RETURN TO SPORT

ATHLETE PREPAREDNESS AND SAFETY

The forced and prolonged closure of gymnastics clubs and facilities across Australia due to the coronavirus pandemic has created a number of unique challenges. In reopening these facilities, it is important that our athletes are returned to training in a graduated manner to ensure they are safe, free from injury and illness and that their performance can be enhanced as quickly as it can safely be achieved.

Created by Gymnastics Australia, the Return to Training Guide forms an important part of the Return to Sport plan.

This guide aims to give coaches and athletes of all levels, across all Gymsports, a framework to ensure that gymnasts return to training and competition safely and productively following the extensive period of lost training time. Clubs and individuals should apply a graded return to mitigate injury risk, understanding that sudden increase in training load will predispose to injury.

Please note that this guide should not replace the specific advice of health professionals working with athletes, coaches and clubs. In implementing a return to training plan, all athletes, coaches and clubs must abide by the requirements of the relevant federal and state government policies on participating in sport during the coronavirus pandemic.

The timeframes stipulated in this guide are suggested as a maximum increase on a fortnightly basis. Athletes should return to training and competition preparation first for participation, then for their sport, then for performance. Clubs, coaches and athletes are not required to progress at the suggested rate and should consult a medical professional if they show signs of soreness due to this increase in activity.

Evidence for Framework

In putting this framework together, GA assembled a working group, including the Chief Medical Officer, national team physiotherapists and strength and conditioning coaches, in order to make the best evidence-based decisions on returning to gymnastics. This return to sport guide is largely based on the work of the AIS and the AIS White Paper which was released originally in 2015. This paper encompasses research across multiple sports and age groups in regard to optimising performance after time away from sport.

The Gymnastics Australia Return to Training Working Group was comprised of:

- Dr Kathy Yu Chief Medical Officer Gymnastics Australia
- Josh Rigg AIS Senior Sport and Exercise Physiotherapist
- Kate McGillivray APA Sport and Exercise Physiotherapist | National Team Physiotherapist
- Sam Offord APA Sport and Exercise Physiotherapist | National Team Physiotherapist
- Phil Cossens APS Sport and Exercise Physiotherapist
- Ross Smith AIS Strength and Conditioning Lead | National Team Physiotherapist
- Mark Calton
- Michelle De Highden National Elite Coach Manager
- Andrew Logan National Performance Director

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Return to Sport Timelines

In compiling these guidelines, it has been taken into account the amount of time that clubs and facilities have closed to date and made some prospective calculations in basing this graduated return to full training recommendation for members. A number of factors will have determined how much activity individual athletes have been able to maintain whilst these facilities have been closed. For the purposes of these guidelines, it is assumed that athletes are returning to gymnastics from a period of complete rest.

Using the AIS White Paper as a guide, athletes and coaches can adjust the return to training timeframes depending on the amount of training and fitness they have been able to maintain whilst away from their regular training facilities.

Gymnastics NSW Return to Training and Performance Principles

CURRENT STATUS

Individual assessment and pre-return monitoring essential

PARTICIPATION

Graduated return to partial training with fitness, strength & prehab focus.

Some 'gymnastic' training and some@ home.

TRAINING

Progressive return to full training hours and load maintain strength and fitness focus.

Careful monitoring required *for* repetitive impact loading.

PERFORMANCE

Full training hours and load with gradual increase in skill combinations and part routines.

Monitoring essential with repetitions of impact loads.

COMPETITION

Preparation phase for competition performance.
Internal preparation camps and programs will enhance readiness.

Figure 1 Based on the Gymnastics Australia Return to Training and Performance Principles for High Performance

Athlete Assessment

Before utilising the framework and guidelines attached it is imperative some initial assessment is conducted with the athletes to gain a clear indication of the current status of your athletes. The initial fitness and strength testing will provide coaches will serve as a base for the programs you design and should be high on the priority list.

Some recommended forms of assessment are:

Assessment	Purpose	
Questionnaire/similar	To gain an understanding of the most recent loading and intensity. A sample	
	questionnaire has been put together as a guide for coaches	
Fitness Assessment	To gain an understanding of baseline fitness in regard to aerobic capacity and general	
	fitness. An example could be the Yo-Yo test, Counter Movement Jump and sprint test	
Gymsport Specific Testing	To gain an indication of specific gymnastics related strength activities. An example	
	could be rope climb, chin ups, or leg lifts etc.	
Discussion	To gain an indication of how your athlete's welfare, current feelings around returning to training, concerns or questions they may have. Consideration should also be given to social and family circumstances but during isolation and during the transition phase to 'regular' training. Use questioning techniques and build athlete engagement.	



