# **MOTORCROSS SAFETY ADVICE**

This document is meant to provide safety information and tips only. The onus is on you the rider, parent and guardian to find out as much information as possible to ensure that you are properly informed. Motocross is a DANGEROUS sport and the AMU Medical Code must be observed.

Motocross is a dangerous sport and participants should understand that accidents are an almost inevitable part of racing. 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 near certainty that every rider will experience not just one crash but many. Nevertheless, motocross riders can take steps to reduce the likelihood of serious crashes.

Refer to Track Tips and Practice Track Rules.

### Safety Gear

Riders are expected to wear certain safety gear as a minimum, including a helmet, motocross boots, chest protection, gloves, goggles, long sleeve shirt and long trousers. Although this will not completely eliminate the possibility of injury, it can substantially reduce the number and range of injuries a rider is exposed to. As well as this basic set of protection, all riders should consider investing in some sort of neck protection.

During the race itself, a rider should always:

- 4 Enter and exit tracks at authorised entry and exit points.
- 4 Only attempt obstacles within the limits of their ability, experience, and physical condition and suited to their motorcycle.
- 4 Check for on-coming traffic before re-entering the track
- 4 Hold his line when negotiating a jump.
- 4 Follow all verbal and written instructions of track personnel.
- 4 Protect a seriously injured rider by warning on-coming traffic if no flagger or other help is available.
- 4 Wear the best safety equipment possible.

### And a rider should never:

- ➤ Jump across the track in front of others unless convinced no contact with other riders will result.
- **×** Change lines or direction while rolling jumps.
- \* Attempt to pass under a yellow flag or jump on a yellow or medical flag.
- **x** Ride under the influence of drugs or alcohol.
- **×** Cut the track.

Every effort must be made to safe guard the rider's safety. This is why there are numerous rules regarding safety and the discipline of the sport. You must make the effort to be fully informed on all requirements and rules, i.e.:

- 1. Rider's age and type of bike: to match skill level to the power and size of the of the vehicle.
- 2. The classification of bikes and rider's in various categories.
- 3. Compulsory Protective Gear.
- 4. Personal fitness and medical booklet.
- 5. Inspection of bikes at race events.
- 6. Presence of ambulances and Chief Medical Officer at race meets.
- 7. Compulsory Insurance Cover and Evacuation Cover.
- 8. Track Rules.
- 9. Track Marshals and Officials.
- 10. And many more...

It is important to understand the dangers of this sport, be honest about your limitations and skill sets, train properly, maintain your bike, and above all use your common sense. Discipline and focus is very important.

Parents and guardians should not push their riders beyond their comfort zone as this is when accidents usually happen.

# What to carry to the track

The body looses a lot of water through sweat. It is important to rehydrate constantly throughout practise and race meets. Water and isotonic drinks are recommended, sugary drinks and soft drinks are not beneficial.

Energy rich snacks and foods such as fruits, bananas, biscuits, energy bars. Etc..

Sun protection both for riders and their families.

### **FIRST AID KIT**

It is recommended that you carry a first aid kit for practise and race events.

Recommended items include:

- 1 x Triangular Bandage
- 1 x 50mm x 70mm First Aid dressing pad
- 1 x 50mm x 200mm x 2,5mm First Aid dressing pad
- 1 x 8cm Stretch bandage
- 4 x Band-Aid type strips
- 4 x Neat seal type plasters (2 x large, 2 x small)
- 1 x Piece cotton wool
- 4 x Pain Killers
- 1 x Tube of burn ointment

Deep Heat and Deep Ice

Antiseptic ointment/lotion/wipes

Surgical gloves

# How to handle an accident on the track

### Instructions

Common sense must prevail. Do not attempt to treat any injury unless you are qualified to do so. Above all remain calm. Do not be afraid to ask for assistance from a more experienced parent/rider.

