There are roughly 144,000 ski-related injuries per year that present to hospital Emergency Rooms and physician’s offices. There are also 148,000 snowboarding injuries that present in any given year. Most of these injuries have to do with upper extremity injuries trying to prevent a fall or cushion a fall with the arms; creating sprains, fractures and dislocations of the upper extremities. These injuries can involve the shoulders, elbows and often the digits of the hands.

The other common area involves the lower extremity with fractures of the lower extremities and sprains and ligament injuries to the knee. The knee is the most common area to injure in the lower extremities. This involves often ACL and MCL ligament injuries. The third category can involve head injuries which can be the most serious.

There are three main areas in preventing injuries. The first involves one’s general fitness. Warming up before skiing activity is important in that warm muscles tend to have less injuries than cold muscles. Hydration is particularly important when skiing at high altitudes particularly avoiding altitude sickness. Most injuries occur during the last run of the day. When fatigue sets in, there is a greater risk of an injury. This fatigue level differs depending on the conditioning of the skier. Skiing within one’s ability is very important.

The second important area involves the use of proper equipment and understanding how the equipment is used. This includes skis, bindings, helmets and poles. Bindings and skis need to be adjusted by an authorized individual. There are industry standards for setting all ski bindings properly and testing these bindings.
Head injuries have decreased as far as lacerations and fractures to the skull because of the increased use of helmets. The total number of head injuries, however, has not changed with the introduction of ski and snowboard helmets. This area has obtained more international focus now because of all of the research being done with concussions in the National Football League and also because of the recent head injury sustained by Formula One driver, Michael Schumacher. Schumacher sustained a significant closed head injury while skiing in France yet he was wearing a helmet. Helmet use is important and I encourage it, but it will not prevent serious head injuries. It seems that with the increased use of ski helmets there also has been an increased incidence of risky behavior on the ski slopes. There are more and more terrain parks encouraging jumps and various acrobatic activities on skis and snowboards. Also, the more modern skiing and snowboarding equipment allows people to go faster and ski areas that they could not ski before.

The third most important area in preventing injuries involves instruction in the use of various ski equipment. It is often beneficial taking a lesson and understanding better how the equipment can function. This includes the use of ski lifts and how to get on and off of them. Also, understanding that it is safer to ski on marked trails than skiing off piste where there are more obstacles and unmarked hazards that you are not aware of. Understanding the hazards that occur when various ski trails and slopes converge where skiers can often run into one another is important to avoid collisions. Skiing terrain that is within your ability is always important.

Skiing and snowboarding are great life sports for all age groups and families. I have been skiing for over 45 years and taught all four of my children how to ski. At this time, they are all better skiers than I am. It is a great family sport, and can be done safely!