Concussion Protocol Harmonization Project:

Sport-Specific Return-to-Sport Strategy Adaptation Tool

**Purpose**

This tool will help ensure your Return-to-Sport Strategy is tailored to include sport-specific activities that help athletes return to your sport after a concussion.

**How to use this tool**

The tables that follow indicate the stages of a graduated Return-to-Sport Strategy[[1]](#footnote-1).

To adapt the generic strategy to your sport, the “Activity” column should describe specific activities athletes can progress through to return to your sport after a concussion. Use the questions and comments listed in the “Sport-specific considerations” column to insert tailored activities for your athletes into the “Activity” column.

**Use Table 1** for full contact and collision sports. There are 6 stages in the strategy.

**Use Table 2** for non-contact sports. There are 5 stages in the strategy, since the stage of non-contact drills is not applicable.

Following each of the tables is a blank template you can use or copy.

**Once your sport-specific strategy is complete, insert it in your concussion protocol.**

**Table 1. Return-to-Sport Strategy: Full Contact and Collision Sports**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Stage** | **Aim** | **Activity** | **Goal of each step** | **Sport-specific considerations** |
| **1** | Symptom-limiting activity | Daily activities that do not provoke symptoms. | Gradual reintroduction of work/school activities |  |
| **2** | Light aerobic activity | *Example: Light intensity jogging or stationary cycling for 15-20 minutes at sub-symptom threshold intensity.*  No resistance training*.* | Increase heart rate | What is the type of aerobic exercise most relevant to your sport?   * Stationary bike? * Treadmill walking/ running? |
| **3** | Sport-specific exercise | *Example: Moderate intensity jogging for 30-60 minutes at sub-symptom threshold intensity. Low to moderate impact passing, dribbling, shooting, and agility drills.*  No head impact activities. | Add movement | What types of sport-specific skills are required for your sport?   * Ball skills, stick handling, racquet skills, cutting, pivoting, spinning, twisting, spotting, etc.   Gradually increase speed, complexity and intensity of activities. |
| **4** | Non-contact training drills | *Example: Participation in high intensity running and drills. Non-contact practice without heading. Participation in resistance training workouts.* | Exercise, coordination and increased thinking | Activities should build on step 3 but add in resistance and at a higher level.  Activities should allow practice in competition environments with low risk of concussion.  Are there “battle drills” or other dynamic activities that can be trained for prior to engaging in full practice? |
| **5** | Full contact practice | *Example: Following medical clearance, participation in full practice without activity restriction* | Restore confidence and assess functional skills by coaching staff | Are there ‘battle drills’, other dynamic activities that can be trained prior to engaging in full game play? |
| **6** | Return to sport | Normal game play |  |  |

**[NAME OF SPORT]-Specific Return-to-Sport Strategy**

|  |  |  |  |
| --- | --- | --- | --- |
| **Stage** | **Aim** | **Activity** | **Goal of each step** |
| **1** | Symptom-limiting activity | Daily activities that do not provoke symptoms. | Gradual reintroduction of work/school activities |
| **2** | Light aerobic activity | **[INSERT SPORT-SPECIFIC ACTIVITIES HERE]**  No resistance training. | Increase heart rate |
| **3** | Sport-specific exercise | **[INSERT SPORT-SPECIFIC ACTIVITIES HERE]**  No head impact activities. | Add movement |
| **4** | Non-contact training drills | **[INSERT SPORT-SPECIFIC ACTIVITIES HERE]**  May start progressive resistance training. | Exercise, coordination and increased thinking |
| **5** | Full contact practice | Following medical clearance.  **[INSERT SPORT-SPECIFIC ACTIVITIES HERE]** | Restore confidence and assess functional skills by coaching staff |
| **6** | Return to sport | Normal game play. |  |

**Table 2. Return-to-Sport Strategy: Non-Contact Sports**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Stage** | **Aim** | **Activity** | **Goal of each step** | **Sport-specific considerations** |
| **1** | Symptom-limiting activity | Daily activities that do not provoke symptoms. | Gradual reintroduction of work/school activities |  |
| **2** | Light aerobic activity | *Example: Light intensity jogging or stationary cycling for 15-20 minutes at sub-symptom threshold intensity.*  No resistance training. | Increase heart rate | What is the type of aerobic exercise most relevant to your sport?   * Stationary bike? * Treadmill walking/ running? |
| **3** | Sport-specific exercise | *Example: Moderate intensity jogging/swimming for 30-60 minutes at sub-symptom threshold intensity. Low to moderate impact exercise and activities (i.e. diving at lower heights and level of difficulty)*  No head impact activities. | Add movement | What types of sport-specific skills are required for your sport?   * Spinning, twisting, spotting, etc.   Gradually increase speed, complexity and intensity of activities. |
| **4** | Full intensity practice | *Example: Participation in high intensity running and drills. Participation in resistance training workouts. Full training at competition intensity and duration (e.g. diving from competition heights and level of difficulty)* | Exercise, coordination and increased thinking | Activities should build on step 3 but add in resistance and at a higher level.  Activities should allow training in competition environments.  Activities include performing full competition skills/routines. |
| **5** | Return to sport | Normal game play. |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Stage** | **Aim** | **Activity** | **Goal of each step** |
| **1** | Symptom-limiting activity | Daily activities that do not provoke symptoms. | Gradual reintroduction of work/school activities |
| **2** | Light aerobic activity | **[INSERT SPORT-SPECIFIC ACTIVITIES HERE]**  No resistance training. | Increase heart rate |
| **3** | Sport-specific exercise | **[INSERT SPORT-SPECIFIC ACTIVITIES HERE]**  No head impact activities. | Add movement |
| **4** | Full intensity practice | **[INSERT SPORT-SPECIFIC ACTIVITIES HERE]**  May start progressive resistance training. | Exercise, coordination and increased thinking |
| **5** | Return to sport | Normal game play |  |

**[NAME OF SPORT]-Specific Return-to-Sport Strategy**

1. McCrory et al. (2017). Consensus statement on concussion in sport – the 5th international conference on concussion in sport held in Berlin, October 2016. *British Journal of Sports Medicine, 51*(11), 838-847. [↑](#footnote-ref-1)