- 1. Assess the situation and call the medic or call 911 if the injuries appear to be severe.
- 2. Tell the rider not to move. Out of embarrassment, many riders will try to stand immediately, compounding their injuries. The safest position is lying down with the head and body as level as possible. Speak reassuringly to the victim and tell him to remain still.
- 3. If the rider is on the track, get assistance from a marshal to waive the yellow flag and slow down approaching riders and remove the injured rider's bike from the track.
- 4. Make a note of any bleeding or vomit around the mouth. Some injuries cause the victim to vomit and if so, turn him carefully on his side to keep him from aspirating the vomit. If you suspect a neck or back injury, use extreme care to keep the head aligned.
- 5. Check the rider to make sure he is breathing freely. Injuries to the chest are common in severe motocross accidents and may result in broken ribs or punctured lungs. If the victim is struggling to breath, elevating his upper body may help.
- 6. Loosen the victim's clothing and cut restrictive safety gear away from his body but move him as little as possible. Unhook the latches on heavy motocross boots to relieve pressure.
- 7. DO NOT ATTEMPT ANY FIRST AID UNLESS YOU ARE QUALIFIED TO DO SO. Call the medic or 911.
- 8. Splint broken bones or suspected breaks in the position you find them. Resist trying to turn or set a bone. Only a qualified physician should set a fractured bone. Ask the victim to move his fingers or toes to determine a dislocated joint. Movement below a dislocation will be restricted or non-existent.
- 9. Wait for emergency personnel to arrive if there is any chance of a spinal injury. Transporting a rider with a damaged back or neck is dangerous; avoid it at all costs.

# TYPES OF INJURIES THAT MAY OCCUR IN MOTOCROSS

As mentioned earlier, motocross is a high impact sport. Injuries can range from minor cuts and abrasions to more severe head trauma, broken bones, spinal injury, and yes, even death.

Ensure that you are fully informed. The onus is on you.

### **Head Trauma**

Severe head trauma accounts for 33-percent of all Motocross injuries. A large portion of Motocross athletes who suffer from head trauma often require some form of surgical procedure. You can prevent extensive head trauma by employing the proper protective equipment, such as a helmet built specifically for Motocross competition and a neck-restraint system. Safe Motocross practice can also help to deter head trauma. Remember, it may save your life, and not just save you a trip to the hospital.

Frequently check your motocross helmet for dents and cracks.

Wear protective Neck-restraint system. The restraint acts as a simple brace that supports your head in the event of impact. Often, the cause of extensive head trauma is closely related with the skull's bounce after one is ejected from the cycle.

Include neck exercises in your strength training routine. The neck acts as a key stabilizer to the head and often gives way under the force of impact. Strengthen the muscles that support your head and give yourself a better chance of walking away from a serious accident with reduced head trauma.

### What should you do when you suspect head trauma?

Follow the basic instructions of how to handle an accident on the track. Assess the situation.

- 1. Instruct the patient to lie down. Examine the wound to see if there is any bleeding from the head, nose, face or ears. If there is severe bleeding coming from these areas, call 911 immediately.
- 2. Ask the patient questions. If he is confused about where he is, has slurred speech, trouble speaking or is breathing strangely, call 911 immediately.
- 3. Treat the bleeding. Use a clean cloth to wrap around the wound. Apply pressure to the wound, unless you think there is a chance the skull could be fractured. Gently mop the wound with the cloth if you think there is a skull fracture, and call 911 immediately.
- 4. Shine a flashlight in the patient's eyes. If her/his pupils are two different sizes or do not dilate, call 911 immediately.
- 5. Look for discoloration or bruises under the eyes. Call 911 if there is major discoloration in the eyes or face. If the person is vomiting, losing consciousness or shaking, call 911 immediately.
- 6. Lay the patient down in a dark, quiet room if possible, with the head and shoulders on a pillow. Tell the patient quietly that the ambulance is

coming and that she should relax. Do not panic; simply remind the patient that help is coming.

# Concussion

A concussion is a traumatic brain injury (TBI) that may result in a bad headache, altered levels of alertness, or unconsciousness.

It temporarily interferes with the way your brain works, and it can affect memory, judgment, reflexes, speech, balance, coordination, and sleep patterns.

