



Let's Keep Approved Helmets Fitted Properly

Now that ASTM/SEI helmets are the norm in the show ring, here's a refresher course on proper fit and function.

Kim Ablon Whitney

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It's now been just a year since the USA Equestrian mandated ASTM/SEI-approved helmets for junior riders showing at USAEq recognized competitions. And while the kids have certainly adjusted to the change in appearance, they've not always adjusted their helmets properly.

Joe Dotoli and the entire Ad Hoc Helmet Safety Committee worked tirelessly to get the rule change passed. Thanks to their efforts and the support of many riders, trainers, judges and parents, kids are now wearing the helmets. But not all are fitting them properly.

"Just because you put an ASTM helmet on a kid doesn't mean you don't have to adjust it," said Dotoli.

And how does one determine what is a properly fitted helmet? "Fit is an ambiguous term," said Richard Timms, CEO of Troxel Helmets, one of the leading makers of ASTM/SEI-approved helmets. "People may equate fit with feel in terms of comfort, but, really, if a helmet stays on in an accident it's said to fit."

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"The most common mistake in fitting helmets is that people don't realize the importance of the chin strap," said Timms. "The most vital safety concern is that the helmet is buckled snugly. Our helmets are all made so that if the chin strap is snug and the buckle is buckled it cannot roll off the head."

In addition, Timms cautions parents of younger children not to fall into the "she'll grow into it" mindset. "When buying a helmet for a child you should never get a loose one in anticipation of head growth," he said. "It needs to fit properly right then and there."

Karen Clark, owner of The Horse Works in Williston, Vt., also cautions against going to a tack shop with a specific brand or model helmet in mind. "Oftentimes kids will come and want the same helmet that looks good on a friend, or even sometimes trainers tell kids a particular helmet to buy," said Clark. "But sometimes those helmets just plain don't fit, and then we really try to encourage them to go with a different model or brand."

And it's important to note that helmets do have a life span. Timms recommended replacing a helmet every five years regardless of whether you've suffered a fall in it. "The effects of time and wear and tear can take a toll on the material," he explained. "Also, while helmets should fit the same over time sometimes the headliner - the soft material between the head and the hard, outer shell-compresses, making a helmet looser."

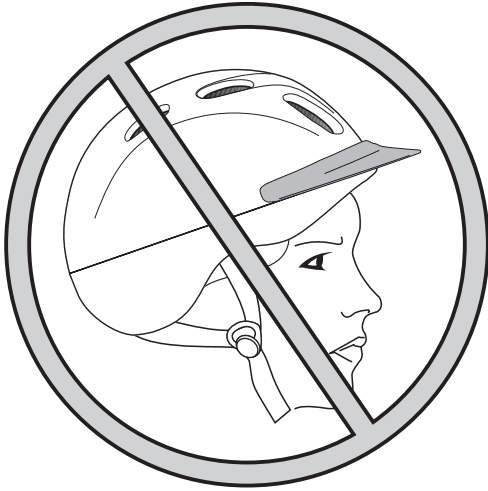
If you do suffer a fall of any kind in which the helmet receives a blow, replacing the helmet is a must-even if it looks perfectly fine.

"You can't tell by looking at or even from feeling a helmet if it's been damaged," stressed Timms.

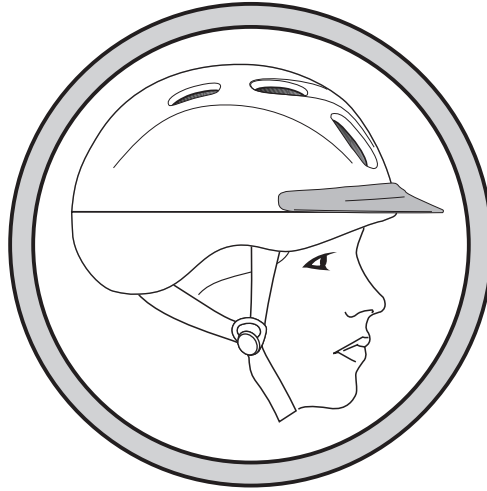
Many helmet manufacturers offer a helmet replacement program where riders can send in their damaged helmets for a replacement at a lower cost. Troxel, for instance, studies the damaged helmets for future engineering.

In terms of fitting a helmet beyond the harness adjustment, Timms said there are a few methods. One is to measure the circumference of the head with a flexible measuring device right above the ears where the helmet rests. Each helmet comes with a measurement chart that translates circumference size into hat size. For those riders who excel at math and want to calculate this figure without the chart, it's the circumference divided by pi (3.14159).

But another method, and possibly the best, is simply trying on various helmets with the help of a tack store professional. "Circumference is a general estimate of the helmet you wear," said Timms. "It's the



INCORRECT



CORRECT

Riders should not wear their helmets tilted up—this makes the helmet unstable.

The visor should be just above the crease of the eyebrows.

best simple measurement, but it doesn't always predict perfectly."

The reason it doesn't predict perfectly is because head shapes differ greatly from person to person. "Some people might have the same head circumference, but one person might have a narrow, long head while the other a wide, short head," said Timms. "Measuring tells you size, but it doesn't tell you shape."

For this reason most helmet companies offer a variety of different shapes. Assessing one's head just from looking can be hard, and that's when trying on lots of different shaped helmets, and also brands, can help.

When a rider enters The Horse Works looking for a helmet, Clark does usually make a guess as to the shape of the rider's head and suggests a corresponding helmet. "Every now and then I can pick it on the first try," said Clark, who was a member of the Ad Hoc Helmet Safety Committee. "But a lot of the time hairstyle or the shape of the face can mask head shape, and you have to try on more than one helmet."

When trying on various helmets, Clark looks for the helmet to sit level on the head. "The helmet should be parallel to the ground, just above the crease of the eyebrows," she said. "Newcomers to the sport

often angle the visor up and that tends to make the helmet unstable and unsafe."

Clark also has riders shake their heads "as if the horse just let out a buck" without the harness buckled. "If there's essentially no motion without the harness done up, then it fits," she said.

Ideally, a helmet should move only minimally when riding. Some Troxel helmets offer GPS (Gripper Positioning System) to help keep a helmet in place. GPS was first developed for cycling, and it grasps the occiput or rear protrusion of the head to help eliminate what Timms calls "helmet bob."

Not all Troxel helmets have GPS, and Timms pointed out that it might be optimal for people with certain shaped heads. He also stressed that gripper systems do not necessarily translate into safer helmets.

"Helmets with GPS might fit some people better than others, but they're not safer by any means," he said. "If an ASTM helmet is on securely it doesn't matter if it's a \$30 helmet or a \$100 helmet with GPS. There's no evidence whatsoever that improving beyond basic fit does anything more for safety.

Another signal of fit is comfort. Clark encourages riders to wear helmets around the store to assure they truly fit. "Some riders will have red marks on their foreheads even if it fits correctly because they have really fair skin," said Clark. "But a helmet should not be so tight that it gives you a headache."

Often a rider's hairstyle can play a role in helmet fit. "I always tell my riders to make sure they have their hair the way they want it when they show when they try on the helmets," said trainer and judge Rita Timpanero. If a rider has long hair that needs to go up in the helmet it can really change the shape of the helmet they need.

"Someone with a round-shaped head but long, thick hair might need an oval helmet," said Clark. She noted that if a rider buys a helmet that fits with her hair up, she needs to ride with her hair up at home or buy separate schooling and show helmets.

"It's a little disheartening to see trainers who don't care"