

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

Motorcycle Helmets

Riders' guide to protective helmets



UNECE

Motorcycle riders are the most vulnerable powered vehicle road users. This leaflet is designed to provide basic information on the importance of wearing certified headgear that delivers maximum on-road protection. It contains an overview of why wearing helmets is important and serves as a guide to riders upon choosing appropriate helmets by indicating which markings to look for when purchasing headgear for themselves and their passengers.



1. Why wear a helmet?

A motorcycle crash may result in head injuries, either through direct contact with hard objects or as a result of excessive acceleration-deceleration. The most traumatic brain injuries are closed head injuries, when there is no open wound. When your head hits the pavement or the ground your brain is going to move forward, hitting up against the bones inside the skull.

It's going to deform. It's going to stretch and tear nerve fibers. The torn ones cannot heal. When you lose a brain cell, there is no replacement for it. That's where permanent damage occurs.

In fact, people who have an accident like that, and survive, often don't fully recover. They may have lost some intelligence, and the capacity to take care of themselves because of the damage to the system that controls their muscles. They may have a behavior change – have difficulty dealing with other people, and having proper social relationships.

Always wear a helmet when riding your motorbike and make sure your passenger is wearing one too.

There is no cure for brain injury. A brain injury is forever. Strategies for dealing with the handicaps can be learned, but the only effective approach in dealing with head injury is prevention, not letting the injury occur in the first place. It's all a consequence of an unprotected skull that cannot withstand the shock. The protective helmet is designed to minimize the risk of all kinds of head injuries.

2. Am I legally obliged to wear a helmet?

The answer is almost certainly **YES**. Nearly all countries have enacted legislation requiring motorbike riders and passengers to wear protective helmets, although laws differ from country to country depending on the age of the driver and vehicle power threshold.

Consult the laws that apply in your country, but keep in mind that wearing a helmet is the single most effective protection against head injuries, or worse.

3. So how do I choose an appropriate helmet?

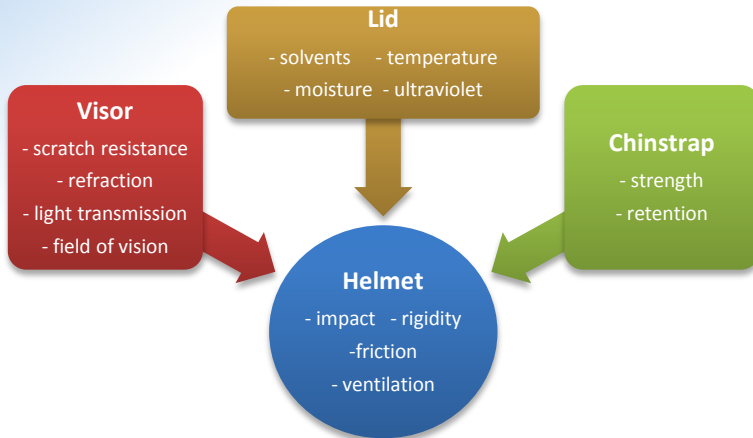
When selecting a certified protective helmet, the rider needs to make sure that the shape and size are a good fit, i.e. not too tight or too loose on the riders' head, and that it remains in place when nudged upwards from its' the back. In addition, it is recommended that the chinstrap can be secured comfortably, leaving the width of an index finger between the strap and the chin.

Use only motorcycle helmets approved according to UN Regulation No. 22.

Motorcyclists are required to wear helmets that comply with a safety standard that prescribe rigorous testing. Such standards are adopted to ensure that helmets available on the market protect the head adequately in an accident. UN Regulation No. 22 - also known as ECE 22 - is the most widely respected and used regulation in the world, endorsed by more than 50 countries.

4. Regulation No. 22 requirements and tests for helmets

ECE 22 defines what manufacturers have to do in order to produce and test an effective motorcycle crash helmet.



5. How do I recognize UN Regulation No. 22 compliant motorcycle helmets?

The helmet and visor must carry the type approval mark. A helmet approved under ECE 22 shall display a capital E in a circle followed by a number that represents the country whose certified authority granted its approval. This is followed by a series of numbers and letters representing the specifics of type approval, approval number and production serial number.

Approved motorcycle helmets can easily be identified by their label:

E = ECE 22-05 Certified by **2** = French Authority;
051018 = ECE 22-05 + Approval Number 1018 issued in France;

P = "Protective", i.e. chin bar tested and approved as a protective full-face helmet;

J – although not visible in this example, would for instance signify "Jet" style open face approval;

320678 = Batch Test control number – identifies the production batch for which test results are available.



6. Facts and myths about helmet use

Myth: Helmets cause neck or spinal cord injuries.



Fact: Research has proven that helmets conforming to international regulations and correctly worn do not cause neck or spinal cord injuries.

Myth: Helmets impair hearing and sight.



Fact: Helmets do not affect peripheral vision or contribute to crashes. Helmets may reduce the loudness of noises, but do not affect the ability of a rider to distinguish between sounds.

Myth: Fatality rates are lower without helmet laws.



Fact: Studies conducted in two states in the United States that recently repealed their motorcycle helmet laws showed that deaths from head injuries actually increased following the repeal of the law.

Myth: Any helmet is better than no helmet.



Fact: A low quality helmet might give the rider a false sense of protection. In case of a crash, a rider using a poor quality helmet could get more severely injured or even killed, sending the false message that all helmets are useless.

Myth: UN Regulation No. 22 will encourage the sale of fake helmets.



Fact: The ECE 22 type approval system contains elements that directly address counterfeit products and products not meeting its requirements, therein working to prevent delivery of fake headgear to the market.

Myth: Motorcycles are a small percentage of registered vehicles, thus motorcycle crashes represent a minor burden to society.



Fact: Motorcyclists are about 27 times more likely than passenger car occupants to die in a traffic crash and about 6 times more likely to be injured. It means that crashes and their consequences are a significant problem in all societies.

UNECE and its Inland Transport Committee have always worked hard to ensure that you and those you care about are kept safe on the road. The vehicle regulations developed and administered by the World Forum for Harmonization of Vehicle Regulations (WP.29) encompass everything conceivable about road vehicles, from the quality of the helmet that you wear to controls on levels of emissions.