

SPORTS CONCUSSION: GYMNASTICS-SPECIFIC RETURN-TO-SPORT STRATEGY



Return-to-Sport strategy starts after symptom free for 24-48 hours and evaluation from a physician. Athlete should be performing mental activities symptom-free, prior to starting the RTS. A minimum, 24 hours should separate each step within this Return-to-Sport strategy

STAGE	AIM	ACTIVITY	GOAL OF EACH STEP
1	Rest followed by light aerobic activity	Daily activities that do not provoke symptoms for 24- 48 hours, then light aerobic activity (~20-30 minutes) without symptoms <ul style="list-style-type: none"> • Stationary bike • Walking or light jogging • Stretching (no inverted positions) 	<ul style="list-style-type: none"> • Gradual reintroduction of work/school activities • Need to be back to full school prior to moving to step 2
2	Return to early sport specific training: Inversion	<ul style="list-style-type: none"> • Moderate intensity aerobics & sprinting • Landing drills – floor based, low impact • Gymnastics specific strengthening – start slow and then progress • Start basic, non-dynamic inversion (ie. Handstands) • Discipline-specific progression: <ul style="list-style-type: none"> - Ar – all events – basic swings/tap swings/cast handstands, leaps, jumps & dance on ground/ low heights, sprints - R – basic dance, no rotation - TT – non-impact, land-based drills, straight bounces - Ac/G – dance choreography only - P – running, jump drills without obstacles 	<ul style="list-style-type: none"> • Increase heart rate • Start non-dynamic basic skills • Limited inversion • No twisting or flipping
3	Progress sport specific training: Flipping	<ul style="list-style-type: none"> • As above with increased intensity • Discipline-specific progression: <ul style="list-style-type: none"> - Ar – FX-basic tumbling/B-series on floor/UB&HB-giants/R-static strength holds (ie. L sit, planche), inlocates, dislocates/V - timers - R – advance dance, rotation, basic throws (Indiv./No Group) - Tr – straight bounces, level 10 single flipping skills - DM – soft landing, straight bounces, single rotation on & off - Tu – soft landing, basic HS, RH, RH, BHS, combining two skills - Ac/G – basic balance/lift drills/limit # of lifts, basic tumbling - P – low height hurdles, climbs, flipping drills 	<ul style="list-style-type: none"> • Add full inversion • Advance basic skills • Limited flipping • No twisting
4	Progress sport specific training: Twisting	<ul style="list-style-type: none"> • As above with increased complexity • Discipline-specific progression: <ul style="list-style-type: none"> - Ar – add twisting, complex flipping, release timers, high beam - R – add full throws, rotation, sequences (Indiv./No Group) - Tr – add double salto skills and single twisting skills - DM – soft landings, single mount flipping skills, double landing skills, single twist on or off - Tu – soft landing, combining skills down the floor, double salto, complex flipping, single twist - Ac/G – progress from basic to advance balance, lift skills, twisting - P – high height hurdles, climbs, flip & twist without obstacles 	<ul style="list-style-type: none"> • Add complex flipping • Start basic twisting
5	Progress sport specific training: Advanced Skills <i>* Physician clearance required to move to step 6</i>	<ul style="list-style-type: none"> • As above with increased complexity • Discipline-specific progression: <ul style="list-style-type: none"> - Ar – complex skills, higher risk skills (i.e. release skills) - R – continue full skills/sequences, integrate with Group - Tr – working rotation and twisting, progress to loop skills 1-5/5-10 together with limited turns - DM – hard landings, progress to mounts and dismounts in limited # - Tu – combo of inverted skills and one twisting skill in combination, complex flip/twist skills, basic sequences - Ac/G – add full tumbling, lift, balance skills, progress to full routines with choreography - P – add flip/twist with obstacles 	<ul style="list-style-type: none"> • Combine complex inversion and rotation • Improve endurance & strength
6	Return to full training	<ul style="list-style-type: none"> • All disciplines – full clearance • Focus on slow increase in volume, to build stamina & strength • Progress through the following steps: <ol style="list-style-type: none"> 1. Single skill elements 2. Combined elements/Sequences 3. Routine parts 4. Full routines 	<ul style="list-style-type: none"> • Final full reintegration • TT if symptoms reoccur go back to step 3

Ar = Artistic; R = Rhythmic; TT = Tumbling & Trampoline; Ac/G = Acro/Group; P = Parkour; FX = Floor Exercise; B = Beam; PH = Pommel Horse; PB = Parallel Bars; UB = Uneven Bars; R = Rings; HB = High Bar; Indv = Individual; Tr = Trampoline; DM = Double Mini; Tu = Tumbling

Special thanks to the following who contributed to this document:

1. USA Gymnastics Medical Staff
2. [FIG Concussion Policy](#)
3. Parachute Canada. Parachute (2017). [Canadian Guideline on Concussion in Sport.](#)



Note: If the athlete experiences worsening or new symptoms at any stage, they should go back to the previous stage that they completed symptom-free, wait for symptoms to resolve (minimum 24 hours), and then begin the progression again.