

# TIP OF THE WEEK: 10 practical guidelines that will help an athlete avoid getting injured

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An athlete's greatest strength is often his greatest weakness, and this is particularly noticeable among full time sportsmen and women. The compulsive streak in their character, which drives them to practise hour after hour, day after day, is their worst enemy when it comes to handling injuries. The only way around this is to put "**avoidance of injury**" **high on the list of priorities**. When making out a training plan start with the objectives, such things as improving aerobic fitness, practising changes of pace or maintaining flexibility, including 'avoidance of injury' in this list brings it into the reckoning when planning a week's training.

## These are my guidelines:

1. Never train hard when stiff from the previous effort
2. Introduce new activities very gradually
3. Allow lots of time for warming up and cooling off
4. Check over training and competition courses beforehand
5. Train on different surfaces, using the right footwear
6. Shower and change immediately after the cool down
7. Aim for the maximum comfort when travelling
8. Stay away from infectious areas when training or competing very hard
9. Be extremely fussy about hygiene in hot weather
10. Monitor the athlete daily for signs of fatigue. If in doubt, ease off.



## Never train hard when stiff

This seems obvious but it is seen all too often at the beginning of a season or in a training camp. Some people turn up very fit and set a fast pace in training and the others suffer for it the next day. But instead of waiting for the stiffness to go, they try to go on training as hard as the day before. The result is that running is awkward, movements are not co-ordinated and injuries are more likely.

## Introduce new activities gradually

Ideally, one would never introduce anything new at all, but there is a first time for everything and there are bound to be changes of emphasis, the switch from indoor to outdoor training or from grass to a synthetic surface. The solution is to start switching well before it is necessary. In switching from cross country running to the synthetic track, for example, one might include a bit of running on the track whenever the opportunity arises, even if it is only three or four laps and a few strides. The first track session of the year would only be half a normal session and it would be done mostly in trainers. The following week one might do most of one session on the track but only part of it in spikes and for the next two weeks one increases the proportion done in spikes. After a month, we might be running three times a week on the track, with other sessions being done mostly on grass.

## Warming up and cooling down

In the British climate this is particularly necessary. Warm muscles stretch much better than cold muscles. Ligaments and tendons are much more likely to tear when the muscles are cold and inflexible.

The warm-up procedure helps in several other ways, too, both physically in diverting the blood flow from non-essential areas to working muscles, and mentally, in focusing the athlete on the approaching event.

I would recommend at least 15 minutes and up to 30 minutes warm-up before hard training starts. In ball games this can often be done with a ball, carrying out various skill routines, but in all cases it should start with 5 to 10 minutes of gentle movement, gradually increasing in pace, followed by 5 to 10 minutes of stretching, still in warm clothing. After that, one moves to fast strides and eventually to short sprints and then stays warm and loose until the start. A sprinter might well take 45 minutes to warm up for a 10-second burst of energy. During the cool-down period, which should last for 10 to 15 minutes after a competition or a hard training session, the body temperature returns to normal and the fatigue products are flushed out of the muscles, which reduces the chances of stiffness the next day.

## Check the course beforehand

In cross-country and road running there may be unexpected traps for the unwary, potholes in the road, sudden ups or downs, all of which could cause trouble if you are not prepared for them, and of course this is closely linked to the next rule.

## Wear the right shoes

Wearing shoes which are too light or flimsy or which are unevenly worn are two very common causes of injury. If you turn up expecting a soft course and find that it is frozen hard, you could be in a lot of trouble. I once arrived for a so-called cross-country race in Madrid to find that it was all road. Luckily I had brought my road-racing shoes, but my England colleague, who had only spikes, had to run the race in dance shoes strapped on with pink ribbon! (I won, but he came second.) At a higher level, Liz McColgan threw away a chance of winning the World cross-country title in Boston because she had not checked out the length of spikes necessary on the snow-covered course. Perhaps the commonest cause of all injuries is training too much on hard surfaces. Running fast on roads and tartan tracks causes a lot of impact shock. I recommend getting off the road at least one day in three.

### **Shower and change after training**

This reduces the likelihood of stiffening up and your chances of catching a cold. Ideally, a hard session or a race should always be followed by a massage if you want to recover quickly.

### **Travel in comfort**

This sounds a bit sissy, but it is not at all uncommon for athletes to stay wedged into a minibus or a train, sitting awkwardly for several hours before an important event. I recommend that you get up, walk around and stretch once every hour while travelling, if possible. Apart from the muscles, the more you can keep down the stress, the better you will perform. It is best to get to the venue the day before the event for anything big, and if you have to deal with major changes in climate and/or time zones it is best to get there a week beforehand.

### **Avoid infection**

After hard sessions, the immune system is definitely vulnerable. Athletes in hard training are particularly susceptible before a big event. They should stay away from crowded rooms, schools, and people with bad colds.

### **Be fussy about hygiene**

All too often people in training camps or in Games villages pick up stomach bugs just before the big event, and the reason is often evident from the sloppy conditions in which they live, with food left around, dirty clothing, people sharing cups and glasses. Athletes, like most young people, have a sense of invulnerability, which is positively dangerous.

### **Monitor fatigue**

I have dealt with this before in earlier issues, but it cannot be too highly stressed. In hindsight it is usually possible to trace the cause of an illness or injury, and there is usually a point where the athletes should have eased off but didn't. It is a vital part of the coach's job to tell the athlete when to stop and the athlete must play his/her part by being aware of the early signs of over-tiredness. A raised resting pulse is a sure sign.

### **Attitude to injury**

However careful you are, injuries can occur, particularly in the stress of competition, and illness can be picked up, often when the athlete is really fit. The first thing is damage limitation. The usual course of events is as follows:

1. The athlete feels a little pain during training and ignores it
2. The pain recurs, and may even be felt after training, but is not bad enough to prevent training
3. The pain is now bad enough to interfere with normal training, but the athlete can still compete, if he/she rests
4. The pain is so bad that the athlete can neither train nor compete

The time to report the injury and start treatment is at stage one. The procedure should be to switch right away from any exercise, which makes the injury more painful, and to get diagnosis immediately, certainly not later than the next day. At the same time, coach and athlete should work out what forms of exercise are possible, and redesign the program so that the athlete is at least doing something to maintain cardiovascular fitness, constant body weight and muscle strength. An inactive injured athlete is a real "sick gorilla". It is as important to maintain their morale and confidence as it is to maintain their fitness, but in these days of leisure centres, gyms, static bikes and aqua-joggers it is always possible to find some suitable exercise.

To take an example: I had a case where a runner was tripped and fell, tearing some fibres just below the kneecap, three weeks before the Olympic Trials. After icing it and protecting it for the first two days, he started on daily physiotherapy, and massaged the area before each session to stimulate blood flow. He could not cycle with it but he could walk, do some circuit training and swim front crawl. After three days of this he progressed to walking and jogging on grass, then to long uphill jogs, trying to avoid limping. Running uphill on grass means there is very little stress but the heart is working quite hard. By the 10th day he was doing long slow training, by the 14th day he was able to train hard, but still mainly uphill on grass. In the third week he was able to do part of the session on the track and at the end of the week he went into the trials with no knee problem at all and finished second, qualifying for the Olympic team.

The key is rapid action when the injury first appears and a lot of psychological support to back up the remedial treatment. It is when things are not going well that the athlete really needs his coach.