

ImPACT™ BASELINE TESTING CONSENT FORM

Dear Parent/Guardian,

Your team or sports organization is currently utilizing an innovative program for evaluating and treating head injuries (e.g., concussion). In order to better manage concussions sustained by our student-athletes, your team or sports organization has partnered with Gundersen Sports Medicine to acquire a software tool called ImPACT™ (Immediate Post Concussion Assessment and Cognitive Testing). Headquartered in Pittsburgh, PA, ImPACT™ is a leader in computerized neurocognitive assessment tools and services. ImPACT™ has created an international network of clients who utilize the company's concussion management program. Neurocognitive tests such as ImPACT™ are an effective tool in recognizing and managing head injuries. Additional information about ImPACT™ can be found at www.impacttest.com.

Your team or sports organization is having student-athletes take the computerized exam before beginning contact sport practice or competition. The format of the test is similar to that of a video game and takes about 20-30 minutes to complete. The ImPACT™ test is akin to a pre-season physical of the brain. It tracks information such as memory, reaction time, and concentration, but it is not an IQ test. The ImPACT™ test is non-invasive and poses no risks to your child.

If your child suffers a head injury, and a concussion is suspected, your child will be referred to a health care organization for evaluation. The physician or clinician may recommend that your child take the post-injury ImPACT™ test. The health care organization will maintain your child's pre-season and post-injury test data, if any, on a secure server maintained by ImPACT™. Your child's post-test data will only be available to that health care organization, except as described below. If your child suffers a head injury, you will be contacted with additional details about how to proceed.

Your child's test data may be made available to the clinician evaluating your child. This clinician may choose to make your child's test data available to other health care providers who are being consulted regarding the treatment of your child. Your child's health and safety are at the forefront of the student athletic experience, and we are excited to utilize this program. If you have any further questions regarding this program please feel free to contact the provider testing your child.

Sincerely,

Gundersen Sports Medicine
3111 Gundersen Drive, Mailstop NC1-002
Onalaska, Wisconsin 54650
800-362-9567 ext. 58600

Gundersen Sports Medicine
111 Riverfront Building (Lafayette/Walnut Streets)
Winona, Minnesota 55987
800-362-9567 ext. 22360

PERMISSION SLIP

For use of the Immediate Post-Concussion Assessment and Cognitive Testing (ImPACT™)

I have read and understood the above information and give permission for my son/daughter to take the ImPACT™ Baseline Concussion Test.

Printed Name of Athlete _____ Grade _____

Signature of Athlete _____ Date _____

Signature of Parent _____ Date _____

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DEFINITION OF A BRAIN CONCUSSION

A concussion is an injury to the brain caused by an "impulsive" force transmitted to the head, such as a direct blow to the head, collision, fall, whiplash injury or violent blow to the body. A concussion causes temporary impairment of normal brain function. Symptoms of head injury may not appear for several hours after trauma and frequently evolve over the first several days. The alteration of brain function can present as any number of signs and/or symptoms, such as those listed on this sheet. A person does NOT have to lose consciousness to have a concussion.

Every head injury should be taken seriously and each dealt with appropriately. No two are exactly alike. The effects of head injuries can be cumulative and recovery time from one to the next is frequently longer.

WHEN TO GO TO THE HOSPITAL

While not every concussed athlete needs to be evaluated emergently, every athlete suspected of having a concussion should be evaluated by a licensed medical provider. Should the athlete display any of the symptoms below, immediate transport to a hospital emergency department is advisable:

- Any loss of consciousness (LOC) or unresponsiveness
- Irregular vital signs (heart rate, breathing, blood pressure, etc.)
- Repeated vomiting
- Amnesia or worsening headache
- Seizure activity
- Persistent or worsening confusion or irritability
- Suspicion of a spine injury, skull fracture or bleeding

Keep careful watch over the athlete for several days. While sleeping the first night, you may wake the athlete periodically every 2-3 hours to determine if they are coherent and respond well to instructions; especially if they suffered LOC, prolonged amnesia or if still experiencing significant symptoms. Transport the athlete to the nearest hospital emergency department immediately if any of the following symptoms persist or worsen:

