



• Consistent with NCAA Guidelines

Concussion

Play It S.A.F.E.® Concussion Management Program

Deciding when an athlete has fully recovered from a concussion and can safely return to play is a difficult challenge facing clinicians, athletic trainers and team physicians. Yet, resuming activity before full recovery can dangerously exacerbate a head injury and/or result in an orthopedic injury...Play It S.A.F.E.® with Biodes.

BIODEX

Play It S.A.F.E.®

Concussion Management Program

Play It S.A.F.E.® starts with baseline testing using objective neuro-physical balance testing to compliment the neuro-cognitive testing tool of your choice. A simple clinical guideline for a sideline assessment and follow-up evaluation provides insight to the question, “Can this athlete return to play?”



What is the Play It S.A.F.E.®

Biodex Medical Systems, a leader in sports medicine and rehabilitation, has teamed up with Bridgett Wallace, a Certified Vestibular Therapist and President of 360° Balance, to develop the Play It S.A.F.E.® Concussion Management Program - a “turn-key” solution to the assessment and management of concussion.

The Play It S.A.F.E.® program brings together cognitive and functional assessment using accepted tools and methods to afford you a “single source” concussion management program.

Even for those facilities that have a concussion program in-place, Play It S.A.F.E.® adds the vital vestibular and objective balance assessment recently found so important in concussion assessment.

The program can be an important addition to an existing program when used in conjunction with accepted neuro-cognitive testing programs.

Objective balance testing is critical

Research shows that athletes demonstrate decreased stability up to three to five days post injury. This can be the result of ineffective use of one or more of their sensory systems.¹ Signs and symptoms will vary following head trauma. With some individuals, signs and symptoms may resolve immediately after a mild head injury (MHI) while others have persistent symptoms. In either case, the recovery period related to MHI appears to coincide with recovery of postural stability as well as normalization of eye-head coordination and return of cognitive function.¹

Preseason Baseline Testing

The ability to quantify balance and cognitive function in athletes before an injury occurs is an important consideration in a comprehensive athletic program. The objective data provided by computerized assessments provides a performance baseline against which post-injury performance can be compared.

Post-Injury Assessment

Traditionally, balance control has not been assigned a high priority in evaluating athletic injuries. Recently, there is strong evidence demonstrating the impact of balance deficits on functional performance and increased risk of re-injury.^(2,3,4)

Following head trauma, the Play It S.A.F.E.® program provides a simple “guideline” that the medical provider can follow, step-by-step to evaluate the athlete and form fact-based conclusions.

The Play It S.A.F.E.® Program consists of:

Step 1:

Concussion Management Education

- Support materials to educate athletes, coaches, parents, administrators, doctors and clinicians, including the CDC “Heads Up” Concussion in Youth Sports Materials.*

Step 2:

Preseason Baseline Testing

- **Neuro-physical Testing:** Get important baseline balance data on all athletes using the Biodex Balance System SD or portable BioSway. The tests are quick and easy to perform.

The Clinical Test for Sensory Integration of Balance (CTSIB) helps to determine which sensory system (visual, vestibular, or somatosensory) an athlete relies on to maintain balance. Research has shown that Mild Head Injury (MHI) populations rely more on visual cues from the environment than an able body population.⁴

- **Neuro-cognitive Testing:** Fully complimentary to any computerized cognitive software testing program including: ImPACT™, Axon Sports CCAT, CNS Vital Signs™, CSMI SportsWare™ Concussion, HeadMinder™, SAC, SCAT2** or any program of choice. (See inset for details.)

Step 3:

Sideline Assessment

- Follow the Play It S.A.F.E.® Algorithm and Sideline Assessment to screen for a concussion and remove the athlete from play if needed.

Step 4:

Follow-up Evaluation

- Repeat neuro-physical balance testing and neuro-cognitive testing in the days following injury to track recovery using preseason baseline testing as a reference.

Step 5:

Return-to-Play Decision

- Doctors, athletes, parents, coaches and administrators feel confident as decisions are based on best practices objective data and clinical protocols.

NOTES

*NOTE: The CDC Heads Up Concussion Materials are included, but are also available free at <http://www.cdc.gov/concussion/headsup/youth.html>.

**The SCAT2 is a free tool for evaluating concussion in athletes, included with the Play It S.A.F.E.® program. It was developed by experts at the 3rd International Consensus on Concussion in Sport in Zurich, Switzerland in November 2008. It is also available online.

DISCLAIMER: The information provided is not intended to be a substitute for professional medical advice but as a guideline to assessing athletes following a concussion. Always seek the care of a physician or other qualified healthcare provider with any questions or concerns you may have about a medical condition. If there is any question/concern about the athlete's status then recommend not returning to play.

