

ImPACT Concussion Testing Directions

About the ImPACT Concussion Test:

ImPACT (Immediate Post-Concussion Assessment and Cognitive Testing) is a brain injury measurement tool for children and teens who have sustained a traumatic brain injury (concussion). Through a series of computerized tests, ImPACT identifies subtle changes in brain function, evaluates post-injury condition, and tracks recovery. By comparing baseline (pre-injury) and post-injury test results, ImPACT can help determine the extent of damage following a concussion and can assist medical professionals in determining when it is safe for an athlete to return to physical activity.

ImPACT should only be administered to those athletes aged 11 and older.

When you take the test, you will need to make sure the following conditions are followed:

- You will need a high-speed Internet connection for the computer you will be using.
- The computer you use MUST have an external mouse plugged in. A "touchpad" will not work for this test.
- Make sure you are taking the test on a computer that is fully charged/plugged in and that there are no other programs running.
- Make sure the athlete is in a quiet room that is free of any noise or other distractions.
- This test requires the athlete to remember things. The athlete should only use the computer and should not be allowed to write any of the instructions/prompts/cues down on paper to help them.

GET MORE INFORMATION ON CONCUSSION www.knowconcussion.org



Taking the ImPACT Test:

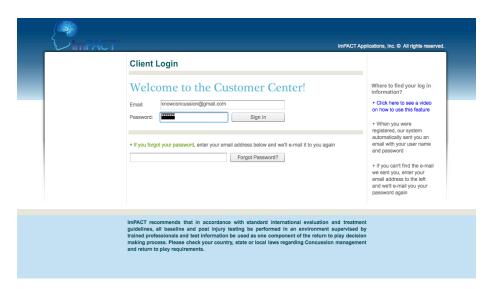
You will need approximately 30 uninterrupted minutes to complete the ImPACT Test. Please make sure you are well rested and that you have not engaged in any strenuous physical exercise prior to the exam. Athletes should also take this test when they are free of any concussion-like symptoms.

1. Log in to the following website: http://impacttest.com

2. On the upper right corner, click on "Customer Center".



3. User Name = knowconcussion@gmail.com Password = test123



4. Click on "Start New Test"



You will now launch a BASELINE test. There are three parts to the test. A parent should help the child with the first two parts to make sure information is accurate.

PART I: SPORT AND HEALTH HISTORY

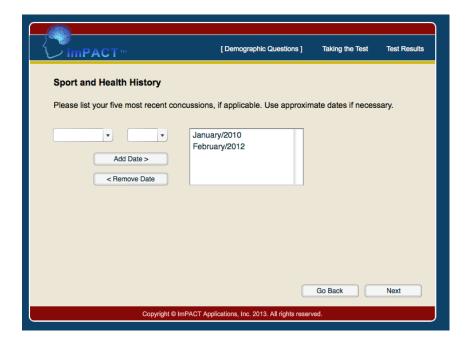
Parents should help the child as they proceed through the "Demographic Questions." Use the drop down arrows to assist you.



As you proceed through the "Sport and Health History" part, you will be asked to list the number of times you have been diagnosed with a concussion. Please understand that if the answer is "0" you will proceed through the next two pages. If you have had a previous history of concussions, you will be asked to list the symptoms associated with each of those concussions.

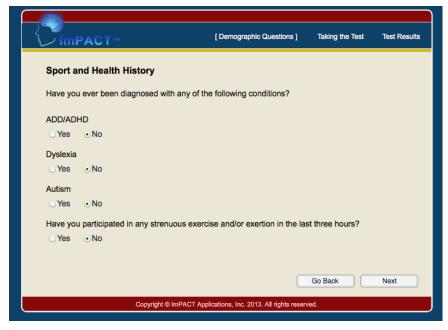


If you do not remember the exact date of each concussion, you can estimate.



You will then be asked if you have been under a physician's care for any significant medical condition. If not, you will need to click on "No" for all of the prompts:





You will then be asked to provide the date of your last concussion. If you have not ever had a concussion, you will leave this blank. Proceed to enter the number of hours of sleep you had last night and any current medications you are taking:



PART II: CURRENT SYMPTOMS AND CONDITIONS

Parents should help with this section

You will be given a list of 22 different symptoms and conditions. You are to rate each symptom on a scale of "0" (not experiencing this symptom) to "6" (so intense that you would be laying in a hospital bed!). Please rate each symptom based on how you are <u>currently</u> feeling or what is "normal" for you to feel on a given day:

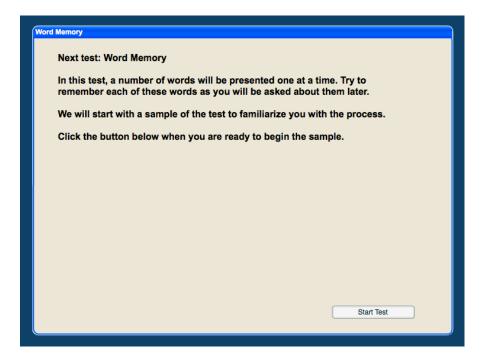


Parents: Assist your child with understanding what each symptom or condition means (and remember these things because they are all signs/symptoms associated with concussion, so if you notice things out of the ordinary, it could be a sign that your child has a concussion):

