How Can Concussions be Prevented?

All athletes should follow these general guidelines for concussion prevention:

- **Wear appropriate protective gear during sports and other recreational activities.**
  - An approved helmet for sports such as hockey and football is a must to prevent serious head injuries such as a skull fracture or a brain bleed. At this time, however, a helmet that will prevent concussions does not exist. Mouth guards, head bands and straps have also not been shown to decrease concussion risk.
  - Make sure the equipment fits properly, is well maintained and worn correctly.

- **Avoid using the head as the point of contact.**
  - Football players should be instructed in proper tackling techniques. They should lead with the shoulder, rather than the head.

- **Do strengthening exercises for the neck muscles.**
  - Some studies indicate that a stronger neck might better absorb some of the shock of the blow.

- Participate in concussion education programs.

- Ensure your school has a concussion policy and action plan in place.

- Ensure you and your teammates follow the rules of the game and practice fair play.

- Do not play if you are having symptoms of a concussion.

- Do not let your teammates play if they have signs of a concussion or you suspect they may have a head injury.

- Report your symptoms to your coach, athletic trainer, parents or team doctor.

- Wait until all your symptoms have resolved before starting to work out again, and receive medical clearance before returning to sport (this is also state law in Illinois).

**What neck strengthening exercises may be beneficial?**

Ongoing studies are looking to see if strengthening the neck muscles may decrease the shaking of the brain associated with concussion. The following exercises performed daily will strengthen neck muscles.

**Shoulder Shrugs**
Holding a dumbbell in each hand, stand with your arms by your sides. Keep your arms straight and slowly shrug your shoulders up and slightly forward, and then slowly lower them back down. Do 3 sets of 20 repetitions.

**Upright Rows**
Holding a bar or a dumbbell in each hand, stand with your arms by your sides and your palms facing behind you.
Slowly raise the weights to chest level, bending your elbows outward, and then slowly lower them back down. Make sure to keep your shoulders down when performing this exercise. Do 3 sets of 10 repetitions.

**Four-Way Resistance**
Place two hands flat on either the back of your head, your forehead, or the right or left side of your head. Push against your hands, but resist the pressure with your hands. Make sure to keep your neck straight, focusing the tension on the neck muscles. Hold for 5-10 seconds, and then release. Do 10 repetitions in each of the four directions.

**Towel Resistance**
Wrap a towel around your head, holding the ends in each hand. Slowly move your head up and down, resisting the movement with the towel. Make sure to keep your neck straight, and do not allow it to collapse. Continue to move your head up and down for 15 seconds, and then relax. Do this 5 times.

**More Information**
For more information on concussions, links to videos and media, as well as tools for parents, athletes and coaches, please see the Center for Disease Control website: [www.cdc.gov/concussion/sports/](http://www.cdc.gov/concussion/sports/).