Flying High

By Nichole Buswell

The risks and rewards of action sports

Grinds and space walks. Backflips and front flips. Landing a 180 on the half-pipe.

For a growing number of teens, nothing beats the thrill of pulling off new tricks in action sports such as skateboarding, snowboarding, and bicycle motocross (BMX). "I love the jumps and the weightless feeling you get when you're in the air," says Greg D., a 16-year-old from Pennsylvania who is a member of his school's popular ski and snowboard club. But while action sports may take fun to new levels, they also involve a set of heightened risks—and deserve serious thought.



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High-Stakes Sports

Now more than ever, recognition of action sports is soaring. Snowboarding and skateboarding are among the fastest-growing sports nationally, according to an American Sports Data survey, with three of five U.S. kids and teens saying they watch action sports on TV. But as the popularity of action sports has increased, so has the number of injuries among young participants, according to the American Academy of Orthopaedic Surgeons

(AAOS). "Many teens don't realize the rigorous training required of extreme sports athletes," says Dr. George Russell, spokesperson for the AAOS. He notes that athletes who compete in the X Games and Olympics spend years working their way up to the gravity-defying stunts they perform on TV.

There is good reason for that practice and preparation. Unlike traditional sports such as basketball and soccer, action sports often propel athletes high in the air. That leaves them more prone to falls that can lead to serious injuries—something top American snowboarder Kevin Pearce experienced firsthand. When he failed to land a twisting double backflip during a trial for the 2010 Winter Olympics, Pearce suffered a traumatic brain injury. Though he was wearing a helmet at the time, the accident left him hospitalized in critical condition. Fortunately, Pearce has regained his ability to walk and talk and is on a slow but steady road to recovery.



Jed Jacobsohn/Getty Images Japanese snowboarder Tomoka Takeuchi (above) competed in the Winter Olympics.

Though extreme, Pearce's injury is not uncommon. Snowboarding causes more injuries than any other outdoor activity, notes the Centers for Disease Control and Prevention, with about half of those injured between the ages of 10 and 24. And snowboarding is not the only culprit: The majority of sports-related head injuries occur during bicycling, skateboarding, or skating, according to the American Academy of Pediatrics and Safe Kids USA.

Though head injuries can be the most devastating, other types of injuries are common in action sports. Those include damage to the knees, as well as broken wrists and elbows, notes Russell. Sometimes, injuries are severe enough to harm growth plates—areas at the ends of long bones that are the weakest parts of teens' growing skeletons. "These types of injuries generally require surgery and can lead to stunted growth or even deformities," warns Russell.

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Blame It on Your Brain

If action sports are so dangerous, why are so many teens drawn to them? The answer may be in your brain, says Tara Kuther, a psychology professor at Western Connecticut State University. She notes that teens' brain chemistry makes them more likely to be drawn to activities that involve a degree of risk. During adolescence, Kuther explains, the parts of the brain responsible for strong emotion develop very quickly. At the same time, the parts that handle judgment and logical thinking lag behind—leaving many teens hard-pressed to control their impulses. When it comes to attempting risky moves in action sports, teens may quite literally forget to look before they leap.

The brain changes during adolescence cause the emotional "high" which often accompanies risky activity to be particularly strong, Kuther adds. That means that the danger of wiping out during a trick may be the very reason a teen feels compelled to try it in the first place. (Thus the popularity of MTV's bone-crunching stunt show *Scarred*, which airs footage of spectacular wipeouts—and the often gruesome aftermath.)

Reducing Your Risk

So how can you prevent impulse from leading to injury? Try taking a timeout. Think carefully about the benefits and risks, and "then pause before jumping into an activity," Kuther advises. If you are uncomfortable with trying a sport or a trick but don't want to lose out on time with friends, just hang out and watch the action.

If you choose to get in the game, the right safety equipment is a must. Since 2009, the Winter X Games have required helmets for all competitors—a trend that is catching on nationwide. Helmet use among skiers and snowboarders has risen 19 percent since 2008, according to a survey by the National Ski Areas Association. "My friends and I always wear our helmets when we go [snowboarding]," says Greg. For skateboarders and bikers, helmet use can reduce the risk of head injury by 85 percent, according to Safe Kids USA.

Equally important in avoiding injury is being honest with yourself about your own skills. Greg and his buddies "look out for each other and don't try tricks that are past our ability level," he says. For novice snowboarders, that might mean sticking with beginner slopes until you're comfortable taking on steeper ones or advancing to the half-pipe. In skateboarding, instructor Sean Nguyen recommends first mastering the basics of balance, turns, and stops before trying grinds, slides, and basic tricks.



No matter the sport, it's best to begin under the guidance of an instructor who knows the ropes. One recent study of injured snowboarders found that 88 percent hadn't taken lessons. "A skilled instructor will not only provide technical instructions but will also instill confidence," says Nguyen.

The Action Sports Advantage

Though they can be more dangerous than traditional sports, action sports may actually have an edge in terms of helping teens stay fit throughout their lives. Researchers at Johns Hopkins University in Baltimore found that for a young person who biked or skateboarded more than four times a week, the chance of becoming an overweight adult fell by 48 percent. Meanwhile, for those who played soccer or other more traditional sports, the odds of being overweight later in life dropped by only 20 percent.

Greg prefers snowboarding to traditional team sports for several reasons. "I like that I can go at my own pace. I take a break when I want to or push myself when I want to. Also, it's not as structured [as organized sports], and it is noncompetitive." Though action sports carry their own set of risks, there's no denying their appeal. As long as teens take the right safety precautions, action sports can be a great way to have fun—and keep in shape for years to come.

