



PROTECTING BRAINS - ONE ATHLETE AT A TIME

KONKUSSION SWRSA Information Package



WELCOME TO KONKUSSION

Welcome to KONKUSSION, protecting brains one athlete at a time.

KONKUSSION was founded by Ontario Neurosurgeon and Spine Surgeon, Dr. Neilank K. Jha to revolutionize the management of concussions by offering:

- Annual baseline testing under the supervision of a healthcare professional to facilitate an objective pre and post-injury comparison of neurological function.
- Twenty-four hour access to an experienced clinical team highly specialized in the diagnosis and management of head injuries.
- Clinical appointments with a Neurosurgeon or Neurologist, commencing 24 to 48 hours after sustaining a head injury or concussion.
- Ongoing treatment and management from a multidisciplinary clinical team until concussion resolution and safe return to activity and sport.

This complete concussion management program sets a global standard of care.

Our team has agreed to offer Baseline Testing and Clinical Management to the South-west Regional Soccer Association (SWRSA) at a preferred rate of \$40.00 per athlete. Fees cover uninsured services such as baseline testing, infrastructure, and education, awareness and support. Neurosurgeons and Neurologists are part of the Ontario Healthcare Program. No other fees will apply. Each athlete's membership will be valid for 12 months.

Please find herein a detailed account of the KONKUSSION program; education, awareness and support initiatives; frequently asked questions; and athlete registration process.

We look forward to a safe and healthy 2013 SWRSA summer soccer season.

Sincerely,



Christopher T. Burke, P.Eng.
Vice President of Engineering

MILD TRAUMATIC BRAIN INJURY (MTBI)

Mild traumatic brain injuries, or concussions, pose unique medical challenges with potentially devastating short and long-term consequences.

If an athlete sustains a wrist fracture, an x-ray is performed to diagnose the fracture and establish an effective treatment regime. However, there is no CT scan, MRI or laboratory test that can conclusively diagnose a concussion.

Emergency Room statistics show that recreational athlete's, including soccer players, are sustaining concussions at alarming rates.

One in six recreational athletes will sustain a concussion this year.

Concussions can lead to short-term impacts that include debilitating headaches, cognitive impairments, sleep disturbances, balance, fatigue and mood disorders, poor school performance and loss of employment.

Up to 20% of athletes who sustain a concussion will continue to experience significant symptoms that persist beyond 3 months.

In some cases, multiple poorly managed concussions may cause irreparable brain damage and long-term impacts such as depression, Alzheimer's, Parkinson's Disease, ALS and suicide.

These serious short and long-term impacts of concussions are preventable however they require objective assessment of pre and post injury function and diligent management by an experienced head trauma specialist.



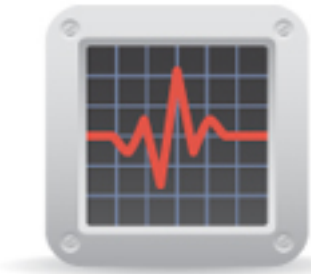
The KONKUSSION Program

The KONKUSSION Baseline Testing and Concussion Management Program is developed and managed by a team of Neurosurgeons and Neurologists.

The program is comprised of:

- Annual baseline testing
- Twenty four hour access to clinical care
- Ongoing concussion management and support.

This complete concussion management program sets a global standard of care.



BASELINE TESTING

No athlete should play a sport without a baseline test.

Baseline testing enables objective evaluation of when an athlete's post concussion level of function has returned to the pre injury level for safe return to activity and sport.

All KONKUSSION athletes will participate in an annual baseline test administered by a member of our professional healthcare team in a mobile onsite baseline testing clinic.

The comprehensive baseline test includes computer based neurocognitive and neurophysical tests, and a rigorous fitness assessment to simulate playing conditions. In select high risk athletes, brain physiological tests may be carried out using Near Infrared Spectroscopy (NIRS) technology.

Should the SWRSA wish to be part of this 2013 Baseline Testing and Clinical Management program, our mobile onsite teams will test each SWRSA district athlete at convenient locations in the General South-west Regional Area. Baseline tests are carried out on a pre designated date and timeslot, selected as part of the KONKUSSION registration process.