Significant movement of the brain (called jarring) in any direction can cause you to lose alertness (become unconscious). How long you remain unconscious may be a sign of the severity of the concussion.

However, concussions don't always involve a loss of consciousness. Most people who have a concussion never black out. You can have a concussion and not realize it.

Symptoms of a concussion can range from mild to severe. They can include:

- Altered level of consciousness (drowsy, hard to arouse, or similar changes)
- Confusion, feeling spacey, or not thinking straight
- Headache
- Loss of consciousness
- Memory loss (amnesia) of events before the injury or immediately after
- Nausea and vomiting
- Seeing flashing lights
- Feeling like you have "lost time"

The following are emergency symptoms of a concussion. Seek immediate medical care if there are:

- Changes in alertness and consciousness
- Convulsions (seizures)
- Muscle weakness on one or both sides
- Persistent confusion
- Persistent unconsciousness (coma)
- Repeated vomiting
- Unequal pupils
- Unusual eye movements
- Walking problems

Head injuries that result in concussion often are associated with injury to the neck and spine. Take particular care when moving patients who have had a head injury.

While recovering from a concussion, you may:

- Be withdrawn, easily upset, or confused
- Have a hard time with tasks that require remembering or concentrating
- Have mild headaches
- Be less tolerant of noise

#### **Treatment**

A concussion with bleeding or brain damage must be treated in a hospital.

A trained medical person must determine when that person can return to playing sports.

When your child can safely return to normal activities depends on the severity of the concussion. Some children may need to wait 1 to 3 months. Ask your child's doctor if it is okay before the child participates in any activity where there is a risk of hitting or injuring the head.

Some organizations recommend that a child who had a concussion avoid sports activities that could produce a similar head injury for the rest of the season.

Treatment for a concussion may include: Acetaminophen (Tylenol) for a headache. Do NOT use aspirin, ibuprofen (Motrin or Advil), naproxen, or similar drugs (blood thinning drugs).

Eating a light diet.

Avoiding alcohol until you have completely recovered.

An adult should stay with you for the first 12 - 24 hours after the concussion. Going to sleep is okay. However, someone should wake you up every 2 or 3 hours for the first 12 hours. They can ask a simple question, such as your name, and then look for any changes in the way you look or act.

Healing or recovering from a concussion takes time. It may take days, weeks, or even months. You may be irritable, have trouble concentrating, unable to remember things, have headaches, dizziness, and blurry vision. These problems will probably go away slowly. You may want to get help from family or friends before making important decisions.

Complications from a concussion can include:

- Bleeding in the brain (intracerebral hemorrhage)
- Brain injury that results in physical, emotional, or intellectual changes

Concussions are cumulative. The second impact syndrome (SIS) is when a person gets a second concussion while still having symptoms from a first one. This raises the risk for brain swelling, which can be deadly.

ALWAYS SEEK MEDICAL ADVISE. Also see www.sportconcussions.com.

# **Knee Injuries**

One of the more common types of injury that motocross competitors deal with is injury to the ACL. The ACL is the ligament that runs across your knee and is attached to both the tibia (lower leg) and the femur (thigh bone), The ACL is responsible for making sure that the two bones stay properly aligned. Injuries to the ACL are not only disabling but take a long time to heal. Female motocrossers are more likely to have an ACL injury then their male counterparts.

# **How to Prevent ACL Injuries in Motocross**

- 1. Stretch before doing any exercising, and before you get on your dirt bike. Properly stretching your ACL will make sure it is limber and more resilient to injury.
- 2. Making an effort to strengthen your ACL is the best way to prevent in from getting injured while you are honing your motocross skills. Exercises that are useful when you need to strengthen your ACL are hamstring curls, power cleans, dead lifts and squats. The more diligent you are about doing exercises, the less likely you are to be laid up with a strained or torn ACL.
- 3. In addition to doing exercises that will strengthen your ACL, you should also always wear protective knee pads when you are riding your dirt bike and practicing your motocross stunts.
- 4. Avoid movements that force the knee to twist and turn. The most common reason for ACL injuries is that the knee is twisted and the amount of torque becomes to great for the ACL to sustain so it tears.

