CONCUSSION

You have been given this information sheet because the ringside doctor has diagnosed you or your fighter as having concussion or being at a high risk of developing concussion. Symptoms of concussion can, at times, take several hours to become obvious.

**Concussion is a change in brain function that is brought about by a force to the head or anywhere on the body that causes the brain to move rapidly bath and forth in the skull. You do not need to lose consciousness (get KO’d) to have concussion.**

It is very important to take this advice seriously. It is now known that concussion can lead to long-term health problems, and repeated concussion increases this risk.

The table below describes the common symptoms of concussion. It is not possible to list every possible symptom of concussion as it varies from person to person, and from one concussion to the next.

If you begin to experience any of these symptoms following your fight or are concerned that you may be concussed, it is recommended that you immediately seek medical advice.

|  |  |  |  |
| --- | --- | --- | --- |
| **Physical** | **Cognitive** | **Emotional** | **Sleep** |
| headache | poor concentration | more emotional | drowsy |
| loss of consciousness | foggy thinking | irritable | trouble falling asleep |
| nausea | amnesia (loss of memory) | upset | sleeping more or less than normal |
| vomiting | “losing” time | angry |  |
| flashing lights | feeling slowed down | anxious |
| dizziness |  | sad |
| balance issues | change in behaviour |
| visual problems | change in personality |
| photophobia (light bothering) |  | | |
| Sonophobia (sound bothering) |
| numbness |
| problems with co-ordination |

Concussion is a mild traumatic brain injury (mTBI), and it may take between 3-15 days for your brain to recover.

During this time, you may experience any, or all, of the above symptoms.

Most people recover fully from concussion with no long-term effect.

Important:

If you have on-going symptoms of concussion, it is important to see a doctor as it can take some athletes weeks or months to fully recover. Ignoring your symptoms may make your symptoms worse.

If your symptoms become worse or you are recovering more slowly than expected, or your family or friends are concerned about you – do not delay – see your doctor or healthcare provider immediately.

# What to do now you have a concussion

* **Early care and monitoring** are important to prevent long-term complications from concussion. It is also the best thing to do to ensure you can return to training and the ring safely and in a timely manner.
* **Have a friend or family member stay with you** for a few days. You should not be alone until you know how the concussion has affected you.
* **Get plenty of rest and sleep** as this helps the brain to heal. Do not try to do too much too soon. As you start to feel better, you can gradually return to your usual routine.

## Do not drink alcohol.

* **Do not drive a car/ride a motorcycle.**

## Do not take any medication unless advised by the doctor.

* **Follow the Return to Fight Strategy** attached to this leaflet.
* **Avoid activities that are physically demanding** (e.g. non-contact training, heavy physical work) or require a lot of thinking or concentration (e.g. screen time).

## Do not spar until you are cleared to return by a medical practitioner fully appraised of your concussion episode.

**A repeat concussion that occurs before the brain has fully healed can be dangerous.**

**It may also slow your recovery and increase the chance of long-term problems.**

Important:

If you do not feel better after seven days, or back to your normal self, see a healthcare professional who has experience in treating brain injuries.

If you experience any of the below symptoms, attend a hospital emergency department immediately:

* repeated vomiting
* headache that gets worse and does not go away
* loss of consciousness
* inability to stay awake during times you would normally be awake
* getting more confused, restless or agitated
* convulsions or seizures
* difficulty walking or difficulty with balance
* weakness or numbness of any part of the body
* blurring or difficulty with vision
* slurred speech

# Return to fight strategy

|  |  |  |
| --- | --- | --- |
| **Stage** | **Activity** | |
| **Initial period: 24/48 hours after contest** | | |
| An initial period of **24/48 hours** of both relative physical and cognitive rest is recommended before beginning Stage 1 of this graduated strategy.  There should be at **least 48 hours (or longer)** for each step of the progression. If any symptoms worsen during exercise, contestants should go back to the previous step. | | |
| **Stage 1: Return to limited activity** | | |
| 1 | Return to symptom limited activity | Daily activities that do not provoke symptoms |
| **Stage 2: Return to general fitness – *may only advance to this stage once concussion symptoms have resolved. It is recommended that Stage 2 not be commenced for at least one week.*** | | |
| 2.1 | Light aerobic activity | Walking, elliptical, stationary cycling at slow to medium pace. No resistance training. |
| 2.2 | Moderate aerobic activity | Jogging, swimming, skipping, other aerobic activities. No head impact activities. |
| 2.3 | Sport-specific activity | Sprinting, mitts, bag/footwork, walk-through grappling. No partner work. May start progressive resistance training. |
| **Stage 3: Return to non-contact fighting activities** | | |
| 3.1 | Bag/mitt work with movement | Tests fighter ability to punch and/or kick in multiple planes. |
| 3.2 | Shadow boxing/drills | Re-introduces fighter to sport environment and re-establishes footwork. |
| 3.3 | One-sided sparring & grappling. | Fighter begins to spar without the concern of contact. Reacts to opponents’ movements and begins to get timing back for punches, kicks and body position. |
| **Stage 4: Return to contact fighting activities – *may only advance to this stage when medical clearance has been obtained from concussion/brain injury specialist approved by the Board*** | | |
| 4.1 | Sparring – short duration | First step of live sparring. Rounds of short duration with long breaks. Number of rounds is small to begin with but  can be increased as tolerated. |
| 4.2 | Sparring – longer duration | Rounds at this stage can begin to lengthen in duration while breaks between can shorten. Number of rounds can increase as fatigue allows. |
| 4.3 | Full contact practice | Full return to normal training. Return to normal rounds and time limits based on sport and next potential bout. Contestant should be able to tolerate normal parameters of training/sparring and is training without a return of symptoms. |
| 4.4 | **Return to fight/contest** | |

Adapted from Nalepa B, Alexander A, Pardini J, et al. Fighting to keep a sport safe: Toward a structured and sport-specific return to play protocol. *The Physician and Sports Medicine*. February 2017