24 HOUR ACCESS TO CARE

Concussions require immediate care.

Upon completing an annual KONKUSSION baseline test, each parent, guardian or athlete – and team official - receives a KONKUSSION information package. This information package includes a membership card and 1-800 number to call in the event of a suspected head injury.

The KONKUSSION Clinical Team is accessible twenty-four hours per day, seven days per week.

After calling the KONKUSSION 1-800 number, the parent, guardian or athlete receives a return phone call within 60 minutes from a KONKUSSION trained healthcare professional.

A detailed pre-screen of the athlete's condition is carried out.

Based upon the pre-screen results – reviewed by a Neurosurgeon or Neurologist – the KONKUSSION member is scheduled to see a Neurosurgeon or Neurologist within 24 to 48 hours. No referral from a family doctor or pediatrician is required.



ONGOING CONCUSSION MANAGEMENT

In the event that an athlete has sustained a concussion, the KONKUSSION team offers state of the art concussion management through clinical appointments or teleconferencing with a Neurosurgeon or Neurologist.

Teleconferencing appointments can be carried out at 1,600 Ontario Telemedicine Network (OTN) sites across Ontario. A KONKUSSION member may alternatively opt to schedule a clinical visit with a Neurosurgeon or Neurologist at one of our GTA clinics.

Clinical appointments follow medically validated rehabilitation stages. These six graduated stages include no activity, light aerobic exercise, sport-specific exercise, non-contact training, full contact practice, and return to play.

The KONKUSSION multidisciplinary medical team offers detailed head injury treatment, diet, supplement and lifestyle regimes to help athletes expedite recovery, return to play in a safer and more responsive manner, and minimize the short and long term health impacts of head injury.

The ultimate clearance for an athlete to return safely to school, work, physical activity or play requires a Neurologist or Neurosurgeon, as these decisions can ultimately prevent permanent brain damage.





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THE KONKUSSION ADVANTAGE

Our detailed pre and post injury assessment of neurological function; twenty-four hour access to care; clinical management by Neurosurgeons and Neurologists; and multidisciplinary treatment, supplement, and lifestyle regimes enable KONKUSSION to make return to play decisions with a higher level of efficiency, precision and safety, quite often resulting in a sooner return to play.



WARNING CONCUSSIONS MAY CAUSE BRAIN DAMAGE

Poorly managed concussions may lead to impaired school performance, debilitating headaches, dizziness, nausea, vomiting, sensitivity to sound and light. Long term effects may include depression, suicide, Alzheimer's and Parkinsonian symptoms.

American Association of Neurological Surgeons

EDUCATION, AWARENESS AND SUPPORT

KONKUSSION was founded with the vision to revolutionize and redefine the management of concussions.

Emergency Room statistics have made it clear that recreational athletes are sustaining concussions at alarming rates, from a variety of sports, including hockey, football and soccer.

Concussions are a national issue that requires national attention.

How can we expect individuals, coaches, sport organizations, school boards and legislators to govern themselves if they do not have the appropriate knowledge?

Athletes, parents, coaches, league officials, association administrators, athletic directors and senior policy makers require grass root awareness. KONKUSSION has established the following Education, Awareness and Support (EAS) Initiatives for 2013.

KONKUSSION EAS Initiative	Function
Athlete Services Team	Provides grass root concussion EAS at SWRSA association events and games
Monthly Newsletter	Highlights the latest in concussion prevention, diagnosis, management and treatment
Coach and Trainer Packages	Guidelines to help SWRSA trainers / coaches feel prepared with respect to concussions
Quarterly Webinars	Enables athletes, parents, trainers and coaches to voice their questions and concerns regarding concussions
Biannual Conferences	Concussion experts present on a variety of issues to advance prevention, diagnosis, management, treatment and education
Collaboration with Ontario Brain Injury Association (OBIA)	Leverages existing resources and establishes a standardized approach to head and spine injury education, awareness and support

KONKUSSION FAQ's

What is KONKUSSION?

