



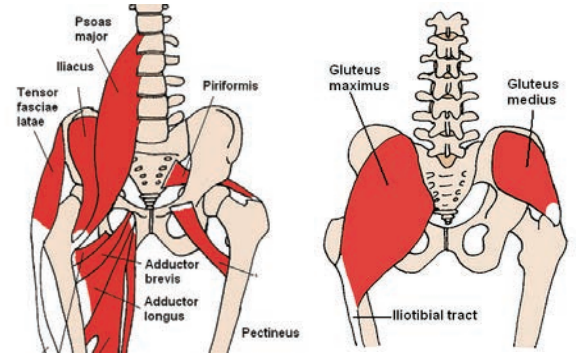
Pelvic Stabilization, Lateral Hip and Gluteal Strengthening Program

Introduction

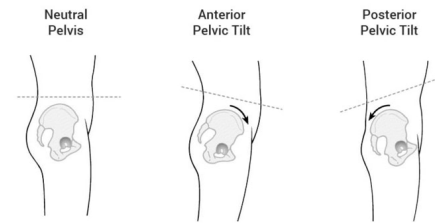
Numerous lower body problems can be caused by inefficient pelvic and/or hip stabilization. Our body works as whole and when certain regions are not performing optimally, the body will find a way to move using another muscle or joint in a less efficient manner. This program is aimed at addressing the most common weaknesses seen in the lumbo-pelvic-hip complex.

*Flexibility may also greatly contribute to these issues, and while stretching is not addressed in this program, it can be found in other programs on the UHS website. Please refer to **cord flexibility, dynamic flexibility, Pilates flex and stretch and static flexibility programs.***

Pilate's principles focusing on centering or maintaining the body in a neutral position are foundational concepts in this program. Maintaining "neutral" pelvis versus being tilted forward or backwards allows for proper muscle function.



The muscles that are primarily responsible for pelvic stabilization include: gluteus medius, gluteus maximus, piriformis and deep core muscles.



While performing this program, please be aware of good body position, number of repetitions and resistance. Maintaining a controlled, neutral pelvis throughout each exercise is required. Start with small ranges and lower repetitions until you feel comfortable. Slowly increase range or repetitions when you feel you can maintain and control pelvic neutral with ease. When you feel you are ready to progress you can add resistance starting with 1 lb and increase by 1 lb with maximum of 3-5 lbs.

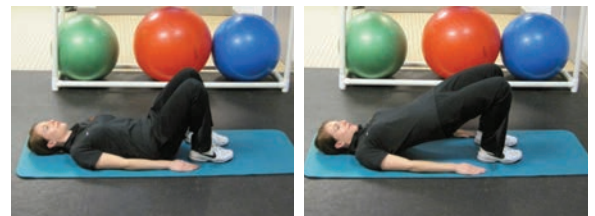
These exercises are not intended to replace working with an allied health care professional. If you experience pain or discomfort lasting longer than 1 day, please seek assistance from a medical professional. When in doubt see a medical professional.

Dynamic Stability Bridge Series

Double Leg Bridge Level 1

Position and Movement: Supine, keep heels close to the glutes. Keep hips level. Abdominals engaged with a neutral pelvis. Focus on stabilizing legs through the glutes instead of the hamstrings. Raise and lower hips slowly and with control.

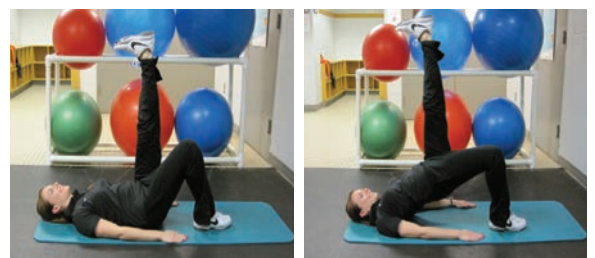
Reps: 8-10 times



Single Leg Bridge Level 2

Position and Movement: Same as double leg bridge, but only one leg is fixed on the ground. Other leg remains lifted off the floor ideally 90 degrees. The lifted leg should be straight with a flexed foot.

Reps: 8-10 times each side



Rotary Stability

Clam Level 1

Position and Movement: Sidelying, heels are in line with the gluteals.

Make sure hip flexion is only 45 degrees. Knees flexed to 90 degrees. Abdominals engaged with a neutral pelvis. Keep hips stacked, don't allow them to rock open. Lift the top knee. At peak height, your positioning resembles an open clamshell. Feet remain in contact throughout arc.

Reps: 8-10 times each side



Clam Level 2

Position and Movement: Advance to level 2 by lifting lower leg up to a 45 degree angle.

