



# Return to Play Progression<sup>1,2</sup>



Athlete: \_\_\_\_\_

Start Date: \_\_\_\_\_

Date Completed: \_\_\_\_\_

Objectives: 1. Increase activity and HR to determine if symptoms return 2. Prepare athlete for return to competition  
Program Target Exertion calculated by Karvonen's equation:  $[(\text{Max. H.R.} (220 - \text{Age}) - \text{Resting H.R.}) \times \text{Target \%}] + \text{Resting H.R.}$

## Step 1- Date:

Target HR: 25% Max HR

Recommendations: 10-15 minutes of cardio exercise, low stimulus environment  
no impact/contact activities  
balance and vestibular treatment (pm)  
limit head movement/position change  
limit concentration activities

Activity: very light aerobic conditioning  
sub-max strengthening  
ROM/stretching  
very low-level balance activity

## Step 2- Date:

Target HR: 50% Max HR

Recommendations: 20-30 minutes of cardio exercise  
exercise in gym areas  
use various exercise equipment  
allow some positional changes and head movement  
low level concentration activities

Activity: moderate aerobic conditioning  
light weight strength exercises  
stretching (active stretching initiated)  
low-level balance activity

## Step 3- Date:

Target HR: 75% Max HR

Recommendations: any environment is okay for exercise (indoor/outdoor)  
integrate strength, conditioning, and balance/proprioception exercises  
incorporate concentration challenges

Activity: moderately aggressive aerobic conditioning  
all forms of strength exercise (80% max)  
active stretching exercises  
impact activities, running, plyometrics (no contact)  
challenging proprio-balance activities

## Step 4 Non-Contact Drills- Date:

Recommendations: continue to avoid contact activity  
resume aggressive training in all environments

Activity: non-contact physical training  
aggressive strength exercises  
impact activities/plyometrics  
sport-specific training activities

## Step 5 Return to Full Practice- Date:

Recommendations: Initiate contact activities as appropriate to sport activity  
full exertion for sport

Activity: resume full physical training with contact  
continue aggressive strength/conditioning exercise  
sport-specific activity

<sup>1</sup> ImPACT Applications 1012

<sup>2</sup> Learish, S. (2008). New developments in sports related concussion: Physical therapy and rehabilitation 5 stage exertion protocol. Pittsburgh, PA. University of Pittsburgh Center for Sports Medicine)