



CONCUSSION



"ImPACT has proven to be an absolutely indispensable tool at our school. Time and time again athletes chomping at the bit to return will strongly deny having subjective symptoms and their gross neurological exam will be negative. When the objective and much more sensitive ImPACT results still show deficits though, the athletes often reconsider their symptoms and admit to not really feeling 100% yet. Knowing that the test results don't lie, the athletes become more honest with themselves and with the ATCs. The more complete information obtained through the use of ImPACT means I never have to second guess if I'm being either too aggressive or too conservative in returning athletes to play. Without question, the first purchase I'll make at any future jobs will be the ImPACT Testing Software."

CA, LATC, Sheffield, MA

Developed following years of university-based research:

- Valid and reliable
- Sensitive to subtle changes in brain function
- Easy to administer
- Baseline and Post-Injury Testing
- Comprehensive Clinical Report
- A valuable tool employed within numerous research studies world-wide
- Utilized throughout professional and amateur sports:
 - ✓ 18 NFL Teams
 - ✓ IRL, CHAMP Car, Formula 1
 - ✓ US Soccer
 - ✓ Professional Baseball
 - ✓ 700+ High Schools
 - ✓ 250+ Universities
 - ✓ Professional Hockey
 - ✓ New Zealand Rugby Football Union
 - ✓ USA Women's Olympic Hockey
 - ✓ Swedish World Cup Soccer
 - ✓ 150+ Sports Medicine Centers
 - ✓ 100+ Neuropsychology Clinics



Tel: (877) 646-7991 • Web site: www.impacttest.com



The Best Approach To Concussion Management

WHO WE ARE:

ImPACT team members have dedicated the past 15 years to the scientific study of sports-related concussion and the clinical application of this knowledge throughout professional and amateur sports. ImPACT team members are widely acknowledged as world leaders in the field of concussion management and are committed to ongoing development of increasingly advanced concussion management tools.

WHAT WE DO:

ImPACT is a sophisticated research-based software tool developed to help sports-medicine clinicians evaluate recovery following concussion. The ImPACT program evaluates and documents multiple aspects of neurocognitive functioning including memory, brain processing speed, reaction time & post-concussive symptoms. In addition, the program provides a user-friendly injury documentation system that facilitates the tracking of the injury from the field through the recovery process.

CONCUSSION

CONCUSSION is a common injury and is often a difficult condition to diagnose and treat. Most often, return to play decisions were made without the benefit of neuropsychological testing and were based on observation and player report of symptoms. The ImPACT software package provides the sports medicine clinician with information that can help to take the guesswork out of concussion management and return-to-play decisions.

Using a battery of tests of memory, reaction time and processing speed, ImPACT provides specific information regarding the severity of injury and a standard for evaluating recovery from injury.

The ImPACT software package consists of a Self-Report Symptom Questionnaire (21 symptoms commonly associated with concussion), a Concussion-History Form that precedes the neuropsychological measures, and seven cognitive tests of cognitive functioning:

- Attention Span
- Working Memory
- Sustained Attention
- Reaction Time
- Response Variability
- Selective Attention
- Visual Memory
- Verbal Memory
- Non-verbal Problem Solving

FREQUENTLY ASKED QUESTIONS:

- **Who can administer ImPACT?**
 - ✓ A neuropsychologist, sports medicine physician, athletic trainer or assistant.
- **Who should interpret the test results?**
 - ✓ A physician, neuropsychologist, or professional trained in interpreting the instrument.
 - ✓ Consultation can be established with your medical staff, through one of our ImPACT specialists in your local area, or through the University of Pittsburgh Medical Center (UPMC) Sports Concussion Program.
 - ✓ ImPACT should be used as only one source of information regarding the athlete's level of functioning. Diagnostic or return to play decisions should be based on an evaluation by medical personnel in accordance with usual and standard medical practice.
- **What if I don't have a baseline on an athlete who suffers a concussion?**
 - ✓ ImPACT post-concussion test results can be compared to our large normative database of baselines to assist in determination of recovery. Our database of 10,000 athletes accompanies the software.
- **What is the best way to baseline test large numbers of athletes?**
 - ✓ Conducted at the school/organization's computer lab.
 - ✓ Groups of 10–15 athletes work best supervised by a professional familiar with ImPACT.
- **When should ImPACT be given following a concussion?**
 - ✓ We suggest initial evaluation 24–72 hours after injury.
 - ✓ If ImPACT results are abnormal or the athlete remains symptomatic, follow-up evaluations should be conducted at 5 day intervals.

POST-CONCUSSION CONSULTATION:

- ✓ Your local ImPACT Consultant OR the UPMC Sports Concussion Program.
- ✓ First consultation and training with UPMC is free to insure the test results are read properly.

OBTAINING A LICENSE FOR THE SOFTWARE:

- ✓ Our site license is for a single organization at one location. Can be installed on as many stand-alone PC's and notebook computers as needed per organization/location.
- ✓ Schools/Clubs have full access to the ImPACT Program through a Yearly Subscription Program, while Sports Medicine Centers/Clinics subscribe to a Per Use License.

COMPUTER REQUIREMENTS:

- Operating Systems – Windows 98, ME, 2000, XP, NT (4.0) w/SP 6 or later
- Internet Explorer 4.01 w/Service Pack 2 or later
- 32MB of RAM and Pentium Class Processor Speed of 200Mhz
- Hard Drive Space 20 MB for the software plus, 4KB per test saved.

DEVELOPERS OF ImPACT:

Mark Lovell, PhD

Director, UPMC Sports Concussion Program
Director, NFL Neuropsychology Program
Director, NHL Neuropsychology Program

Michael Collins, PhD

Assistant Director, UPMC Sports
Concussion Program

Kenneth Podell, PhD

Division Head, Dept. of Neuropsychology
Henry Ford Health System

Joseph Maroon, MD

Professor, UPMC Dept. of Neurological Surgery
Heindl Scholar
Team Neurosurgeon, Pittsburgh Steelers

John Powell, PhD, ATC

Director, Graduate Studies in Sports
Medicine, Michigan State University
President, Med Sports Systems

SALES AND MARKETING:

Labiba Russo, Director

(877) 646-7991 or lrusso@impacttest.com

Andrew Heath, International Sales

+ 61 (0)7 3374 3351 or aheath@impacttest.com