Skateboarding 101

Can you imagine getting school credit for skateboarding? For students at New York City's East Side Community High School, gym class is a time to hop on their boards and go. Taught by professional skateboarder Billy Rohan and instructor Sean Nguyen, the class has become a favorite for Maria G., 14. "I look forward to it every day," she says.



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Michael J. Lebrecht II/Sports Illustrated/Getty Images

Maria is not the only student who loves the program. "With skateboarding, we've reached a whole other group of kids that weren't formerly interested in sports," says Tom Mullen, East Side's assistant principal. "They've found something they're good at," he says, noting that students not only are keeping physically fit by skateboarding but in many cases are improving their confidence and self-esteem as well.

Teens also get an important lesson in skateboard safety. Students wear helmets and begin each class with a stretching exercise to prepare their muscles for use. Additionally, they learn to remain in control of their boards and how best to fall in order to avoid injury.

Maria says that skateboarding has become more than just a sport—it's now part of her identity. "We're like a family," she says of her classmates and instructors. "We all help each other, and everyone gets better together."

Playing It Safe

Here are some easy steps you can take to prevent action sports injuries.



Istock Source: "'X-Tremely' Dangerous Sports" press release. American Academy of Orthopaedic Surgeons, Jan. 26, 2009

- **1 Warm up.** Cold muscles are much more likely to strain or tear. Before starting a sports activity, first walk or jog for three to five minutes. Follow up with some slow, gentle stretching.
- **2 Protect yourself.** Be sure to wear the right safety gear, including a helmet, gloves, and padding. Make sure your equipment is properly fitted and in good condition.
- **3 Know how to fall.** Sometimes falling is unavoidable. When you fall, turn your head in the direction of the fall, and try to land on your side or rear end.
- **4 Don't go it alone.** Whatever the sport, always head out with a coach or a friend so there's someone to get help if an injury occurs.
- **5 Know your limits.** Don't attempt to imitate the tricks you see on the X Games or other televised action sports events. Remember that you are watching athletes with many years of experience and training.



Giving Back

An Interview With Daniel Brown

Daniel Brown started riding motocross after getting his first dirt bike at age 12. Now 28, Brown is the creator of Helping Extreme Athletes Live, or HEAL (www.healclothing.com), an organization he was inspired to put together after a close friend became paralyzed in a supermoto* accident.



Courtesy of Dan Brown Injured motocross athlete Doug Henry (left) with Daniel Brown (right)

Current Health: Tell us about the mission of HEAL.

Daniel Brown: With HEAL, I set out to make an apparel line to help take care of injured action sports athletes and give back to that community. HEAL takes a percentage of every sale and donates it to organizations like Road 2 Recovery, Athlete Recovery Fund, and Life Rolls On.

CH: What do you think teens should know about the risks of action sports?

Brown: What teens need to know about the risks is that they are real—injuries can happen to anyone. I once came close to losing my leg from a motocross accident. As these sports are progressing, you are seeing more and more serious injuries, even on the professional level.

CH: Are there any action sports safety tips that you recommend teens follow?



Brown: You can decrease your level of risk without decreasing your performance by wearing a helmet. It won't affect your chances of landing a trick or take the rush out of your sport—the only thing it will do is help you keep enjoying these sports for longer. Also, know what you are getting into. Take the time to learn a track, course, or jumps before you attempt them.

*A cross between motocross and street bike racing

- 1. In what year did the Winter X Games start requiring that all competitors wear helmets?
 - **A** 2008
 - **B** 2009
 - **C** 2010
 - **D** 2011
- 2. The author describes action sports as all of the following EXCEPT
 - **A** taking fun to new levels
 - **B** involving a set of risks
 - **C** increasing in popularity
 - **D** being perfectly safe
- 3. After reading the passage, what can you most likely conclude?
 - **A** Snowboarding and skateboarding will continue to be popular sports.
 - **B** Most people will soon lose interest in watching action sports on TV.
 - **C** Within the next few years, all schools will offer skateboard classes.
 - **D** Helmets will no longer be required at the next Winter X Games.
- **4**. Read this sentence from the passage: "'Many teens don't realize the rigorous training required of extreme sports athletes,' says Dr. George Russell, spokesperson for the AAOS."

In this sentence, the word **rigorous** means

- **A** rewarding
- **B** wonderful
- C demanding
- **D** effortless
- 5. Why does the author include the section called "The Action Sports Advantage" in the passage?
 - A to explain the benefits of participating in action sports
 - **B** to compare and contrast individual versus team sports
 - **C** to persuade soccer players to try skateboarding instead
 - **D** to describe why competitive sports are too structured



6. What organization did Daniel Brown create?
7 . How can action sports be helpful? How do you know? Give specific examples from the article that support your answer.
8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

Action sports such as skateboarding, snowboarding, _____ bicycle motocross are

A or

gaining in popularity.

- **B** for
- C but
- **D** and

9. Answer the following questions based on the sentence below.

American snowboarder Kevin Pearce suffered a traumatic brain injury by failing to land a twisting double backflip during a trial for the 2010 Winter Olympics.

Who?			
(did) What?			

How? _____

When? during a trial for the 2010 Winter Olympics

10. Vocabulary Word: devastating: causing much damage.

Use the vocabulary word in a sentence: ______