Figure 2: Gymnastics Australia Preparing to Return to Training



Principles of Increasing Load

Increasing the load and demands on our bodies through training is necessary to progress physical and skill-based capabilities. In order to maximise performance and decrease the chance of injury or illness this has to be done in a progressive way. Load can be increased in a number of ways. Commonly these include;

- Volume increasing numbers of any particular activity or skill
- Duration increasing the time that an activity or skill is performed for
- Intensity increasing the rate of work for an activity or skill
- Intervals decreasing the rest time between repeated bouts of an activity, skill or training session

Increasing load too quickly does not allow the body to cope with the demands put on it. If load increases too slowly, by one or more parameters, time can be wasted.

Research from multiple sports suggests that a 20%-30% increase in load is an efficient and safe increment by which to adapt positively to load and enhance performance. This guide has used this, as well as the literature on building chronic workloads in athletes, for the chronic workloads in athletes, for the basis of this guide.



Using this guide

The guide has been split into five groups to cater for high performance, competitive and recreational athletes. The principles that underpin each group are the same. The timeframe to return to full training differs depending on the amount of training an individual athlete will need to build back up to.

Please use the appropriate table for each individual athlete and utilise it as the basis to structure a return to training that follows the requirements of both the NSW and Federal governments.

Return to Training processes are not a blanket approach and it is important that the individual needs, preparation and recovery of each athlete are taken into consideration and carefully evaluated within the context of the athletes gymsport and level. Monitoring athlete progress and psychological readiness are critical to successful return to safe training and competition.

Return to Training Framework for RECREATIONAL, LOWER LEVEL COMPETITIVE AND COMMUNITY GYMNASTICS

Training: Less than 12 HOURS

Coaches and clubs should follow the same gradual and incremental return to training and performance load process as for athletes training more hours. Athletes may return to previous full training load over a shorter time-frame.

The return to full training load should carefully consider the staged re-introduction and increase to firstly re-establish conditioning and fitness. This should then be followed by a gradual re-introduction of gymnastic skills, before progression to sport training, and increasing to partial routine, then competition routine training, preparation and loading. Coaches should also ensure the psychological preparation of athletes is closely monitored across their return to training, sport and performance. Individual athletes must also be mentally prepared to begin performing skills, even if they are reacquiring skills they have previously developed.

Monitoring of confidence and preparedness should continue through their progression and return to competition.



Return to Training Framework for RECREATIONAL, LOWER LEVEL COMPETITIVE AND COMMUNITY GYMNASTICS

Training: UP TO 12 HOURS (approx. 4 sessions per week)

Determined by

- (1) Athlete Questionnaire
- (2) Individual baseline assessment General Fitness
- (3) Individual baseline Gymnastics Specific Fitness
- (4) Discussion with athlete & / parent

Week	Number of Hours Per Week	Evidence Based Recommendations
Week 1	9	Aim to build a rest day between sessions to allow for tissues to adapt
		and respond to loading
Week 2	9	Aim to build a rest day between sessions to allow for tissues to adapt and respond to loading
)	12	
Week 3	12	Return to normal training schedule
		Aim to build training with two days in a row to adapt to multiple
		loading sessions with less rest

Return to Training Framework for COMPETITIVE GYMNASTICS

Training: UP TO 18 HOURS (approx. 6 sessions per week)

Determined by

- (1) Athlete Questionnaire
- (2) Individual baseline assessment General Fitness
- (3) Individual baseline Gymnastics Specific Fitness
- (4) Discussion with athlete & / parent

Week	Number of Hours Per Week	Evidence Based Recommendations
Week 1	9	Aim to build a rest day between sessions to allow for tissues to adapt and respond to loading
Week 2	9	Aim to build a rest day between sessions to allow for tissues to adapt and respond to loading
Week 3	12	Aim to build training with two days in a row to adapt to multiple loading sessions with less rest
Week 4	12	Aim to build training with two days in a row to adapt to multiple loading sessions with less rest
Week 5	18	Return to normal training schedule

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Return to Training Framework for COMPETITIVE AND HIGH PERFORMACE GYMNASTICS

Training: UP TO 20 +HOURS (approx. 7 sessions per week)

Determined by

- (1) Athlete Questionnaire
- (2) Individual baseline assessment General Fitness
- (3) Individual baseline Gymnastics Specific Fitness
- (4) Discussion with athlete & / parent

Week	Number of Hours Per Week	Evidence Based Recommendations
Week 1	9	Aim to build a rest day between sessions to allow for tissues to adapt
		and respond to loading
Week 2	9	Aim to build a rest day between sessions to allow for tissues to adapt
		and respond to loading
Week 3	12	Aim to build training with two days in a row to adapt to multiple
		loading sessions with less rest
Week 4	12	Aim to build training with two days in a row to adapt to multiple
		loading sessions with less rest
Week 5	18	Aim for multiple days of training in a row to rebuild
		load tolerance
Week 6	15	Aim for multiple days of training in a row to rebuild
		load tolerance
Week 7	21	Return to normal training schedule

This Framework was based from the **Gymnastics Australia** Return to Training Framework.

