information regarding the level of safety and comfort of the helmets tested.

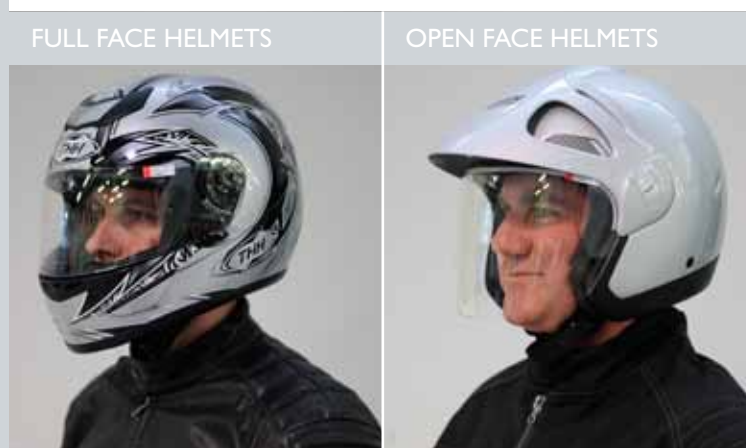
Types of helmets

Full face helmets

Full face helmets cover the entire skull and have a protective section over the front of the chin. Such helmets have an open cut-out in a band across the eyes and nose, with a visor that generally swivels up and down to allow access to the face. Many full face helmets include vents to increase the airflow to the rider.

Open face helmets

Open face helmets have a rear that covers the back of the head, but lacks the lower chin-bar of the full face helmet, and do not necessarily include a visor. An open face helmet provides the same skull protection as a full face helmet, but less protection to the face and chin areas. For helmets without visors; bugs, dust or even wind to the face and eyes may cause rider discomfort or injury unless used with goggles. (Goggles should meet Australian Standard AS 1609-1981).



The RTA recommends full face helmets as they offer more protection to the face of motorcycle riders and pillion passengers than open face helmets. This is based on studies that found 60 per cent of helmeted motorcyclist injuries were to the face area.

EVALUATION RESULTS

The Helmet Evaluation Program is based on tests developed in Australia to identify helmets that offer safety performance above the minimum requirements.

The helmets have been rated on factors that indicate how well they protect the wearer's head in a crash. This involved dropping the helmets onto different types of anvils to determine their ability to absorb crash forces, and pulling the helmets off the test head-form to measure their ability to remain on the wearer's head in the event of a crash.

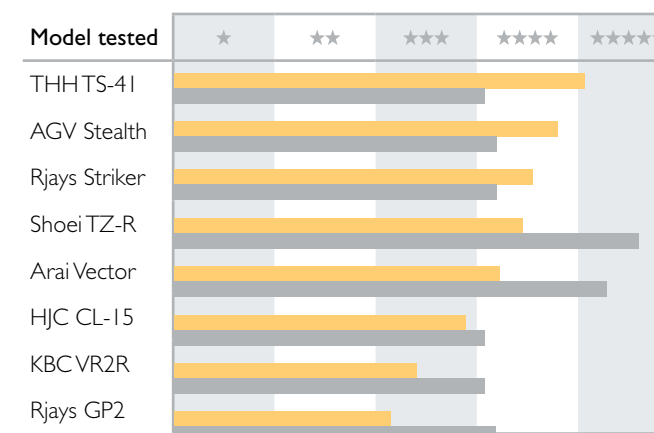
In this program, the helmet fit was evaluated based on the likelihood of the helmets fitting a wide range of head sizes. This involved assessing the available number of shell, liner and consumer sizes for each helmet. Helmets with more size variation received higher scores.

The helmets were also evaluated on their level of riding comfort for two different groups of motorcyclists.

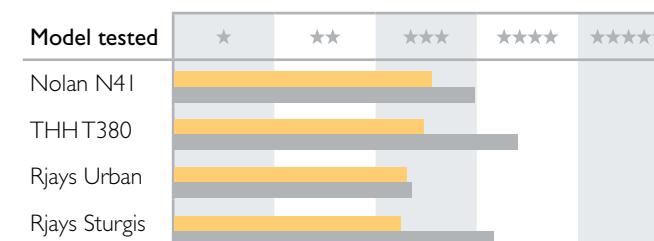
1. Commuting motorcyclists (commuters) who travel shorter distances.
2. Touring motorcyclists (tourers) who travel longer distances.

The level of riding comfort was assessed by two experienced riders using both upright and crouched riding position motorcycles. The helmet ratings were based on the riders' opinion on comfort factors, such as the helmet's ability to promote good central and peripheral vision, seal out wind, dust and moisture, as well as the ability to reduce noise while still maintaining desirable levels for such sounds as horns and sirens for safety.

Full face helmets



Open face helmets



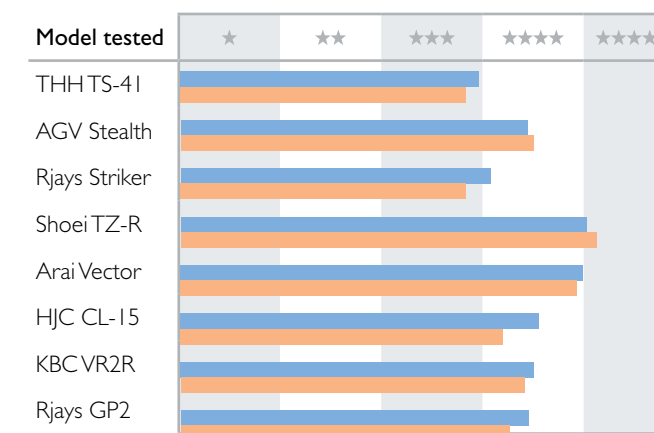
PROTECTION FROM INJURY IN A CRASH

- ★★★★★ Exceptional crash protection and well above the Australian Standard crash protection requirements.
- ★★★★ Excellent crash protection and well above the Australian Standard crash protection requirements.
- ★★★ Good all round Australian Standard crash protection requirements.
- ★★ Above the minimum Australian Standard crash protection requirements.
- ★ Meet Australian Standard crash protection requirements.

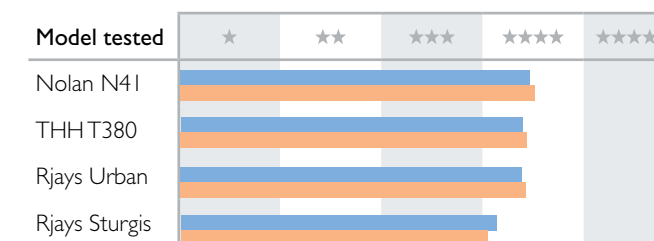
LIKELIHOOD TO FIT

- ★★★★★ Highest chance to fit a wide range of head size.
- ★★★★ Excellent chance to fit a wide range of head size.
- ★★★ Higher chance to fit a wide range of head size.
- ★★ Good chance to fit a wide range of head size.
- ★ Fair chance to fit a wide range of head size.

Full face helmets



Open face helmets



RIDING COMFORT LEVEL FOR COMMUTERS

- ★★★★★ Exceptional riding comfort performance.
- ★★★★ Excellent riding comfort performance.
- ★★★ Good all round riding comfort performance.
- ★★ Marginal riding comfort performance.
- ★ Poor riding comfort performance.

RIDING COMFORT LEVEL FORTOURERS

- ★★★★★ Exceptional riding comfort performance.
- ★★★★ Excellent riding comfort performance.
- ★★★ Good all round riding comfort performance.
- ★★ Marginal riding comfort performance.
- ★ Poor riding comfort performance.