Play It S.A.F.E.®

Concussion Management Program helps you follow the athlete's progress from baseline testing through post-injury evaluation.

1. Administer the test(s).
2. See the results.
3. Enter the data and document progress with Summary Report.



BENEFITS of the Play It S.A.F.E.® Concussion Management Program

- Easy-to-follow algorithm allows coaches, ATC's and PT's to take full advantage of the program.
- Evidenced-based protocol facilitates medically supported "return-to-play" decision process.
- Instrumented objective balance testing utilizing the Biodex Balance System SD or the portable BioSway allows quick and objective comparisons of test scores.
- **Sideline Assessment Guide** serves as a quick reference, taking you step-by-step through the post-injury evaluation. (See inset for details.)
- HIPPA compliant post-injury Summary Report shows status, progress and outcomes of tests.
- Ongoing education and support with print-on-demand protocols, graded symptom checklist and educational materials round out the program and keep you up to date.
- Fully complimentary to any computerized cognitive software testing program including: ImpACT™, Axon Sports CCAT, CNS Vital Signs™, CSMI SportsWare™ Concussion, HeadMinder™, SAC, SCAT2** or any program of choice.



Play It S.A.F.E.®

Sideline Assessment Guide Includes:

- Graded Symptom Checklist
- Cognitive Test
- Functional Testing
- Oculomotor (Eye Movement)
- Dynamic Visual Acuity Testing
- Physical Tests
- Romberg
- 20-yard Jog
- Follow-up Evaluation (Repeat of Sideline Assessment)

References:

1. Guskiewicz, KM, et al (1997). Alternative approaches to the assessment of mild head injury in athletes. Med Sci Sports Exerc, Vol 29, No 7 Supplement, pp S213-221.
2. Kauffman, et al. Balance is a critical parameter in orthopedic rehabilitation. Orthopedic Physical Therapy Clinics of North America: New Technologies in Physical Therapy 6:1 1059-1516, 1997
3. Goldie, et al. Postural Control following inversion injuries of the ankle. Arch Phys Med Rehab 75:969-975, 1994
4. Lehmann J.F. et al Quantitative Evaluation of Sway as in Indicator of Functional Balance in Post-Traumatic Brain Injury. Arch Phys Med Rehab 1990;71: 955-962

Play It S.A.F.E.®
Concussion Management Program
developed by



BIODEX

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Int'l 631-924-9000

There are several ways you can begin utilizing the **Biodex Play It S.A.F.E.® Concussion Management Program**

What is needed:

- Balance testing using either the Biodex Balance System SD with software version 1.3 or higher (the version with the CTSIB test), the indexed foam pad, or the Biodex BioSway.
- A computerized cognitive software testing program of your choice, e.g.: ImPACT™, Axon Sports CCAT, CNS Vital Signs™, CSMI SportsWare™ Concussion, HeadMinder™, SAC and SCAT2**.
- A Windows-based PC to run the Play It S.A.F.E.® Software program.

Play It S.A.F.E.® Pro



▲ Biodex Balance System SD™

Play It S.A.F.E.® Pro features the versatile **Biodex Balance System SD** for static and dynamic balance testing and training. The Balance SD, not only serves your concussion management needs, but standardized fall screening and athlete knee injury screening tests. Plus six interactive training modes to provide valuable and effective proprioceptive and neuromuscular training.

950-500 Play It S.A.F.E.® Pro
Includes Balance System SD with 12.1" monitor,
Printer, Printer Stand, Indexed CTSIB Pad and
Play It S.A.F.E.® Concussion Management Program.

For Existing Balance System Owners:

950-446 Play It S.A.F.E.®
Concussion Management Program
950-303 Pad, CTSIB Indexed

Play It S.A.F.E.® Varsity



▲ Biodex BioSway - Printer and Printer Stand sold separately.

Play It S.A.F.E.® Varsity utilizes the **Biodex BioSway** portable static balance training and testing device. The BioSway features a lightweight portable instrumented platform, easy-to-use color touch screen display, standardized testing, interactive training, plus a hard shell travel case – perfect for when testing has to be brought to an athlete.



950-510 Play It S.A.F.E.® Varsity
Includes BioSway with 12.1" monitor,
Adjustable Display Stand, Indexed CTSIB Pad,
Travel Case and Play It S.A.F.E.® Concussion
Management Program. (Printer and Printer Stand
sold separately).

For Existing BioSway Owners:

950-446 Play It S.A.F.E.®
Concussion Management Program
BioSway accessories, www.biodex.com/biosway

www.biodex.com/concussion

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