

**Regulation**

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SPORTS RELATED CONCUSSION AND HEAD INJURY

Athletic Department Personnel

All athletic department personnel (coaches, athletic trainer, athletic director, school nurse, and team physician) and all subsequent appointments shall be required to complete the National Federation of State High Schools Association (NFHS) course: Concussion in Sports – What You Need to Know. A copy of the course completion certificate must be provided prior to assuming athletic department responsibilities and will be kept on file in the Athletic Office.

For each subsequent year of appointment, athletic department personnel (with certificates on file) will be required to verify participation in a “Concussion Review Session” conducted by the Athletic Department.

Parents/Guardians

Parents/guardians of all athletic candidates shall receive, on a seasonal basis, a written description of the Bordentown Regional High School concussion policy/concussion fact sheet/acknowledgement form and they will be required to submit a written verification (form to be provided) that they have read the information. Students will not be permitted to participate in scrimmages or games without a verification form in the athletic trainer’s office.

Additionally, parents/guardians of all athletic candidates will receive a written description of the Bordentown Regional High School ImPACT testing protocol and a permission slip for their child to be baseline tested. Students will not be permitted to participate in scrimmages or games without a completed ImPACT baseline on file in the athletic trainer’s office.

Student-Athletes

All athletic candidates shall receive, on a seasonal basis, a written description of the Bordentown Regional High School concussion policy/concussion fact sheet/acknowledgement form and they will be required to submit a written verification (form to be provided) that they have read the information. Students will not be permitted to participate in scrimmages or games without a verification form on file in the athletic trainer’s office.

Additionally, all athletic candidates will receive a written description of the Bordentown Regional High School ImPACT testing protocol and a permission slip to be baseline tested. Students will not be permitted to participate in scrimmages or games without a completed ImPACT baseline on file in the athletic trainer’s office.

Students will also be required to participate in a concussion awareness program at the start of each season conducted by the athletic department.

ImPACT Testing Protocol

It is important to manage concussions on an individualized basis and to implement baseline testing and post-injury neurocognitive testing. This type of concussion assessment can help to objectively evaluate the concussed athlete's post-injury condition and track recovery for safe return to play, thus preventing the cumulative effects of concussion. ImPACT is administered by the school’s Athletic Trainer.

A. Test Features:

1. Measures player symptoms;

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2. Measures verbal and visual memory, processing speed and reaction time;
3. Reaction time measured to 1/100th of second;
4. Assists clinicians and Athletic Trainers in making difficult return-to-play decisions;
5. Provides reliable baseline test information;
6. Produces comprehensive report of test results;
7. Results can be e-mailed or faxed for fast consultation by a neuropsychologist;
8. Automatically stores data from repeat testing;
9. Testing is administered online for individuals or groups;
10. Compatible with PC and MAC.

The test battery consists of a near infinite number of alternate forms by randomly varying the stimulus array for each administration. This feature was built in to the program to minimize the "practice effects" that have limited the usefulness of more traditional neurocognitive tests.

- B. ImPACT takes approximately 20-30 minutes to complete. The program measures multiple aspects of cognitive functioning in athletes, including:
1. Attention span;
  2. Working memory;
  3. Sustained and selective attention time;
  4. Response variability;
  5. Non-verbal problem solving;
  6. Reaction time.

Test Overview

## A. Section 1: Demographic Information &amp; Health History Questionnaire

Section 1 of the ImPACT test requires the athlete to input basic demographic information and descriptive information through a series of easy-to-follow instructional screens. The athlete inputs this information via a keyboard and must utilize an external mouse to navigate/select responses on the screen.

Many of the questions can be answered using "pull down" menus in the window. This section asks the athlete to answer questions regarding height, weight, sport, position, concussion history, history of learning disabilities and other important descriptive information.

## B. Section 2: Current Symptoms and Conditions

This section of the ImPACT test asks questions about the athlete's most recent concussion date, hours slept last night, and current medications. Then the athlete is to rate the current severity of 22 concussion symptoms via a 7-point Likert scale.

The concussion symptom scores are displayed in the ImPACT test report along with the symptom total score.

## C. Section 3: Neuropsychological Tests (baseline testing and post-injury testing)

## 1. Module 1: Word Memory

This module evaluates attentional processes and verbal recognition memory utilizing a word discrimination paradigm.

Delay Condition: Following the administration of all other test modules (approximately 20 minutes), the athlete is again tested for recall via the same method described above. The same scores that are described above are provided for the delay condition.

## 2. Module 2: Design Memory

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This module evaluates attentional processes and visual recognition memory utilizing a design discrimination paradigm.

Delay Condition: Following the administration of all other test modules (approximately 20 minutes), the athlete is again tested for recall via the same method described above. The same scores that are described above are provided for the delay condition.

3. Module 3: X's and O's

This module measures visual working memory as well as visual processing speed and consists of a visual memory paradigm with a distractor task.

4. Module 4: Symbol Matching

This module evaluates visual processing speed, learning and memory.

5. Module 5: Color Match

This module represents a choice reaction time task and also measures impulse control and response inhibition.

6. Module 6: Three Letter Memory

This module measures working memory and visual-motor response speed.

For more information on ImPACT Testing please go to: <http://www.impacttest.com/>

Adopted:	August 19, 2009
Revised:	August 31, 2011
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Readopted:	