

## The Risks:

Motocross is a very dangerous activity. Participation in this sport can and sometimes does result in severe injury or death. Due to the nature of the competition, the rough terrain, man-made and natural obstacles, and the performance characteristics of the machines—it is a virtual certainty that every rider will experience not just a crash—but many crashes. There are a couple well-used adages that every experienced rider knows and every new rider should know. “It’s not ***if you’re going to crash***, it’s ***when and how bad***.” The other oldie but goodie goes like this “The are two types of motocrossers, ***those that have crashed and those that are about to***.”

The information provided below is intended to be a guideline to help prepare riders for the types of falls that can occur in this sport. The gear listed here should be worn ANY time a person throws a leg over a motocross motorcycle. Another oldie but goodie goes like this: “***Dress for the crash, not the ride***.”

Riders participating in practice sessions or races are expected to wear certain safety gear as a minimum. This gear should consist of, but not necessarily be limited to a helmet, goggles, long sleeve shirt, long pants, motocross boots, chest protection, and gloves. While wearing any or all of these items will not completely eliminate the possibility of injury, these items will substantially reduce the number and range of injuries a rider is exposed to.

In addition to equipping yourself (or your child) with this basic set of protection, all riders and parents should strongly consider investing in some sort of neck protection. A variety of devices are available including the recently released “Leatt Brace” which claims to provide substantially improved protection from cervical spine injuries.

Riders under the age of 16 should wear hard plastic, over-the-jersey type chest protection.

The following equipment should be considered basic requirements. Riders (and/or their parents) should consider investing in additional equipment designed to help prevent injuries. Protection is a personal choice; do your homework. Research what is available and invest in the best equipment possible. We have assembled basic information designed to inform riders as to the types and intended purpose of the various pieces of motocross safety gear. We hope you find it useful it determining how to best protect yourself or your child while enjoying the sport of motocross.

## Equipment Outline

- **Helmets:** Helmets should be “Full Face”, DOT and preferably Snell approved for use in motocross. In general, the more expensive the helmet, the better the protection. That’s not always the case, so do some research on the available helmets before you purchase. How much is your brain worth?

**Arai**  
**Shoei**  
**M2R**

**Fox**  
**SixSixOne**  
**Bell**

**Fulmer**  
**AFX**  
**Scorpion**



Arai VX-Pro

Helmets should fit snug, and not move on the rider’s head when the chin bar is grasped and rotated from side to side and up and down. The helmet’s ability to protect the rider’s head is directly dependent on a good fit. DOT or Snell certification should be considered required. Some helmets exceed these standards more than others.

A high quality helmet is quite possibly the most important piece of protective equipment you will buy.

Although the impact on your pocket book is rough, riders (and parents) should be aware that in the event of a crash, your helmet is designed to self destruct while protecting your head. Any time a helmet takes a heavy impact it should be examined closely for signs of fatigue. Some helmet manufacturers will actually inspect your helmet for you if you suspect it might be damaged. Things that indicate a helmet needs to be retired include but are not limited to: cracking or compression of the Styrofoam under the padding, stress cracks in the finish around the chin bar or perimeter of the helmet, pulling or fraying of the chin strap or its connections, scars that are deeper than the paint on the exterior of

the helmet. If your helmet shows any of these signs you should, at the very least, consider having it inspected by the manufacturer.

The safest practice by far is to replace any helmet any time it has suffered more than a mild impact. Not all damage is easy to see. The Styrofoam may be compromised to the point that its ability to protect your head in a crash is minimal—and you wouldn't know it. If you can't have it factory inspected—trash it!

- **Goggles:** Most all goggle manufacturers' products offer similar protection for your eyes from roost and crash damage. Pick one that has a good fit on your face and with your helmet opening, while allowing maximum field of vision. Having clear vision can also help you be a safer rider. Goggle manufacturers offer tear-off and roll-off systems to keep your vision clear. Take advantage of these systems. Clean your goggles after each riding session and store them in a way that minimizes the potential for scratched lenses. Also be sure to replace your lenses when they get scratched enough to impair your vision.

**Scott**  
**Oakley**  
**Thor**

**Blur**  
**Utopia**  
**Spy**

**Fox**  
**Smith**  
**Goat**



Scott Model 89

- **Pants/Jersey/Gloves/Kidney Belt:** Just like goggles, most gear manufacturers' products offer similar protection. Chose one that offers a good fit and feel so it won't hinder your ability to control your motorcycle. Riding gear comes in all sizes and colors. For summer riding, most companies also offer vented gear. Don't let the cost of riding gear keep you from wearing all the proper gear. Many riders sell their gear after a couple years. You can find a good amount of protection at very affordable prices this way. Today's gear is not just for looks. It is very functional.

