ESSENTIAL GUIDE TO PROTECTIVE GEAR FOR BIKERS

Fall off your bike and tarmac will shred through your jeans in a second*
Click on each heading to go straight to that section.

3 THINK SAFETY
4 HELMETS
6 GLOVES
7 BOOTS
9 TROUSERS AND JACKETS
12 THINGS TO CONSIDER
13 TESTED AND CERTIFIED
14 CHECKLIST

* At 50mph, tarmac will shred through jeans within one second. Source: Transport Research Laboratory
Wearing the right gear is just as important as having a properly serviced bike and knowing how to ride it. These few short pages are full of useful safety information and advice on how to select the best protective gear – it could make the difference between getting some bumps and bruises and sustaining injuries that could stop you riding again.

Choosing what to wear when riding isn’t just about protection from injury, but also comfort. Properly fitting gear means you stay comfortable, warm and dry on your bike, helping you to fully enjoy your ride without getting distracted from the road.

Many items of protective wear now have reflective panels or strips. It’s good to have high visibility on as many parts of your bike as possible. Wear bright and fluorescent colours during the day and reflective elements in the dark.

**REMEMBER**

Don’t just go for the way the clothing or gear looks. It needs to perform.
Arguably, it’s your single most important piece of protective kit - choosing the right crash helmet could save your life.

To make sure you’re getting the best lid for your money, look out for the independent SHARP rating system. It is a government programme that is unique in providing a 1 – 5 star safety rating: an indication of how much protection a helmet offers in an impact. Our independent advice can help to ensure you choose a helmet that offers the best protection possible.

Helmets sold in the UK must satisfy either British Standard 6658: 1985 or ECE Regulation 22.05 standards. Look for a label inside the helmet or on the shell to confirm this.

Choosing a helmet that fits correctly is vital. If it moves around on your head, it won’t offer the best protection in a crash.

For more information about getting the right fit, the SHARP rating system and examples of affordable and highly-rated helmets, visit [www.direct.gov.uk/sharp](http://www.direct.gov.uk/sharp)

**STEER CLEAR OF SECOND-HAND GEAR**

Never buy a second-hand helmet or use a helmet used by anyone else. The external appearance can disguise damage to the protective material inside the helmet.

When riding, you should always use a visor or goggles carrying an ECE, CE or BSI approval mark. During daylight hours a tint of up to 50% is okay - legal tinted visors will be marked “For daylight use only”. Before setting off, make sure your visor is clean and free of smudges, scratches or marks which could affect your vision, especially in strong sunlight.
HELMETS

STRAP UP

Always secure the helmet properly using the chin strap and check the adjustment before every trip. Even with a good fit, a helmet that’s not been properly strapped on is likely to come off in a crash. A strap which is too long could cause irritation and affect your concentration, so make sure you tuck it away.

WHAT TO LOOK FOR WHEN BUYING A HELMET

FIT

Always try a helmet on before you buy as sizes can vary. It should feel snug around the cheeks (if full face) and hug your head. If it moves at all when you move your head, it’s too big and won’t offer adequate protection in a crash.

COMFORT

There should be no tight spots or pressure points. Wear the helmet for several minutes in the store before you make a purchase as you won’t be able to take it back afterwards.

SAFETY

Look for the SHARP safety rating of the helmets that you are interested in and choose from the highest scoring models that fit you properly. Choose light, bright colours as these help other road users to see you coming.

LOW NOISE

A noisy helmet can lead to tiredness which will affect your concentration. Noise can be influenced by a number of factors including the fit of the helmet, your riding position and the style of the motorcycle that you ride. Speak to other motorcyclists, go online and consult your dealer to find the best model for you.

STORE IT SAFELY

When not wearing your helmet, keep it somewhere where it cannot fall or be knocked – use a helmet bag if possible. It is a good idea to keep it out of direct sunlight and heat as this can affect the components of the helmet.
The first thing you do in a crash is put your hands out to protect yourself – it’s instinct. Unfortunately, fingers and wrists are fragile, so it doesn’t take much for them to sustain long-term damage.

It can take less than a second in contact with the road to remove the skin from your hands so never ride without specialist motorcycling gloves – a strong protective layer is essential.

Most bike stores sell bike gloves for both winter and summertime; a pair of each will help keep your hands safe all year round.

