*It takes brains to be safe—*
*Be smart and wear a helmet!*

# Which Helmet for Which Activity?

**See inside for an answer to this and other questions.**

## Why are helmets so important?

For many recreational activities, wearing a helmet can reduce the risk of a severe head injury and even save your life.

## How does a helmet protect my head?

During a typical fall or collision, much of the impact energy is absorbed by the helmet, rather than your head and brain.

## Does this mean that helmets prevent concussions?

No. No helmet design has been proven to prevent concussions. The materials that are used in most of today's helmets are engineered to absorb the high impact energies that can produce skull fractures and severe brain injuries. However, these materials have not been proven to counteract the energies believed to cause concussions. Beware of claims that a particular helmet can reduce or prevent concussions.

To protect against concussion injury, play smart. Learn the signs and symptoms of a concussion so that after a fall or collision, you can recognize the symptoms, get proper treatment, and prevent additional injury. See cdc.gov/headsup/ for more information.

## Are all helmets the same?

No. There are different helmets for different activities. Each type of helmet is made to protect your head from the kind of impacts that typically are associated with a particular activity or sport. Be sure to wear a helmet that is appropriate for the particular activity you're involved in. (See the table in this pamphlet for guidance.) Helmets designed for other activities may not protect your head as effectively.

## How can I tell which helmet is the right one to use?

There are safety standards for most types of helmets. Bicycle and motorcycle helmets must comply with mandatory federal safety standards. Helmets for many other recreational activities are subject to voluntary safety standards. The standards for each type of helmet are shown in the table in this pamphlet.

Helmets that meet the requirements of a mandatory or voluntary safety standard are designed and tested to protect the user from receiving a skull fracture or severe brain injury while wearing the helmet. For example, all bicycle helmets manufactured after 1999 must meet the U.S. Consumer Product Safety Commission (CPSC) bicycle helmet standard (16 C.F.R. part 1203); helmets meeting this standard provide protection against skull fractures and severe brain injuries when the helmet is used properly.

The protection that the appropriate helmet can provide is dependent upon achieving a proper fit and wearing it correctly; for many activities, chin straps are specified in the standard, and they are essential for the helmet to function properly. For example, the bicycle standard requires that chin straps be strong enough to keep the helmet on the head and in the proper position during a fall or collision.

Helmets that meet a particular standard will contain a special label or marking that indicates compliance with that standard (usually found on the liner inside of the helmet, on the exterior surface, or attached to the chin strap). Don't rely solely on the helmet's name or appearance, or claims made on the packaging, to determine whether the helmet meets the appropriate requirements for your activity. See the table in this pamphlet for more information on what standards to look for on the label or marking.

Don't choose style over safety. When choosing a helmet, avoid helmets that contain nonessential elements that protrude from the helmet (e.g., horns, Mohawks)—these may look interesting, but they may prevent the helmet's smooth surface from sliding after a fall, which could lead to injury.

Don't add anything to the helmet, such as stickers, coverings, or other attachments that aren't provided with the helmet, as such items can negatively affect the helmet's performance.

Avoid novelty and toy helmets that are made only to look like the real thing; such helmets are not made to comply with any standard and can be expected to offer little or no protection.

## Are there helmets that I can wear for more than one activity?

Yes, but only a few. For example, you can wear a CPSC-compliant bicycle helmet while bicycling, recreational in-line skating or roller skating, or riding a kick scooter. Look at the table in this pamphlet for other activities that may share a common helmet.

## Are there any activities for which one should not wear a helmet?

Yes. Children should not wear a helmet when playing on playgrounds or climbing trees. If a child wears a helmet during these activities, the helmet's chin strap can get caught on the equipment or tree branches and pose a risk of strangulation. The helmet may also prevent a child's head from moving through an opening that the body can fit through, and entrap the child by his/her head.

## How can I tell if my helmet fits properly?

A helmet should be both comfortable and snug. Be sure that the helmet is worn so that it is level on your head—not tilted back on the top of your head or pulled too low over your forehead. Once

on your head, the helmet should not move in any direction, back-to-front or side-to-side. For helmets with a chin strap, be sure the chin strap is securely fastened so that the helmet doesn't move or fall off during a fall or collision.

If you buy a helmet for a child, bring the child with you so that the helmet can be tested for a good fit. Carefully examine the helmet and the accompanying instructions and safety literature.

## What can I do if I have trouble fitting the helmet?

Depending on the type of helmet, you may have to apply the foam padding that comes with the helmet, adjust the straps, adjust the air bladders, or make other adjustments specified by the manufacturer. If these adjustments do not work, consult with the store where you bought the helmet or with the helmet manufacturer. Do not add extra padding or parts, or make any adjustments that are not specifically outlined in the manufacturer's instructions. Do not wear a helmet that does not fit correctly.

## Will I need to replace a helmet after an impact?

That depends on the severity of the impact and whether the helmet was designed to withstand one impact (a single-impact helmet) or more than one impact (a multiple-impact helmet). For example, bicycle helmets are designed to protect against the impact from just a single fall, such as a bicyclist's fall onto the pavement. The foam material in the helmet will crush to absorb the impact energy during a fall or collision. The materials will not protect you again from an

additional impact. Even if there are no visible signs of damage to the helmet, you must replace it after such an event.

Other helmets are designed to protect against multiple impacts. Two examples are football and ice hockey helmets. These helmets are designed to withstand multiple impacts of the type associated with the respective activities. However, you may still have to replace the helmet after one severe impact if the helmet has visible signs of damage, such as a cracked shell or permanent dent in the shell or liner. Consult the manufacturer's instructions or certification stickers on the helmet for guidance on when the helmet should be replaced.