**Fox**  
**Thor**  
**Answer**

**MSR**  
**No Fear**  
**Fly**

**Oneal**  
**Moose**  
**M2R**



Answer Alpha Gear

- **Boots:** There are tons of boot manufacturers to choose from and each has its own selling points. Buy the best boot you can afford. Ankle support, lower leg protection, fit, durability, and the ability to accept knee braces should all impact your buying decision. Motocross boots are especially important when landing off big obstacles, putting your foot down in a corner, or in case of a nasty crash. They offer levels of protection you just can't get from a work boot. A good pair of boots can easily last three years.

**Gaerne**  
**Alpinestar**  
**SixSixOne**

**Fox**  
**MSR**  
**Answer**

**Sidi**  
**Oneal**  
**Thor**



Gaerne SG-10 Boots

- Chest Protection:** There are two basic forms of chest protection available. The hard, external protector, and the soft, under-the-jersey protector. The outer version chest protector is a hard plastic ‘jacket’ that covers the chest and shoulders, and most times, back and upper arms as well. This ‘jacket’ is usually made from a hard plastic shell that is mostly for deflecting roost, but also offers some puncture or point load protection in the case of a fall on a rocky soil or some type of projection like a root or foot peg.

This is the preferred type of protection in our sport, especially for the young rider under 16 years of age. We recommend that all racers wear this type of protection. The reason for stressing this type protection for the younger riders is due to their inexperience. Typically younger riders take more chances which can result in more crashes and opportunities for injury. Additionally blunt trauma to the chest area of younger riders carries additional risks. Some young athletes are susceptible to “sudden cardiac death syndrome” – a very rare condition caused by highly focused trauma to the chest. Remember, dress for the crash, not the ride.

The soft type chest protectors are worn under the jersey and are designed purely for roost protection. They offer little above the ability to keep flying dirt and small rocks from causing bruises. A hard protector will spread the impact of a crash over a larger area and could potentially prevent more severe injury.

Thor  
Oneal  
No Fear

Answer  
Moose  
Fox

SixSixOne  
EVS  
MSR



SixSixOne Defender

- **Neck Protection:** Currently, there are two basic types of neck protection. The neck roll and the neck brace. Neck rolls have been out for several years now. They are basically a foam doughnut worn around the neck of the rider to transfer and cushion the load a helmet might put on the neck and shoulders in the case of a fall.

The Leatt Brace is a new device that claims to more effectively transfer load from a rider's helmet and head to his/her shoulders and torso. This will reduce the likelihood of neck trauma. It will also limit the range of motion the rider's head/neck can move which will reduce hyper-extension and hyper-flexion type injuries. Consult the manufacturer's web site ([www.leatt-brace.com](http://www.leatt-brace.com)) and read product reviews and testimonials for more information.

Whether you use a neck roll or a neck brace, follow the manufacturer's instructions closely when configuring and wearing one of these devices.

Leatt-Brace

SixSixOne

EVS



Leatt-Brace



SixSixOne Race Collar

### Spine Protection:

There are several manufacturers that make spine protection devices. A few are listed below. This piece of equipment isn't used very widely in motocross at this point. However as with other types of protection, these devices have the potential to reduce the range and number of injuries a rider is subjected to and should therefore be considered.

SPORTPROTECTION INC.

SixSixOne

EVS



In addition to the gear listed above several specialty companies concentrate on motocross specific protection devices. SixSixOne, EVS and others offer: wrist braces, wrist supports, ankle supports, knee braces, kidney belts, neck rolls, shoulder

supports, chest protection and spine protectors. Asterisk and CTi<sup>2</sup> offer knee and wrist braces, etc.

The bottom line is this: Would you go in to battle without a weapon and a flak vest? Would you go white water rafting without a life vest? Whether you choose to ride motocross as a play rider, practice rider, or competitively, you knowingly engage in a hazardous activity--one that has the potential for a broad range of injuries; some serious enough to cause paralysis or death. Doing so without making knowledgeable, informed and reasonable decisions about the level of protection required to reduce the potential for injury just doesn't make sense.

While safety gear can represent a significant investment—think about the alternatives. Lost work time, medical insurance deductibles, or worse, injuries not covered by medical insurance can run in the thousands of dollars.

It's a matter of priorities. The next time the guy on the line next to you is griping about the cost of a quality helmet or a neck brace, look down to see if he has custom billet hubs and \$2,000 worth of color-coordinated rims and an after-market exhaust system. Like we said, it's a matter of priorities.

Take the time to learn what is out there—and make smart decisions that will help you spend more time riding and less time healing.

See you at the track!

**DISCLAIMER:** The Motocross Safety Council makes no representation about the quality or performance of any manufacturer's safety equipment. The choice to ride off-road motorcycles, protection-related decisions, and the consequences of each rests solely with the rider and/or parent. Even with the best safety equipment available, accidents involving injuries will occur.

We encourage riders and parents to invest in as much safety equipment as possible in an effort to minimize the potential for and seriousness of racing injuries—however the ultimate responsibility is yours.