- Vomiting = throwing up
- Nausea = feeling like you need to throw up/sick to your stomach
- Balance problems = feeling woosy
- Fatigue = body is tired
- Sensitivity to Light/Noise = bright lights or loud noises make head hurt or dizzy
- Irritability = things easily get on your nerves
- Numbness or Tingling = typically in fingers, toes or face
- Feeling too slow = feel like the world around you is operating in slow motion
- Visual problems = blurred vision <u>unrelated</u> to the need to wear glasses/contact lenses

PART III: THE IMPACT CONCUSSION TEST

Parents: This is the time you should leave the room and allow your child to take the test without any interference or help. Instruct your child to read the directions on each screen prior to proceeding to the next page. This part of the test will take approximately 20-30 minutes to complete. Again, it's very important that your child take this part of the test on their own.



Parents: The information below is to help you understand what your child will be doing over the course of the next 20 minutes. This information is not intended to be given to your child. They will get instructions as they proceed through the test.

Module 1: Word Memory

Evaluates attentional processes/verbal recognition memory

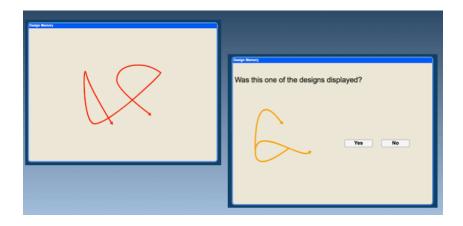
You will be given a sequence of 6 different modules. The first module will ask you to remember various words as they are presented on the screen. Each word is shown twice, and then you will be asked to verify whether or not a given word was one of those you were asked to remember.



Module 2: Design Memory

Evaluates attentional processes/verbal recognition memory

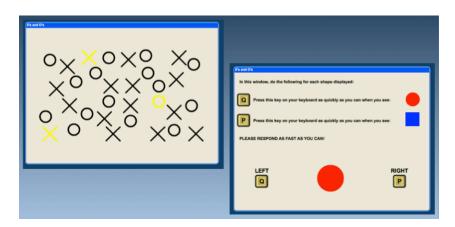
Similar to word memory, only using designs instead of words.



Module 3: X's and O's

Measures visual working memory, visual processing speed and visual memory.

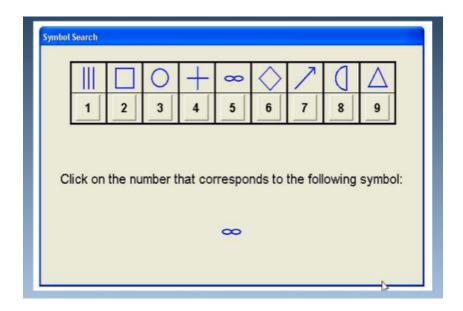
You will be given a grid full of X's and O's and asked to remember the location of three of them. Then, you will proceed to a reaction time game where you are asked to press a given key if you see a red circle or a different key if you see a blue square. It's a reaction time game, so you need to push the given key as quickly as you can. After playing the game for several seconds, you will return to the X's and O's chart to recall where the marked symbols were.



Module 4: Symbol Match

Evaluates visual processing speed, learning and memory.

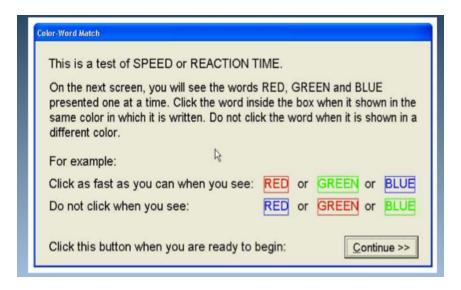
You are asked to click on the number that corresponds to the symbol shown as quickly as possible.



Module 5: Color Match

Measures impulse control/response inhibition.

You will be asked to press the given key if the word is displayed in its own color (red = red; blue = blue; green = green) and resist the urge to press the key if the word is displayed in a different color (red = blue).



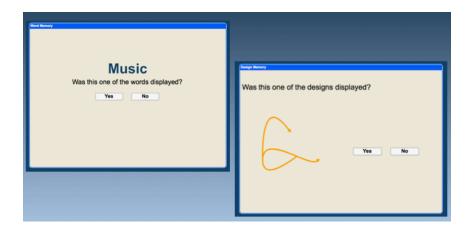
Module 6: Three Letters

Measures working memory and visual-motor response speed.

You will be given three letters to memorize, and then will be asked to play a game in which you click on the numbers in reverse order. You will start by clicking on 25, then to 24, then to 23, and so on. This is a timed game, so when the time expires, you will return to list those three letters. The game repeats several times.



After Module 6, you will be asked to recall words and designs from Modules 1 and 2. *Evaluated delayed memory/memory recall.*



YOU ARE FINISHED TAKING THE TEST!!!

There are no "results" that you need to be concerned with. If/When your team physician suspects you might have sustained a concussion, you will be asked to take this test again under the guidance of a medical professional. Results of the test will be compared to your baseline test and that will give your physician a better indication of how your brain is healing following your injury. The test is used to help your physician and/or athletic trainer determine when it is safe to allow you to return to physical activity following a concussion.