KONKUSSION is a team led by neurosurgeons and neurologists providing athletes with mobile on-site comprehensive baseline testing and subsequent 24/7/365 complete concussion care and safe return to play.

How does KONKUSSION work?

All athletes undergo an annual Baseline test administered by a healthcare professional. Upon completing the baseline test, each athlete, parent or guardian receives a membership card and 1-800 to call in the event of a head injury.

KONKUSSION clinical care is accessible 24 hours per day, 7 days per week. Members receive a phone call back within 60 minutes from a healthcare professional to facilitate a detailed pre-screen of the athlete's condition.

If necessary, KONKUSSION athletes are scheduled to see a specialist (Neurosurgeon or Neurologist) within 24 to 48 hours, anywhere in Ontario.

In the event of a concussion, the diagnosis is confirmed by comparing the post-injury measurements to the athlete's baseline levels.

A graduated return to activity, return to play protocol is followed under the expertise of our clinical team with multidisciplinary head injury treatment, diet, supplement and lifestyle regimes to expedite recovery.

The ultimate decision on clearance to return safely to play is made by a Neurosurgeon or Neurologist in consultation with our entire healthcare team.

Why become a member of KONKUSSION?

Concussions require immediate care.

Parents and athletes concerned about a possible concussion have immediate access to our clinical team and will be scheduled to see a Neurosurgeon or Neurologist within 24 to 48 hours, anywhere in Ontario.

How is KONKUSSION's baseline testing different from others?

Firstly, our neurocognitive test is administered by a healthcare professional at the beginning of each sport season.

Secondly, our baseline testing incorporates features of previously validated tests and further dimensions of cognition, including visual memory, balance, reaction time and working memory.

Thirdly, our rigorous fitness assessment simulates playing conditions.

Finally, each concussed athlete undergoes a comprehensive review by our team of Neurosurgeons and Neurologists.

All of the above enables KONKUSSION to make return to play decisions with a higher level of efficiency, precision and safety.

Is Baseline testing only for athletes above they age of 10?

No. KONKUSSION has modified its baseline test for younger athletes and continues to follow their sporting career.

What happens when an athlete returns to play too soon after sustaining a concussion?

The athlete will become more susceptible to a second concussion, post concussive syndrome and irreversible brain damage.

Short-term consequences may include impaired school performance, debilitating headaches, dizziness, nausea, vomiting, and sensitivity to sound and light. Long-term effects may include depression, Alzheimer's, Parkinson's, ALS and suicide.

Will KONKUSSION delay a player's Return To Play?

No, quite the opposite. Due to immediate access to care with KONKUSSION baseline testing, athletes will return to play as soon as safely possible.

Why do my kids need to register with KONKUSSION each year?

Given the developing brain, it is important to establish an up to date baseline test.

SWRSA ADMINISTRATION

The KONKUSSION Registration Process has been developed to enable sport associations, districts and clubs to efficiently facilitate and track KONKUSSION enrollment and usage. In fact, this process requires five simple steps.

Step 1 - Create a User Account

Upon entering the KONKUSSION website, each first time association, district or club administrator is required to create a User Account. The User Account may comprise a unique Username and Password, or an existing external social login with providers such as Google, Windows Live, Yahoo, Facebook, Twitter and LinkedIn.

Each new sport season, a previous KONKUSSION Administrative User is able to utilize their existing User Account.

Step 2 – User Account and Organization Match

Once a User Account is created, the administrator selects their athletic association, district or club from a series of dropdown menus. Upon selection, the administrator is prompted to enter an organization specific username and password to verify their access permission. This username and password links the administrator's User Account with the appropriate organization.

The KONKUSSION infrastructure comprises a four level hierarchy:

- Trainers and coaches may view the 'KONKUSSION status' of those athletes on their team.
- Club administrators may view the 'KONKUSSION status' of those athletes that are members of teams in their organization.
- District administrators may view the 'KONKUSSION status' of those athletes that are members of clubs in their organization.
- Association administrators may view the 'KONKUSSION status' of all athletes in their organization.