## How long are helmets supposed to last?

Follow the guidance provided by the manufacturer. In the absence of such guidance, it may be prudent to replace your helmet within 5–10 years of purchase, a decision that can be based, at least in part, on how much the helmet was used, how it was cared for, and where it was stored. Cracks in the shell or liner, a loose shell, marks on the liner, fading of the shell, evidence of crushed foam in the liner, worn straps, and missing pads or other parts, are all reasons to replace a helmet. Regular replacement may minimize any reduced effectiveness that could result from degradation of materials over time, and allow you to take advantage of recent advances in helmet protection.

## Where can I find specific information about which helmet to use?

Look at the information in columns 1-3 of the table to the right, and follow these easy steps:

Find the activity of interest in the first column (1).

Read across the row to find the appropriate helmet type for that activity listed in the second column (2).

Once you've found the right helmet, look for a label or other marking stating that the helmet complies with an applicable standard listed in the third column (3).

# heads up + helmeted = safer play

For more information, please contact:

CONSUMER PRODUCT SAFETY COMMISSION UNITED STATES

**CPSC.gov**

USCPSC

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| 1. Activity | 2. Helmet Type | 3. Applicable Standard(s) |
|---|---|---|
| **Individual Activities — Wheeled** | | |
| Bicycling<br>Kick Scooter Riding | Bicycle | ASTM F1447, F1898[1]; Snell B-90, B-95, N-94[2]; and CPSC 16 CFR 1203 |
| BMX Cycling | BMX | ASTM F2032 |
| Downhill Mountain Bike Racing | Downhill | ASTM F1952 |
| Longboarding<br>Roller and In-line Skating – Aggressive/Trick<br>Skateboarding | Skateboard | ASTM F1492[2]; and Snell N-94[2] |
| **Individual Activities — Wheeled with Motor** | | |
| ATV Riding<br>Dirt- and Mini-Bike Riding<br>Motocrossing<br>ROV/Side by Side/UTV Riding | Motocross or Motorcycle | Snell M2020, CM2016[3]; ASTM F3103; and DOT FMVSS 218 |
| Karting/Go-Karting | Karting or Motorcycle | Snell K2020, SA2020, M2020, CM2016[3]; and DOT FMVSS 218 |
| Moped Riding<br>Motorized Bicycling[4]<br>Powered Scooter Riding[4] | Moped or Motorcycle | Snell L-98, K2020; SA2020, M2020, CM2016[3]; and DOT FMVSS 218 |
| Motorcycling | Motorcycle | Snell SA2020, EA2016, M2020; and DOT FMVSS 218 |
| **Individual Activities — Non-Wheeled** | | |
| Bull Riding | Bull Riding | ASTM 2530 |
| Horseback Riding | Equestrian | ASTM F1163; and Snell E2021 |
| Pole Vaulting | Pole Vaulting | ASTM F2400 |
| Rock- and Wall-Climbing | Mountaineering | EN 12492[2]; and Snell N-94[2] |
| **Team Sport Activities[5]** | | |
| Baseball, Softball, and T-Ball | Baseball: Batter, Catcher, or Fielder | NOCSAE ND022, ND024, ND029[6] |
| Football | Football | NOCSAE ND002 |
| Ice Hockey | Hockey | NOCSAE ND030; and ASTM F1045 |
| Lacrosse | Lacrosse | NOCSAE ND041; and ASTM F3137 |
| Polo | Polo | NOCSAE ND050 |
| Field Hockey | Field Hockey | NOCSAE ND061 |
| **Water Activities** | | |
| Canoeing/Kayaking | Canoeing/White Water | EN 1385 |
| Power Boating | Motorcycle | Snell SA2020, EA2016, M2020; and DOT FMVSS 218 |
| **Winter Activities** | | |
| Skiing, Snowboarding, and Snow Tubing | Snow Sports | ASTM F2040; and Snell S-98, RS-98 |
| Snowmobiling | Motorcycle | Snell SA2020, EA2016, M2020; and DOT FMVSS 218 |
| **Although a helmet standard does not currently exist for each of the following activities, until such standards are written, wearing one of the listed types of helmets may be preferable to wearing no helmet at all.** | | |
| Ice Skating/ Sledding | Ice Skating, Bicycle, Skateboard, or Snow Sport | ASTM F1849, F1447, F1492, F2040; CPSC 16 CFR 1203; and Snell B-90, B-95, N-94[2], S-98, RS-98 |
| Spelunking (caving) | Mountaineering | EN 12492[2]; and Snell N-94[2] |

[1] A helmet that complies with this standard is designed for use by infants and toddlers in activities involving non-motorized wheeled vehicles.

[2] A helmet that complies with this standard is designed to withstand more than one moderate impact, but protection is provided for only a limited number of impacts. Replace if visibly damaged (e.g., a cracked shell or crushed liner) and/or when directed by the manufacturer.

[3] A helmet that complies with this standard was designed specifically for use in children's motorsports.

[4] Capable of maintained speeds of at least 20 mph and likely to have more interaction with motor vehicles than non-motorized activities. If under 20 mph and used in the same manner as a bicycle or kick scooter, a bicycle helmet may be appropriate.

[5] Team sport helmets are designed to protect against multiple head impacts typically occurring in the sport (e.g., ball, puck, or stick impacts; player contact), and, generally, can continue to be used after such impacts. Follow manufacturer's recommendations for replacement or reconditioning.

[6] For fielder helmets.

**Definitions:** ASTM – ASTM International; CSA – Canadian Standards Association; DOT – Department of Transportation; EN – Euro-norm or European Standard from the European Committee for Standardization; NOCSAE – National Operating Committee on Standards in Athletic Equipment; Snell – Snell Memorial Foundation.

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