

OFF-ROAD MOTORCYCLING AND ATV SAFETY



AOSSM SPORTS TIPS

Off-road motorized recreation with motorcycles or four-wheel all-terrain vehicles (ATVs) has gained rapid increases in popularity. Riders of all ages are learning to tour back country and race competitively in a wide variety of venues. Due to the high speeds, potential for injury can be high. However, injuries can be reduced in number and magnitude by following some basic safety principles. Preparation is the key to a safe, enjoyable ride.

GET IN SHAPE FOR OFF-ROAD ACTIVITY

A common misconception is that “the bike does all the work.” One must prepare for the ride by engaging in a pre-ride fitness program. Cardiovascular training is critical. Many riders will use bicycling on the road or trails to prepare themselves for their competition. Strength training with emphasis on the large hip and leg muscles, trunk stabilizers and grip strength enhance the rider’s ability to control the dirt bike for extended periods. For beginning riders, training should consist of a general endurance, strength and flexibility program conducted several days per week. **Do not ride to get in condition, be in condition to ride.**

Competitive riders should perform “cardio” training (jogging, treadmill, etc.) off the dirt bike at least five hours per week and weight train three days per week. Flexibility programs before every session on or off the bike can better prepare and increase the effectiveness of the training session. Working with a personal trainer knowledgeable in these sports and a techniques coach can increase a rider’s performance significantly.

RIDE AT YOUR OWN SKILL LEVEL

Skill preparation and training can decrease injury potential and magnitude. Beginning riders should strongly consider a formal program such as those developed by the Motorcycle Safety Foundation (MSF) and supported by major motorcycle and ATV manufacturers (see www.dirtbikeschool.org). One must ride within one’s own skill level. Initial training should be in open fields, dirt lots, or dirt roads or trails. Motocross tracks should be for more experienced riders. Individual tracks may have mini, veteran and main tracks for various levels of riders. The rider should ride on a track appropriate for his skill. Tracks should be evaluated for their commitment to safety with trained flaggers, fences and on-site medical personnel. Children must always be supervised. When a rider desires to begin racing, he should obtain additional training and knowledge of racing techniques and rules prior to the first competition.

PROTECT YOURSELF FROM INJURY

Protective equipment designed specifically for the sport and the individual must be worn whenever one is on the bike. The body should be protected from head to toe. When any item of protective gear is damaged, it must be replaced or repaired. MSF schools will provide equipment and bikes for the lessons, allowing beginning riders to experience the sport without needing to purchase equipment.

The **helmet** should be designed for the sport with full face coverage including chin protection. The helmet should be worn at all times one is on the bike or on the track. Certification by the Snell Foundation ensures a quality helmet. Children’s helmets should be of the new design, not just mini-adult helmets. If a helmet is damaged in any way, it should be replaced. Most manufacturers will check a helmet for integrity following a crash. Buying a used helmet is **not** recommended. **Mouth guards** are helpful to prevent dental and jaw injuries and may decrease head injury severity. **Eye protection** with sport-specific goggles should always be worn with the helmet.

The **upper extremities and chest** should be protected with a long-sleeved jersey, elbow pads and gloves. The chest, shoulder and upper arms should be protected with a polycarbonate chest protector with shoulder and arm extensions. An alternative device is an under-jersey garment with protective cups and pads. Most riders will also wear a supportive lumbar spine (lower back) wrap.

The **lower extremities** can be well protected with motocross pants with hip and coccyx (“tail bone”) pads. The knees should be supported with a functional knee brace with a patellar (kneecap) cup. These braces come in many forms and prices and are available from local motorcycle dealers, by mail order or from your orthopaedic surgeon. High boots designed for off-road riding should be worn by both dirt bike and ATV riders. They should fit well and be secured prior to starting the machine.

Additional protective equipment, such as neck rolls, custom knee braces and wrist braces, are sometimes used but their effectiveness in preventing or reducing injury has not yet been determined.

KEEP YOUR EQUIPMENT IN TOP SHAPE

The vehicle must also be well-prepared and suited for the event. Riders should choose a bike or ATV appropriate for their age, size and experience level. Most states will not allow children under 16 to ride larger bikes and ATVs. A pre-ride inspection is always performed including inspection of the tires and wheels; inspection of controls, lights and electric as equipped; oil and other fluids; and

inspection of the chassis including the suspension and drive chain. Maintenance of the bike should be performed regularly to prevent catastrophic failure.

Off-road riding is a fun recreational and competitive sport enjoyed by increasing numbers of male and female athletes of all ages. Although injuries do occur their frequency and severity can be decreased by improving the rider's fitness and skill level, using the proper protective equipment, making the correct bike choice and maintaining it in excellent condition, and by riding within one's own ability.

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