# **Spinal Cord Injury**

Emergency signs and symptoms of spinal cord injury after an accident may include:

- Extreme back pain or pressure in your neck, head or back
- Weakness, in-coordination or paralysis in any part of your body
- Numbness, tingling or loss of sensation in your hands, fingers, feet or toes
- Loss of bladder or bowel control
- Difficulty with balance and walking
- Impaired breathing after injury
- An oddly positioned or twisted neck or back

A spinal cord injury isn't always obvious. Numbness or paralysis may result immediately after a spinal cord injury or gradually as bleeding or swelling occurs in or around the spinal cord. In either case, the time between injury and treatment can be a critical factor that can determine the extent of complications and the amount of recovery.

Anyone who has experienced significant trauma to the head or neck needs immediate medical evaluation for the possibility of a spinal cord injury. In fact, it's safest to assume that trauma victims have a spinal cord injury until proved otherwise.

If you suspect that someone has a back or neck injury, don't move the injured person. Permanent paralysis and other serious complications may result. Instead, take these steps:

- 4 Call 911 or your local emergency medical assistance number.
- 4 Keep the person still.
- 4 Place heavy towels on both sides of the neck or hold the head and neck to prevent them from moving, until emergency care arrives.
- 4 Provide basic first aid, such as stopping any bleeding and making the person comfortable, without moving the head or neck.

# **Sports Injuries**

"Sports injuries" are injuries that happen when playing sports or exercising. Some are from accidents. Others can result from poor training practices or improper gear. Some people get injured when they are not in proper condition. Not warming up or stretching enough before you play or exercise can also lead to injuries. The most common sports injuries are:

- Sprains and strains
- Knee injuries
- Swollen muscles
- Achilles tendon injuries
- Pain along the shin bone
- Fractures
- Dislocations

What's the Difference Between an Acute and a Chronic Injury?

There are two kinds of sports injuries: acute and chronic. Acute injuries occur suddenly when playing or exercising. Sprained ankles, strained backs, and fractured hands are acute injuries. Signs of an acute injury include:

- Sudden, severe pain
- Swelling
- Not being able to place weight on a leg, knee, ankle, or foot
- An arm, elbow, wrist, hand, or finger that is very tender
- Not being able to move a joint as normal
- Extreme leg or arm weakness
- A bone or joint that is visibly out of place.

Chronic injuries happen after you play a sport or exercise for a long time. Signs of a chronic injury include:

- Pain when you play
- Pain when you exercise
- A dull ache when you rest
- Swelling.

What Should I Do if I Get Injured?

Never try to "work through" the pain of a sports injury. Stop playing or exercising when you feel pain. Playing or exercising more only causes more harm. Some injuries should be seen by a doctor right away. Others you can treat yourself.

### Call a doctor when:

- o The injury causes severe pain, swelling, or numbness
- You can't put any weight on the area
- An old injury hurts or aches
- An old injury swells
- o The joint doesn't feel normal or feels unstable.

If you don't have any of these signs, it may be safe to treat the injury at home. If the pain or other symptoms get worse, you should call your doctor. Use the RICE (Rest, Ice, Compression, and Elevation) method to relieve pain, reduce swelling, and speed healing. Follow these four steps right after the injury occurs and do so for at least 48 hours:

**Rest**. Reduce your regular activities. If you've injured your foot, ankle, or knee, take weight off of it. A crutch can help. If your right foot or ankle is injured, use the crutch on the left side. If your left foot or ankle is injured, use the crutch on the right side. **Ice.** Put an ice pack to the injured area for 20 minutes, four to eight times a day. You can use a cold pack or ice bag. You can also use a plastic bag filled with crushed ice and wrapped in a towel. Take the ice off after 20 minutes to avoid cold injury. **Compression**. Put even pressure (compression) on the injured area to help reduce swelling. You can use an elastic wrap, special boot, air cast, or splint. Ask your doctor which one is best for your injury.

