



Our Mission

"To provide outstanding, progressive care in a nurturing environment that prioritizes individual treatment, with accountability to standard of care; where rehabilitation, fitness, performance and an overall healthy lifestyle contributes to best serving our patients and the community."

APTA Web Site Launched

The American Physical Therapy Association (APTA) has now launched an information-rich and user-friendly consumer Web site:

www.moveforwardpt.com.

This web site features content from leading PT experts who will help consumers make the important decisions necessary to improve their quality of life.

Going Green! Please email us if you would like to receive this newsletter via email. Contact: ppt@frii.com

Performance Physical Therapy (970) 493-8727 www.performance-physicaltherapy.com

Performance Physical Therapy Welcomes Michele Munsil PT, DPT

Michele Munsil has been working in Greeley and is excited to be working close to her home in Fort Collins while pursuing her love for out-patient physical therapy. Michele received her Doctorate in Physical Therapy (DPT) from University of Colorado Denver. Michele lives with her husband, Jef and dog, Zoey. They enjoy an active outdoor lifestyle.

Concussion in Skiers and Snowboarders

This time of year, we are often asked in the clinic about helmets while skiing/snowboarding. Our recommendation is for people to wear helmets while participating in these activities. Please read on for more information on both sides of the debate.

Canadian researchers found that the occurrence of both spinal cord and traumatic brain injury appears to be increasing worldwide. They reported that these increased injury rates coincide with an increase and acceptance of higher speeds on the slopes and more acrobatic maneuvers, such as jumping and twists. They also reported that wearing a helmet can reduce the risk of head injury by up to 60 percent and highly recommend helmets for skiers and boarders.

What is a concussion?

A concussion is a traumatic injury to the brain that alters mental status or causes other symptoms. Many people assume they do not have a concussion if they have not lost consciousness. However, significant

injury can occur without losing consciousness at all. Football players often say "I just got my bell rung" when a blow to the head causes ringing in the ears, but those symptoms are often consistent with concussion. If left undiagnosed, a concussion may place an athlete at risk of developing second impact syndrome-a potentially fatal injury that occurs when an athlete sustains a second head injury before a previous head injury has completely healed.

What are the signs/symptoms of a concussion?

Concussion symptoms may include the following:

- Balance problems
- Difficulty communicating, concentrating
- Dizziness
- Drowsiness
- Fatigue
- Feeling emotional
- Feeling mentally foggy

Concussion in Skiers and Snowboarders Cont. from Page 1



“Given that concussions are sustained each season by more than 10 percent of high school athletes, determining when it is safe for these athletes to return to play is an important objective.”



- Headache
- Irritability
- Memory difficulties
- Nausea
- Nervousness
- Numbness or tingling
- Sadness
- Sensitivity to light or noise
- Sleeping more than usual or difficulty falling asleep
- Visual problems - blurry or double vision
- Vomiting

Concussion First Aid

If you suffer any head injury, stop activity and seek medical attention. Even if you think it's a mild bump on the head, it could turn into something serious if you return to sports.

According to researcher Mark Lowell, allowing an athlete to return to play too early after any head injury increases their chance of more serious brain injury. Because signs of a mild concussion -- confusion, disorientation and memory loss -- may disappear within minutes and may not be reported by the athlete, athletes are too often allowed to continue playing or return to a game before their brain has had adequate time to heal.

Deciding when an athlete should return to sports after a concussion remains a matter of controversy within the medical community. However, various research projects continue to learn more about concussion assessment and evaluation.

Recent studies on the cumulative effects of concussions in high school athletes have shown that even mild concussions can result in serious long-term problems, particularly if an athlete is allowed to return to play too

early, or has a history of concussions or other head injuries.

Researchers at the University of Pittsburgh's Sports Medicine Center have been studying male and female high school athletes who have sustained concussions during sporting events. A concussion is typically caused by a severe head trauma where the brain moves violently within the skull so that brain cells all fire at once, much like a seizure.

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The research conducted by the University has also demonstrated that a history of concussions can cause long-term memory loss and other problems. According to Dr. Michael Collins, "the study indicates for the first time in the high school athlete population that prior concussions may indeed lower the threshold for subsequent concussion injury and increase symptom severity in even seemingly mild subsequent concussions." Researchers found that athletes with three or more concussions were nine times more likely to suffer more severe concussion symptoms (e.g., loss of consciousness and memory) than players with no prior history of concussion.

The new recommendations, published in 2009 in *The British Journal of Sports Medicine*, say any athlete, 18 and under, who

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may have sustained a concussion during sports should not be allowed to return to activity the same day. The group's previous recommendation allowed the athlete to return to activity if cleared by a doctor or certified athletic trainer. The neurologists now believe it's too difficult to make an immediate determination of the seriousness of head injuries which makes it too dangerous for continued play to be considered safe.

This change is stirring up debate among other experts. While many believe this will help prevent serious, life-threatening injuries in youth sports, some believe the new guideline will result in more kids hiding their head injury for fear of being pulled from the game.

Arguments for not wearing a helmet with snow sports

Various reasons have been put forward to explain the still relatively low uptake of helmets on most slopes around the globe. Leaving aside issues such as cost and availability, (neither of which should be issues these days) here are some responses to a few of these concerns:

1. Helmets predispose the neck to a greater risk of injury

A common anti-helmet argument has been the concern that wearing a helmet may predispose the wearer to a greater risk of injury to the neck. The logic is that the increased weight of the helmet places the neck under increased strain in the event of an accident. Thankfully, the issue has been examined in both the laboratory and also out in the field. Computer simulation data presented at the 17th ISSS meeting concluded that wearing a helmet did not place additional stress on the neck. More

recently, in May 2010 Brent Hagel and colleagues published the results of a 10 year case-control study looking specifically at this issue, even subdividing the risk between adults and children. They found no evidence that wearing a helmet increased the risk of a neck injury whilst skiing or snowboarding.

2. Helmets interfere with your vision (especially peripheral vision)

Once again, this concern has been studied and there is no evidence that wearing a helmet does interfere with the visual field of skiers or snowboarders.

In conclusion...There is good evidence to indicate that a helmet will protect you against many of the common injuries that the head is susceptible to when on the slopes. They are especially important for children, who run a higher generic risk of snow sport injury. Helmets seem to have their most protective effect in incidents involving low speed impacts (below 15 mph) and for falls leading to blows to the head on the snow surface.

There is no evidence to date that helmets predispose the wearer to a higher risk of neck injury, causes injury to others or restrict vision, hearing or general sensory awareness.

Finally, be aware that there is no conclusive scientific evidence that helmets reduce the risk of death in the event of a high speed collision with another object. Wearing a helmet does not make you invincible and may not offer you full protection if you have a high speed impact - so go careful, especially if there are trees on or near the area you are using.

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Suggested Websites

www.theprrt.com

www.vestibular.org

www.muscleactivation.com

www.totalmotionrelease.com

View video of MAT and PRRT
techniques on our website!

We're on the Web!

See us at:

www.performance-physicaltherapy.com