#### LIFESPAN

BETA recommends that body protectors should be replaced every three to five years, depending on use, as impact absorption properties of the foam might start to decline during this time. Level 5 (red), Level 7 (blue), Class I (green), Class 2 (orange) and Class 3 (purple) labels are now obsolete, so garments bearing them are no longer effective and should be replaced.











Garments bearing 2000 Level I (black), Level 2 (brown) and Level 3 (purple) labels should also be replaced, as they will be between six and 17 years old. Most riding organisations and disciplines are changing their rules so that only the BETA 2009 version and later versions will be accepted. A new version – which in terms of safety is no different from the 2009 one – will be entering the market in

## **CHECK IT OVER**

You should never cut or alter a body protector – leave things to the manufacturer. Any changes introduced by you could result in the garment no longer meeting the standard. Even if it still carries the label, changes could lead to the wearer being excluded from competition in disciplines where the standard is compulsory.

Always check your body protector for dents immediately after an incident such as a fall or kick because the foam should expand back into shape after 30 minutes. Any dents that remain are an indication that properties as before. Some manufacturers, however, are



#### **BUYING A BODY PROTECTOR**

Body protectors are available from many BETA retailers who have been trained by us to offer an expert fitting service – just look for their safety course attendance certificate displayed in-store. They will be able to help and guide you when making your purchase. A full list of BETA retail members can be found on the BETA website, www.beta-uk.org.

Full instructions, including how to wash and care for your body protector, are supplied by the manufacturer.

A full list of body protector brands and manufacturers approved to current standards can be obtained from the BETA office (see contacts on the back page of this booklet).



#### THE INSIDE STORY

- 1. Fabric covering Foam is usually enveloped in a sponge clean fabric. However, before you clean your body protector, make sure that you check the manufacturer's instructions.
- 2. Inner material Most body protectors are constructed from two layers of heat-sensitive PVC Nitrile foam. This is softened by body heat when the garment is worn. Some foams are perforated to provide increased flexibility, reduce weight and improve air flow. Body protector foam should never be exposed to excessive heat, such as when drying garments on a radiator.
- 3. Weight The lighter the foam, the harder it usually is when not in use and the heavier the foam, the softer it is. Most modern foams mould to the body, so the difference in weight is hardly noticeable when worn.
- 4. Fastenings These can include zips, sliding buckles, clips or Velcro strips and will depend on whether the body protector is a tabard (over the head) or front-opening garment.
- **5. Lining** This is usually made of a



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# BETA GUIDE TO BODY PROTECTORS

Find out more about the correct fit, safety standards and quality marks



## **BUILT TO PROTECT**

Body protectors are designed to offer the best possible protection to a rider. They do this by absorbing high levels of energy created when falling off or being kicked or stood on by a horse. The British Equestrian Trade Association (BETA) body protector standard sets the benchmark for safety and is recommended by all leading riding organisations and disciplines that demand body protectors should be worn.



There is a wide range of styles on the market from a number of different manufacturers and brands. Zip-fronted garments are a popular option. Tabard body protectors, which are put on over the head and adjusted at the shoulders and waist, are also available but becoming a little less common.

Developing technology has seen a number of new styles emerging, such as moulded garments. It is crucial when seeking a body protector that you shop around and try on a variety of styles before deciding what suits you the best.

#### **QUALITY ASSURANCE STANDARD**

The BETA 2000 standard was introduced in March 2000, superseding all previous ones. Although there are still a few body protectors made to this standard in circulation, most now carry the current 2009 standard.

Riders who have been wearing a 2000 label body protector for some time should replace it now because the energy-absorbing properties will have been compromised with age.





In order to feature a BETA label, body protectors must meet the EN 13158 performance standard and be certified to the PPE (personal protective equipment) Directive shown by CE marks on labels.

All manufacturers are called to re-test approved garments annually to ensure consistency in the quality of manufacture and shock-absorbing foam used. BETA acts as a quality assurance standars

**EN 13158:** This provides the technical specification for body protectors and sets the level of shock absorption required, highlights the area of the body that must be covered and ensures minimal gaps between foam panels and that all closures are safe. EN 13158 is a one-off test at the beginning of a body protector's life, provided that no changes are made to materials or patterns.

