Dear Parent or Guardian,

While participating in athletics on (date) __________ your son/daughter _________________________ sustained a head injury that appears to be a concussion or brain injury. This fact sheet should answer your questions about concussions and how to treat them.

Your student-athlete’s safety is our main priority. Your student-athlete will not be able to return to activity until a medical physician or your child’s school athletic trainer (depending on their assessment) has determined that it is safe to do so with written clearance. Your student-athlete must complete the CPS supervised Gradual Return to Sports Participation Program prior to being allowed to compete. You should take your student-athlete to his/her primary care physician or you can call CHKD Sports Medicine (668-PLAY) to see their pediatric concussion specialists, Dr. Joel Brenner or one of his colleagues. If you have any questions or concerns please call us at the number listed below.

Sincerely,

(Signature) __________________________

Joel Brenner, MD  __________________________, ATC
Director, CHKD Sports Concussion Program    Certified Athletic Trainer
Office: (757) 668-PLAY (7529)    Cell Phone: (757) ______________

What is a concussion?
A concussion is a brain injury which results in a temporary disruption of normal brain function. A concussion is caused by a bump, blow or jolt to the head or body. Even what seems to be a mild bump to the head can be serious. A student-athlete does not have to lose consciousness (“knocked-out”) to suffer a concussion.

A concussion may cause multiple symptoms. Many symptoms appear immediately after the injury, while others may develop over the next several days or weeks. The symptoms may be subtle and are often difficult to fully recognize.

<table>
<thead>
<tr>
<th>Physical</th>
<th>Cognitive</th>
<th>Emotional</th>
<th>Sleep</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headache</td>
<td>Visual problems</td>
<td>Feeling mentally foggy</td>
<td>Irritability</td>
</tr>
<tr>
<td>Nausea/ vomiting</td>
<td>Fatigue/ feeling tired</td>
<td>Feeling slowed down</td>
<td>Sadness</td>
</tr>
<tr>
<td>Dizziness</td>
<td>Sensitivity to light or noise</td>
<td>Difficulty remembering</td>
<td>More emotional</td>
</tr>
<tr>
<td>Balance problems</td>
<td>Numbness/ tingling</td>
<td>Difficulty concentrating</td>
<td>Nervousness</td>
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What should I do the first 24-48 hours?

- Your student-athlete should not be left alone and should be checked throughout the night.
- It is OK to let them go to sleep. You only need to wake them up if you are concerned about their breathing or how they are sleeping.
- Your student-athlete should not drive while they are still having symptoms.
- Check with your doctor before giving your child any prescribed pain medicine.
- It is OK to use an ice pack on the head and neck for comfort.

When should I take my child to the doctor?

All student-athletes who sustain a concussion need to be evaluated by a licensed health care professional who is familiar with sports concussion diagnosis and management. You should call your student-athlete’s physician and explain what has happened. A follow up appointment should be scheduled with your primary care doctor or a sports concussion specialist if directed by your personal physician.

If any of your student-athlete’s signs or symptoms are worsening they should be taken to the emergency department IMMEDIATELY. Additional symptoms to watch for that would require you to call your doctor or go to the emergency department IMMEDIATELY include:

<table>
<thead>
<tr>
<th>Headaches that worsen</th>
<th>Very drowsy, can’t be awakened</th>
<th>Can’t recognize people or places</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seizures</td>
<td>Repeated vomiting</td>
<td>Increasing confusion</td>
</tr>
<tr>
<td>Neck pain</td>
<td>Slurred speech</td>
<td>Weakness/ numbness in arms/ legs</td>
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<tr>
<td>Unusual behavior change</td>
<td>Significant irritability</td>
<td>Less responsive than usual</td>
</tr>
</tbody>
</table>

When can a student-athlete return to play following a concussion?

After suffering a concussion, no student-athlete should return to play or practice on that same day. Studies have shown us that a young brain does not recover quickly enough for a student-athlete to return to activity in such a short time. Your student-athlete should not participate in any HIGH risk activities that may result in head injury such as physical education class, recess, ride a bike or skateboard until cleared by a licensed health care professional.

Once a student-athlete no longer has symptoms of a concussion for a minimum of 24 hours and is cleared to return to physical activity by a licensed health care professional knowledgeable in the care of sports concussions, he or she should proceed with activity in a supervised step-wise fashion to allow the brain to re-adjust to exertion. This should occur over a minimum of 5 days. (See Gradual Return to Sports Participation Program, Form #2)

*The Medical Clearance for the Gradual Return to Sports Participation form (Form #2) must be signed and returned to your school ATC prior to beginning the progression.*

How can a concussion affect schoolwork?

Following a concussion, many student-athletes will have difficulty in school. These problems may last from days to months and often involve difficulties with short and long-term memory, concentration, and organization.

In many cases it is best to lessen the student-athlete’s class load early on after the injury. This may include staying home from school for a few days, followed by a lightened schedule for a few days, or perhaps a longer period of time, if needed. Decreasing the stress on the brain early on after a concussion may lessen symptoms and shorten the recovery time.
Why is it so important that a student-athlete not return to play until they have completely recovered from a concussion?

A second concussion that occurs before the brain recovers from the first can slow recovery or increase the chances of long-term problems. In rare cases, brain swelling can result leading to permanent brain damage or even death (“second impact syndrome”).

What is the best treatment to help my student-athlete recover more quickly from a concussion?

The best treatment for a concussion is rest, both physically and mentally. There are no medications that can speed the recovery from a concussion. Exposure to loud noises, bright lights, computers, video games, television and phones (including text messaging) all may worsen the symptoms of a concussion. You should allow your student-athlete to rest as much as possible in the days following a concussion. As the symptoms lessen, you can allow increased use of computers, phone, video games, etc., but the access must be lessened if symptoms worsen.

How long do the symptoms of a concussion usually last?

The symptoms of a concussion will usually go away within one week of the initial injury. However, in some cases symptoms may last for several weeks, or even months.

Is a “CT scan” or MRI needed to diagnose a concussion?

Diagnostic testing, which includes CT (“CAT”) and MRI scans, are rarely needed following a concussion. While these are helpful in identifying life-threatening brain injuries (e.g. skull fracture, bleeding, swelling), they are not normally utilized, even by student-athletes who have sustained severe concussions. A concussion is diagnosed based upon the student-athlete’s description/story of the injury/event and the licensed health care provider’s physical examination.

When should the student-athlete see a sports concussion specialist?

Any student-athlete who has had significant or recurrent head injuries or the symptoms persist beyond 5-7 days may benefit from a specialty evaluation from a pediatric sports concussion program. Your personal physician may also recommend a specialty evaluation if they have any concerns or need further assistance with your student-athlete’s concussion management. Neuropsychological testing, which should be part of the evaluation when possible, can be helpful to assist with return to academic and physical activity. (2010 AAP Sport-Related Concussion in Children and Adolescents)

Some of this information has been adapted from the CDC’s “Heads Up: Concussion in High School Sports” and the NFHS’s Sports Medicine Advisory Committee. Please go to www.cdc.gov for more information.