



A weekly question/answer column

## Do You Have Tips For Selecting A Bicycle Helmet?

*Karen Biers\* answers:*

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When you straddle your bicycle this spring, it is important to also strap on a helmet. Bicycle helmets have been shown to reduce the risk of head injury by as much as 85 percent and the risk of brain injury by 84 percent. In spite of this, the majority of riders are still not wearing helmets or are not wearing them properly.

The Consumer Product Safety Commission (CPSC) recently set new federal safety standards so that those wearing bicycle helmets are better protected. As of February 1999, all bicycle helmets manufactured or imported for sale in the United States are required to meet uniform, mandatory safety standards. Helmets meeting the requirements carry a CPSC sticker.

The following tips can help you select a bicycle helmet to increase your comfort and safety while riding.

- Find a helmet that fits your head properly. A good fit means the helmet is level on your head and is not tilted in any direction. It should touch all around your head and not obstruct your field of vision. It should be comfortably snug, but not tight. The helmet should be as low as possible on the head to maximize side coverage. Try to select a helmet comfortable enough that you almost forget you are wearing it.
- Look for a helmet with a stiff outer shell made of rounded, smooth plastic. This is designed to distribute impact forces and protect against sharp objects. The shell enables the helmet to skid easily on rough pavement which helps prevent the rider's neck from being damaged. A white or brightly colored shell is a good choice since it is more visible to motorists and other cyclists.
- Find a helmet with a layer of stiff foam to cushion a blow and reduce the peak energy of sharp impact. Most bicycle helmets use expanded polystyrene (EPS). However, it is important to know that EPS does not recover once it is crushed. Although the foam damage may not be visible, the helmet will no longer provide adequate protection. If a helmet properly protects the head during a crash, a person will not usually know their head was hit. After an accident, be sure to check the shell for scrapes or measure for foam crush. If there is damage, the helmet should be replaced. Many manufacturers will replace crashed helmets for a fee and/or inspect a helmet to see if it should be replaced.
- Select a helmet with a chin strap that fits properly. It should be snug against the chin, with the V on the side straps meeting with no slack just below the ear. The fastener

should be strong so it does not jiggle open. The length of the strap should be adjusted so it is comfortably snug. If you can slide more than two fingers through the strap, it is too loose. If the strap cuts into your chin, it is too tight. When you have the straps adjusted, shake your head, then put the palm of your hand under the front edge and try to move the helmet. Your helmet should not move more than about an inch in any direction and must not pull off. Helmets with too much slack may fall from the head during impact.

- Be aware of vents, visors and mirrors. Vents provide cooling, but too many mean less foam is in contact with your head. In a crash, this could concentrate force on one point of your skull. Visors on helmets can snag or shatter in a fall. If a visor snags while you are skidding on the pavement, it may jerk your head and cause injury. If you select a helmet with a visor, choose one that will break away in the event of a crash. Mirrors are a necessity, but they also need a breakaway mount. Ponytail ports can improve fit for those with long hair.
- Choose a helmet with at least one set of inside fitting pads. Foam fitting pads help keep the helmet correctly positioned. Adjust the side fitting pads by using thinner or thicker pads where there is space. The helmet should fit with pads touching all the way around without making it tight or uncomfortable. For cooling purposes, you may want to leave a few gaps in the fitting pads.
- Be sure children remove bike helmets before climbing trees or playing on playground equipment. This will prevent the risk of catching the helmet on playground equipment or a tree branch, a potential cause of strangulation.

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