Summer gloves can be lightweight but need to provide good abrasion resistance. In winter, gloves must keep your hands warm and dry as cold hands can distract you from your riding. Gortex, Cordura and other similar materials have good thermal properties as well as water-resistance.

**KEEP CONTROL**

Gloves should never be so thick and cumbersome that they prevent you moving your hands and fingers easily. Try them on your bike or a machine in the showroom to check you can operate the controls properly.

**CUFF UP**

Winter gloves particularly should have cuffs that extend over the end of your sleeves, to prevent wind and rain getting up your arms.

**STITCHED UP**

Good quality stitching is important. Make sure that they carry stitching across the palms and there is good layering on the upper glove.

**STRAP ON THE WRIST**

Check for straps, fixings or adjustments around the wrist. If a pair of gloves can be pulled off easily without undoing a fixing or strap, they’ll probably come off just as easily in a crash.

**TOTAL COMFORT**

Make sure seams don’t chafe against your hand, particularly on the palm and between the fingers. That little bit of discomfort could affect your concentration on a long journey.
The boots you wear ought to be sturdy and above ankle-height to provide support and protection for the ankle area. Ideally they should be made from good quality leather (at least 2.5mm thick) and be waterproof too.

Feet tend to get crushed sideways, so strong soles are extremely important. A stitched sole is best, and if possible bonded as well. Anything less and it may fall apart under impact or abrasion. The sole should contain ridges to provide good grip, and be at least 4mm thick. The thicker the sole, the more the boot will absorb the vibration of the bike.

**TWO THINGS TO AVOID**

- Do not wear work boots with metal plates or toe caps. These can protect your feet in certain circumstances but are also capable of cutting through your toes.
- When you try the boots on, wear a pair of socks you would normally wear on the bike. Do not wear two pairs of socks in a boot. Double layers of socks will create movement of your foot within the boot and could lead to rubbing and blisters.

If possible, before buying boots, try wearing them while sitting on your bike in your normal riding position to make sure you can easily operate the foot controls.

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1 NHS Hospital admissions due to motorcycle injuries 1997-2008
THE PERFECT FIT
It may sound obvious, but make sure the boots you buy fit properly. Too tight and they will make your feet numb – too loose and you will find it difficult to maintain control over the gear lever and brake.

FLEXIBILITY
Boots will get softer and more comfortable with use, but if a boot is too rigid it may lead to discomfort. Test their flexibility by manipulating them physically in the store, as well as trying them on.

SAFE ZIPS
Where boots are zipped up, ensure there is a large enough flap under the zip and one over it. This ensures the zip won’t let in water or rub directly on the ankle.

SAFE COLOURS
Try to make sure the leather is colour-fast, otherwise you will find socks and feet are dyed the colour of your boots in wet weather.

SAFETY FIRST
Motorcycle boots are available in a range of designs and can be bought to match your bike or other bike gear. Some non-motorcycle boots can be practical but be careful. Cowboy boots can be worn for example, but vary enormously in quality. Cheap leather boots may split and tear against the road surface – but better quality boots will provide adequate protection. Also bear in mind boots which are harder to get on and off will cause problems for paramedics should it be necessary to remove them.
A short slide on tarmac – even at 30mph – will shred through clothes and then take skin down to bone in no time.

Whether you ride a 50cc moped or a 1200cc superbike, riding in your everyday clothes puts you at real risk of serious injury. Finding clothing to shield you from both impact and abrasion – the most common causes of injury – is extremely important.

WHAT TO LOOK FOR WHEN BUYING LEATHERS

A GOOD FIT
The leathers should feel comfortable and fit well, without being tight. Make sure the arms are long enough and the shoulders in particular allow you to move within the jacket.

INTEGRATED BODY ARMOUR
This will often be included and should enhance protection at the elbows, back, shoulders, hips and knees. This should carry the CE label.

DOUBLE STITCHING
Stitching should be double or triple and should be sealed as well, either with a leather overlap or a plastic coating.

SAFE ZIPS
Zips should never lie directly against the skin. There should be an overlapping piece of leather. A zip against the skin will transmit heat from friction if you have a slide and a serious burn could result.

THICK WATERPROOF LEATHER
Leather should be at least 1.2mm thick. However, if it’s too thick it will be uncomfortable and will restrict your movement. Kangaroo leather is about the toughest you’ll find. Good leather will be treated to make it as waterproof as possible, but you may need to treat it from time-to-time to maintain this quality.
JACKET AND TROUSERS

Good quality biker leathers with internal integrated CE approved body armour will provide the best all round protection.