- Difficulty in waking the athlete
- Severe headache, particularly at a specific location, which is continuing, increasing or changing in pattern
- Dizziness or disorientation
- Blurred vision
- Pupils which are dilated, unequal in size, or non-reactive to light
- Poor balance or unsteadiness
- Difficulty in remembering relevant people, events or facts
- Deteriorating level of consciousness or convulsions
- Unusual or bizarre behavior
- Any discharge from the ears or nose
- Slurring of speech
- Confusion, strangeness or irritability
- Weakness or numbness in either arm or leg

The appearance of any of the above symptoms indicates that this athlete has a significant head injury that requires immediate medical attention. The recommendations on this document are in no way a substitute for the direct care of a licensed medical provider.

Other symptoms frequently observed in concussion include:

- Headache
- Nausea/vomiting
- Balance problems/dizziness
- Fatigue/drowsiness
- Changes in sleep patterns
- Sensitivity to light and/or noise
- Sadness/depression
- Nervousness/anxiety
- Emotional instability or irritability
- Numbness or tingling sensations
- Feeling mentally 'foggy' or slowed down
- Difficulty with concentration or memory
- Visual problems

INITIAL TREATMENT

After being assessed, the main treatment for concussion is rest, both physical and mental. Attempting to carry out one's normal activities while concussed will likely only prolong symptoms and slow recovery.

Activities to avoid or moderate while symptomatic include, but are not limited to: any physical activity, school attendance, using a computer, reading or studying, text messaging and video gaming. **The athlete should not be allowed to operate a motor vehicle.** Any other activities that exacerbate symptoms should also be curtailed or eliminated until the athlete is cleared to reintroduce the aggravating activity by his/her licensed medical provider.

Once symptoms are absent at rest, brief periods of reading, focusing and abbreviated school attendance may be better tolerated. Once the athlete can tolerate a full day of school, light intensity, low impact walking may be attempted.

PAIN RELIEF SUGGESTIONS

If pain medication is necessary, acetaminophen (Tylenol®) may be advisable. If pain cannot be effectively managed with acetaminophen, the athlete should seek care from a licensed medical provider. Cold packs may also offer some pain relief.

The use of anti-inflammatory drugs such as ibuprofen, naproxen or aspirin is not recommended for use when a concussion is suspected.

GENERAL RETURN TO PLAY RECOMMENDATIONS

It is imperative that no athlete resumes any physical activity until completely symptom free for several days. The athlete should be cleared by a licensed medical provider and his/her progress monitored by a licensed athletic trainer. When a return to sport is appropriate, a standardized post-concussion return to activity progression over several days is recommended.

If symptoms return at any time during this progression, activities should be stopped for the day. Symptoms should be reported to the supervising licensed medical provider. The athlete is advised to resume the progression once an asymptomatic status has been re-achieved. Athletes should be able to comfortably complete several full practice sessions before returning to play in games or matches.

Returning too soon can slow the recovery process, increase the chances of re-injury and risk permanent disability or death.

SAMPLE RETURN TO ACTIVITY PROTOCOL

The program below represents a minimum time table to return athletes back to competition. When utilized for an athlete's first concussion, Steps 2-7 take a minimum of six days to complete. A longer asymptomatic period and/or exercise progression is advisable if 1) complications arise 2) the program is utilized after a complex concussion or 3) the athlete has a history of multiple concussions.

Step 1: Athlete is symptom free for at least 48 hours, is caught up in all classes, and can tolerate a full academic schedule

Step 2: Light cardiovascular work (15 minutes on stationary bike)

Step 3: Light cardiovascular work (15 minutes bike + 15 minutes other non-impact light aerobic activity)

Step 4: Step 3 activities + Valsalva type activities (25 repetitions of sit-ups, push-ups and/or single leg squats)

Step 5: Step 4 activities + non-contact, sport specific drills in a practice setting for no more than 45-60 minutes

Step 6: Sport specific drills and conditioning without contact (attempt a full practice length, all team activities not involving hitting, contact or body jarring maneuvers)

Step 7: Attempt a full return to normal play, activities and/or physical education classes

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