**Elevation**. Put the injured area on a pillow, at a level above your heart, to help reduce swelling.

# How Are Sports Injuries Treated?

Treatment often begins with the RICE method. Here are some other things your doctor may do to treat your sports injury.

# Nonsteroidal Anti-Inflammatory Drugs (NSAIDs)

Your doctor may suggest that you take a nonsteroidal anti-inflammatory drug (NSAID) and / or pain killer to reduce the swelling and pain.

#### **Immobilization**

Immobilization is a common treatment for sports injuries. It keeps the injured area from moving and prevents more damage. Slings, splints, casts, and leg immobilizers are used to immobilize sports injuries.

### Surgery

In some cases, surgery is needed to fix sports injuries. Surgery can fix torn tendons and ligaments or put broken bones back in place. Most sports injuries don't need surgery.

### Rehabilitation (Exercise)

Rehabilitation is a key part of treatment. It involves exercises that step by step get the injured area back to normal. Moving the injured area helps it to heal; however, this should be supervised by a qualified physiotherapist. Exercises start by gently moving the injured body part through a range of motions. The next step is to stretch. After a while, weights may be used to strengthen the injured area.

As injury heals, scar tissue forms. After a while, the scar tissue shrinks. This shrinking brings the injured tissues back together. When this happens, the injured area becomes tight or stiff. This is when you are at greatest risk of injuring the area again. You should stretch the muscles every day. You should always stretch as a warm up before you play or exercise.

Don't play your sport until you are sure you can stretch the injured area without pain, swelling, or stiffness. When you start playing again, start slowly. Build up step by step to full speed.

#### Rest

Although it is good to start moving the injured area as soon as possible, you must also take time to rest after an injury. All injuries need time to heal; proper rest helps the process. Your doctor can guide you on the proper balance between rest and rehabilitation.

# Other Therapies

Other common therapies that help with the healing process include mild electrical currents (electrostimulation), cold packs (cryotherapy), heat packs (thermotherapy), sound waves (ultrasound), and massage.

# What Can People Do to Prevent Sports Injuries?

These tips can help you avoid sports injures.

- 4 Don't bend your knees more than half way when doing knee bends.
- 4 Don't twist your knees when you stretch. Keep your feet as flat as you can.
- 4 When jumping, land with your knees bent.
- 4 Do warm up exercises before you play any sport.
- 4 Always stretch before you play or exercise.
- 4 Don't overdo it.
- 4 Cool down after hard sports or workouts.
- 4 Wear shoes that fit properly, are stable, and absorb shock.
- 4 Use the softest exercise surface you can find; don't run on asphalt or concrete.
- 4 Run on flat surfaces.

#### For adults:

- 4 Don't be a "weekend warrior." Don't try to do a week's worth of activity in a day or two.
- 4 Learn to do your sport right. Use proper form to reduce your risk of "overuse" injuries.
- 4 Use safety gear.
- 4 Know your body's limits.
- 4 Build up your exercise level gradually.
- 4 Strive for a total body workout of cardiovascular, strength-training, and flexibility exercises.

### For parents and coaches:

- 4 Group children by their skill level and body size, not by their age, especially for contact sports.
- 4 Match the child to the sport. Don't push the child too hard to play a sport that she or he may not like or be able to do.
- 4 Try to find sports programs that have certified athletic trainers.

- 4 See that all children get a physical exam before playing.
- 4 Don't play a child who is injured.
- 4 Get the child to a doctor, if needed.
- 4 Provide a safe environment for sports.

# For children:

- 4 Be in proper condition to play the sport.
- 4 Get a physical exam before you start playing sports.
- 4 Follow the rules of the game.
- 4 Wear gear that protects, fits well, and is right for the sport.
- 4 Know how to use athletic gear.
- 4 Don't play when you are very tired or in pain.
- 4 Always warm up before you play.
- 4 Always cool down after you play.