**CE:** The CE sign is neither a quality mark nor a standard. It's a mandatory declaration to show when garments conform to the European directive for all personal protective equipment (PPE). Under the PPE Directive, safety equipment must bear the CE mark showing compliance with the basic health and safety requirements, meeting the relevant European Safety Standard. In the case of body protectors, this is EN 13158: 2009.

## THREE LEVELS OF PROTECTION

Body protector labels highlight three levels of protection suitable for different activities and riders. These safety garments are made from materials designed to absorb and spread impact to reduce any injury sustained. The difference between each of the levels is due to the thickness of foam used in manufacture.

Although no body protector can prevent serious injury in certain circumstances, it can definitely improve your chances of staying safe and reducing the severity of injuries.

BETA-standard body protectors and shoulder protectors feature one of the following labels:

**Level 1:** This shows that the body protector provides a lower level of impact protection considered suitable only for licensed jockeys while racing.

**Level 2:** Body protectors with this label provide a lower than normal level of protection considered appropriate for use in low-risk situations. These do not include riding on roads or other hard surfaces, riding over jumps, riding young or excitable horses or if you are an inexperienced rider. Those working in the racing sector can wear Level 2 garments provided that the trainer has completed a risk assessment beforehand. This level is now a requirement for racing in Ireland and the UK.

**Level 3:** This shows that the body protector offers a level of protection considered appropriate for normal horse riding and competitions, and for those working with horses. Garments to this level should prevent minor bruising resulting in stiffness and pain, as well as some rib fractures, and reduce soft tissue injury and bruising.

Please note that a Level 3 body protector should always be worn under an air vest, whatever the activity.

## **SHOULDER PROTECTORS**

These are designed to protect the end of the collarbone, which often suffers injury when falling on the shoulder. The BETA standard is designed to help guard against injury sustained in a fall on to the point of the shoulder, which is stronger than the rib cage and a different shape.

For this reason, shoulder protectors undergo separate testing even though they are an integral part of a body protector. Research into eventing falls has revealed that a BETA Level 3 shoulder protector can reduce the risk of breaking a collarbone by up to 80 per cent.

#### **FITTING TIPS**

For a body protector to do its job, it must be properly fitted. A visit to a retailer who has been trained by BETA to fit safety garments is highly recommended. The following tips can help you to find a suitable body protector:

**Measurements** Waist, chest and waist-to-waist (from the waist at the front, over the shoulder and then down to the waist at the back) measurements are taken.

**Size chart** This can be found in the user instructions attached to new BETA-standard body protectors and it helps to find the correct size.









**Size ranges** If your measurements put you at the top or bottom of a size range, try to find the two closest sizes before establishing which is most comfortable.

**Try it on** Always try a body protector on over light clothing or garments that will usually be worn underneath. Heavier clothing such as rain wear is best worn over the top.

Fastenings To ensure a snug fit, adjust the body protector's fastenings at the shoulders and waist.

If you can't find a body protector that's a comfortable fit, some manufacturers offer a made-to-measure service.

#### A CORRECT FIT

Some body protectors can seem a bit stiff when you first try them on but, after five minutes, body heat will warm the foam up and allow it to mould to your shape.

**Secure** A secure and reasonably tight fit helps to avoid movement and ensure that the body protector remains in place in the event of an accident.

**Coverage** The body protector should reach the top of the sternum (breastbone) at the front and fit up to the prominent bone at the base of the neck at the back. Additionally:

- The front should not be less than 25mm below the ribcage.
- The body protector must fit all the way round the torso.
- Together, the body and shoulder protectors should cover the collarbone.
- The rear bottom edge of the body protector should not touch the saddle when mounted. There should be a minimum gap of at least 7cm. It is possible to obtain short fittings or a shortening service from some manufacturers.

**Comfort check** Try out all simulated riding positions to ensure that the body protector is comfortable.

**Coloured Velcro** Some body protectors made to the BETA 2000 standard and all BETA 2009, and later ones have coloured Velcro fastenings. If these are exposed once the garment has been fitted, it shows that the garment does not fit correctly and a larger size should be tried.





