

## RETURN TO SPORT PROGRESSION: Gymnastics

The athlete must be cleared by medical provider before beginning to return to Gymnastics Protocol. During this phase, Transitional Therapy is strongly recommended, a therapy focused on strength and conditioning. The goal of Transitional Therapy is to transition from therapy back to sport. The athlete may progress through each phase as tolerated. Cross-training can be performed on off days, such as performing non-specific sport specific activities. Each phase should be performed 2-3 times with one day of rest between each session. The athlete should progress to the next phase once he/she is able to complete the current phase without pain, swelling, decreased range of motion or difficulty. If the athlete experienced pain, swelling, decreased range of motion or difficulty during a phase, he/she should take a day off and go back to the prior phase where they were not experiencing pain or difficulty completing activities. Do not keep on moving through phases if you are having pain or difficulty. Seek medical attention if necessary! Emphasis should be placed on developing and maintaining proper mechanics without developing symptoms or excessive fatigue. The athlete should ice the affected area for 15-20 minutes following the activity.

| <u>Womens</u> | Phase 1  | Phase 2 | Phase 3 | Phase 4 | Phase 5 |
|---------------|--|---------|---------|---------|---------|
| Conditioning  | •  | •       | •       | •       | •       |
| Bars          |  | •       | •       | •       | •       |
| Floor         |  |         | •       | •       | •       |
| Beam          |  |         |         | •       | •       |
| Vault         |  |         |         |         | •       |
| Competition   | Progressively increase your exposure time as you tolerate. Must be cleared by provider to return to competition. |         |         |         |         |

| <u>Mens</u>             | Phase 1  | Phase 2 | Phase 3 | Phase 4 | Phase 5 |
|-------------------------|--|---------|---------|---------|---------|
| Conditioning            | •  | •       | •       | •       | •       |
| Pommel Horse            |  | •       | •       | •       | •       |
| Parallel Bars/ High Bar |  |         | •       | •       | •       |
| Rings                   |  |         |         | •       | •       |
| Floor                   |  |         |         | •       | •       |
| Vault                   |  |         |         |         | •       |
| Competition             | Progressively increase your exposure time as you tolerate. Must be cleared by provider to return to competition. |         |         |         |         |

For each gymnastics event dismounting and tumbling should be progressively increased per below:

- Dismount progression = foam pit → to pads → to floor
- Tumbling progression = front tumble pain free → back tumble pain free

### Phase 1 Exercises for Back Pain: Trunk Mobility and Stability:

- **Childs Pose:** Assume hands and knees position on the floor. Keeping arms straight round your back and rock back onto your heels. Take 5 deep breaths into your back in this position.
- **Quadruped Hover:** Assume hands and knees quadruped position, push into the ground and round your back. Keeping core tight, take a deep breath in and maintain spine rounded, lift knees 1-2 in off floor. The normal response is the feeling of core muscles engaged while maintaining breathing rhythm.
- **Dead Bug (alternating arm and leg):** Lay flat on the ground with spine flat, legs in 90/90 position, arms reaching up toward ceiling. Breathe in while keeping core tight and spine neutral, then lower right leg and left arm as you exhale and keep spine flat without extending your back. Return back to start position and repeat with other leg/arm. The normal response is the feeling of core abdominals engaged as you lower leg/arm.
- **½ Kneel Palloff Press:** Assume the half kneel position with one foot forward and one knee down, keeping belly button pulled toward your spine and abdominal brace hold this position. Using a Thera Band that is tied at waist level to secure area, press forward while breathing out and maintaining braced abdominal position. The normal response is core activation felt throughout.

### Exercises Incorporating Rotation (Do not perform if you experience pain):

- **Open Books:** Assume the side lying position on the floor with knees bent and hands between knees. Bring arm up in a diagonal pattern while twisting trunk. The normal response is feeling a stretch through anterior chest and mid back.
- **Reach Blocks:** Assume the quadruped position with elbow on ground and knees shoulder width apart. Place on hand behind your head while other elbow stays in contact with the ground. Rotate elbow and head towards ceiling. The Normal response is rotation in upper spine.
- **Helicopters:** Assume the half kneel position with arms abducted (outstretched by your side). Rotate your trunk to one side and breathe in/ out, then rotate trunk to opposite side breathe in/out. The Normal response is feeling a stretch along your back and hips.
- **World's Greatest Stretch:** Lunge forward with trunk erect, then rotate trunk to one side reaching arm up toward ceiling, alternate sides and repeat. The normal response is feeling a stretch throughout entire spine.

### Phase 1 Exercises: Foot/Ankle Mobility and Stability Exercises:

- **Half Kneel Dorsiflexion:** Assume the half kneel position (down on one knee) Rock forward without lifting your heel off of the ground. The Normal response is feeling a stretch in heel/posterior calf
- **Single Leg Balance (eyes open and eyes closed):** Assume the single leg balance position on a stable surface, engage foot muscles and create small arch in the middle of your foot. Once you have your balance, close your eyes try to maintain that position. Begin with 10 seconds and progress for longer as you tolerate. The normal response is feeling muscles of lower leg (calf).
- **Standing Heel Raises:** Standing on one leg raise up onto your toes without losing balance and lower down slowly. Complete 3 sets of 10 on each leg. The Normal response is the feeling of lower leg muscles including the calf.
- **Inchworms:** Assume the tall plank position (top of push up position).Walk feet up towards hands until stretch is felt in calf and hamstrings, hold for 2-3 seconds. Walk hands out to tall planks position again and then repeat. The normal response is feeling a stretch in calf and hamstring, feeling core muscles engage.

- **Glute Bridge:** Lying face up on the ground with your knees bent to 90 degrees and arms by your side, squeeze glutes and lift hips off the floor. The normal response is to feel glute/ hamstring muscles engage while maintaining back flat, do not arch low back. Progress to single leg Glute Bridge if double leg bridge feels easy after first set.
- **Squat Holds:** Begin with feet just outside of shoulder width and create small arch in the middle of your foot, bend knees and sit back as if you are sitting in a chair. Hold squat while maintaining weight on their heels, maintain neutral spine and hold for 30 sec. The normal response is feeling quads, glutes, and core muscles engage without low back pain, do not arch low back to attain deeper squat position. Progress to SL balance in squat as you tolerate.
- **Single Leg RDL to Target (cone):** Begin by balancing on one leg with other knee bent to 90 degrees with a cone out in front of you. Keeping knee unlocked, bend only from your hips and reach with one arm toward cone. Stretch should be felt in hamstring/ lower leg, engage hamstring and glute muscles to return to start position. The normal response is feeling muscles in the posterior leg (calf, hamstring, glute).
- **Kneeling Side Plank:** Lie on your side with your forearm on the ground, knees bent to 90 degrees, and hips and spine neutral. Raise hips off of floor and stabilize through your shoulder, keep hips from dropping and breathe. The normal response is feeling muscles of lateral core, hip, and stabilizing shoulder.

Phase 1 Exercises Shoulder/Upper Extremity Stability: Exercise Progressions:

1. Incline planks → Tall planks → elevated pushups
2. Floor push-ups → Decline push up
3. Inverted hold → inverted pushups
4. Wall walk handstand
5. Wall handstand (maintain proper body alignment)
6. Handstand holds
7. Handstand wall shrugs
8. Handstand hops
9. Cartwheel → round off → front handspring → back handspring