You may wish to consider a suit made from a highly waterproof material such as Cordura. Protection from the elements is coupled with thermal linings – which are often removable to allow for use in the spring or summer – and body armour too. These types of suits tend to be more ‘adjustable’ with velcro belts and fitted cuffs forming waterproof seals at the neck and arms.

REMEMBER

Leather is great in the summer, but not so good in the winter. It tends to be less warm and once a leather suit gets wet it can be extremely uncomfortable to continue your ride.

WHAT’S INSIDE

Look for thermal linings – preferably removable and breathable to ensure you remain cool when necessary. Also make sure there is CE-approved body armour integrated into the design.

SEAMLESS COVERAGE

Check there are flaps on the pockets to stop rain getting in. Also, make sure the cuffs, ankles and collar are all adjustable. Velcro fixings and over-cuffs should marry up with gloves to create a seamless covering for your body. Look for a nice snug fit around the neck and ensure that it’s comfortable. If it is too tight it will be very uncomfortable, or if it’s too loose it will be cold or let water in.
It is possible to get really good quality 'casual' motorcycle clothing. There are denim materials made with a mix of heavy duty denim and Kevlar weave which provide good abrasion protection. The addition of body armour provides safe motorcycle clothing which can be worn when not riding without you looking out of place.

**UK SUMMER SHOWERS**

For the UK summer, you may wish to carry a waterproof over-suit which will provide additional protection from the predictably unpredictable weather.

If possible, try on clothing whilst sitting on your motorcycle – or one in the showroom. This will help you to gauge the comfort of the gear much better than just walking around and looking in a mirror. You will spend most of the time wearing your gear on a bike, it's the best way to test the fit.
In the winter consider buying a good quality base layer. These are not the bulky old-fashioned ‘thermals’ of yesteryear, but are lightweight, comfortable and extremely effective. Long-sleeved tops and leggings can be supplemented by inner gloves and thermal socks to provide a first layer which will ensure your comfort and safety.

Back protectors absorb energy from an impact, helping to prevent damage to the spine and ribs, as well as to internal organs such as the kidneys, liver and spleen, which can all be harmed by a heavy external blow.

It is vital a back protector is the correct size for you. If it is too small, it won’t protect the vulnerable lumbar region of the lower back and if it is too big, it won’t fit comfortably under your riding gear. Label sizes will refer to torso length and this can be confusing. If you are not completely confident in taking your own measurements, the best advice is to visit a reputable dealer and ask them to measure and fit a back protector for you.
The European Personal Protective Equipment (PPE) Directive 1989, requires any clothing or personal equipment sold to provide protection from injury, for example motorcycle clothing, to comply with the relevant European Standard. To comply, the gear has to be independently tested and certified. The manufacturer is then issued with a CE (Conformité Européenne) label which shows that the motorcycle clothing conforms to the relevant European standard. The clothing or gear must carry a permanently attached CE label with the number of the Standard.

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<thead>
<tr>
<th>Category</th>
<th>Standard</th>
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<tr>
<td>Boots</td>
<td>CE EN 13634</td>
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<tr>
<td>Motorcycle jackets, trousers and</td>
<td>CE EN 13595</td>
</tr>
<tr>
<td>suits</td>
<td>Impact protectors and body armour – CE EN 1621</td>
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Remember to check what the CE label applies to, as it could be there to certify only a small part of a garment. Also, if you’re unable to find CE-approved items, there are other ways of making sure protective gear is good quality – just check out the tips in this guide!
BE ALIVE TO THE ROAD

CHECKLIST

KNOW YOUR STUFF
Do some research online or ask fellow bikers what gear they’d recommend. Remember we’re all different shapes and sizes, so what fits someone like a glove may not be good for you.

TRY BEFORE YOU BUY
Whether it’s a new pair of gloves, boots or full leathers, trying them on when on a bike is very important so you can see if they get in the way at all.

COVER UP
Don’t leave yourself exposed to the elements or to injury. Make sure every part of you is covered up as seamlessly as possible.

COMFORT IS KEY
Remember if something is even slightly uncomfortable, it could cause chafing over a long journey and end up becoming a dangerous distraction from the road.

BE BRIGHT, BE SEEN
Bear in mind wearing bright and fluorescent colours during the day and reflective elements in the dark can help improve your chances of being seen by others.