The 'KONKUSSION status' summarizes athlete registration and usage information. Detailed patient information is confidential and securely stored on the KONKUSSION website for internal use by the KONKUSSION clinical team.

Step 3 – Upload Athlete CSV File

Once an administrator has created a User Account and linked this account with their corresponding organization, the administrator is prompted to upload a Comma Separated Value (CSV) file of all athletes in their organization enrolled in the KONKUSSION program. Required fields include first name, last name, email address and OSA number.

The contents of this CSV file are imported into the KONKUSSION athlete tracking application outlined in Step 4.

Step 4 – Athlete Registration Tracking

Once a complete list of KONKUSSION members are uploaded by a club, district, or association administrator, the KONKUSSION athlete tracking application matches those athletes that have already registered, scheduled and completed their baseline test against the CSV imported 'master' athlete list.

KONKUSSION automatically distributes standardized reminder emails to parents, guardians and athletes based upon their 'KONKUSSION status'.

For instance, prior to an athlete registering and scheduling their baseline test, email notifications provide instructions on the KONKUSSION registration and baseline test clinic scheduling process.

After an athlete has registered and scheduled their baseline test, email notifications provide directions to their selected baseline test clinic and instructions for what to do upon arrival.

Step 5 – KONKUSSION Metrics

Associations, districts and club administrators are able to track total enrollment, baseline testing, head injuries, concussion diagnosis, and concussion management metrics for their organization.

ATHLETE REGISTRATION

The KONKUSSION Registration Process has been developed to provide a simple and efficient registration experience for parents, guardians and athletes enrolled in the KONKUSSION program. In fact, this process requires three simple steps.

Step 1 – Create a User Account

Upon entering the KONKUSSION website, each first time parent, guardian or athlete enrolled - or representing an athlete - enrolled in the KONKUSSION program creates a User Account. The User Account comprises a unique Username and Password of the users choosing. This process generally takes less than 1 minute.

A parent or guardian with multiple children enrolled in the KONKUSSION program is only required to create one User Account, as each account can support more than one athlete.

Each new sport season, a previously enrolled KONKUSSION member is able to utilize their existing User Account.

Step 2 - Add/Remove Athlete

Once a User Account has been created, the parent, guardian or athlete will proceed to the “Add Athlete” tab. General, health and sport registration forms must be completed for each athlete, prior to scheduling a Baseline Testing Clinic timeslot.

General Registration

General Registration creates an athlete in the KONKUSSION database and links that athlete to an appropriate User Account. As part of the General Registration process, a parent, guardian or athlete is required to provide the name, sex, age, contact and guardian information for each athlete enrolled in the KONKUSSION program.

Every subsequent sport season, a previously enrolled KONKUSSION member is only required to verify their contact information, rather than repeat the General Registration process.

Health Registration

Upon completing the General Registration form, a User will proceed to KONKUSSION Health Registration. The Health Registration process requires that the parent, guardian or athlete select any neurological related symptoms or medications that the athlete has experienced, or been prescribed, during the past three months.

The Health Registration process must be updated each time an athlete enrolls for a KONKUSSION Baseline Test and generally takes less than five minutes.

Sport Registration

Sport Registration involves selecting an athlete's corresponding sport association, district and club from a series of three dropdown menus.

The Sport Registration process enables KONKUSSION and the Sport Association to track which athletes have registered for, and subsequently completed, a Baseline Test.

Step 3 – Baseline Testing Clinic Registration

Baseline Testing Clinic registration is where a parent, guardian or athlete reserves a Baseline Testing Clinic timeslot. For each District or Club, a specific list of Baseline Test Clinics, including available dates and locations are provided in two dropdown menus.

Once a specific date and location have been selected by the User, a timetable will appear. The User can select a convenient timeslot on a first come, first serve basis.

Depending upon the size of the Baseline Test Clinic, five to twenty-five concurrent Baseline Tests may be carried out during each timeslot. This enables a parent or guardian to have multiple athletes tested with no additional wait time.