From this lifted position, lift the top knee. Pause at the top and slowly and with control lower top leg. Feet remain in contact the entire time.

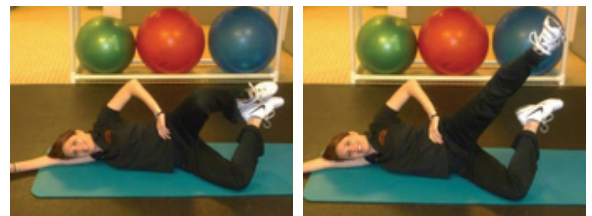
Reps: 8-10 times each side



Clam Level 2 with Knee Extension

Position and Movement: Align the body as for Clam Level 2. Lift top knee. Hold this open clam shell position and add knee extensions. The bottom leg remains lifted the entire time.

Reps: 8-10 times each side



Clam Level 2 with Small Ball at Feet

Position and Movement: Align the body as for Clam Level 2, add small weighted ball between feet. Lift top knee while ball and feet remain in contact.

Reps: 8-10 times each side



Clam Level 3

Position and Movement: Align the body as for Clam Level 2, then extend the lower leg, keeping the top hip and knee flexed with the foot hooked behind the lower leg. Lift knee. Pause at the top and slowly and with control, lower to start position.

Reps: 8-10 times each side



Mobility

Sidebend

Position and Movement: Lie on your side with body propped up on elbow and forearm. Top arm resting on top leg. Lift pelvis off the floor. Simultaneously, reach top arm upwards toward ear and stretch the uppermost side of trunk.

Reps: 6-8 times on each side



Plank Series

Sideplank Static Holds

Position and Movement: Sidelying with upper body propped on elbow and forearm. Top arm is resting on top leg. Lift pelvis. Maintain straight alignment of body while holding sideplank position.

Reps: 4: hold 15-30 seconds, alternating sides to avoid overload to upper extremity

Sets: 2-4 each side



Sideplank with Abduction Static Leg Holds

Position and Movement: Sidelying with upper body propped on elbow and forearm. Top arm is resting on top leg. Lift pelvis while simultaneously lifting top leg to abducted position. Keep body in straight alignment while maintaining sideplank with leg lift position.

Reps: 4: hold 15-30 seconds, alternate sides to avoid overload to upper extremity

Sets: 2-4 each side



Sideplank with Abduction Leg Raises and Lowers

Position and Movement: Sidelying with upper body propped on elbow and forearm. Top arm is resting on top leg. Lift pelvis while simultaneously lifting top leg to abducted position. Maintain sideplank while raising and lowering top leg to an inch above bottom leg. Feet do not come into contact.

Reps: 6-8 raises and lowers, alternate sides to avoid overload to upper extremity

Sets: 2-4 each side



Raised Sideplank Static Holds

Position and Movement: Sidelying with arm extended under shoulder. Top leg is crossed over bottom leg so that feet are in a straight line. Top hand rests on hip. Lift pelvis.

Reps: 4: hold for 10-15 seconds, alternate sides to avoid overload to upper extremity

Sets: 2-4 each side



Raised Sideplank with Static Abduction Leg Lift Holds

Position and Movement: Sidelying with arm extended under shoulder. Top leg is crossed over bottom leg so that feet are in a straight line. Top hand rests on hip. Lift pelvis while simultaneously lifting top leg. Maintain lifted pelvis and leg in abducted position.

Reps: 2: hold 10-15 seconds, alternate sides to avoid overload to upper extremity

Sets: 2-4 each side



Raised Sideplank with Abduction Leg Raises and Lowers

Position and Movement: Sidelying with arm extended under shoulder. Top leg is crossed over bottom leg so that feet are in a straight line. Top hand rests on hip. Lift pelvis while simultaneously lifting top leg. Maintain lifted pelvis while raising and lowering top leg. Feet do not come into contact.

Reps: 4-6 raises and lowers, alternate sides to avoid overload to upper extremity

Sets: 2-4 on each side



Lateral Hip Circuits

Circuit A:

Equipment: Yoga mat, cuff weights (optional)

Start Position: Place both feet in the top left corner of mat, sidelying at a 45 degree angle. Bottom hand supports head and is in line with torso. Place top hand down on mat, in front of torso to aid in keeping hips stable and balanced. Keep hips stacked one on top of the other. Engage abdominals the entire time. Lift the top leg first for all of these exercises. After completing entire series, switch corners, to lie on opposite side.

Reps: Start with 5 reps for each exercise. Do each rep slowly and controlled. Continuously flow from one exercise to the next without resting. Progress up to a maximum of 12 reps, then add small (1.5-2.5 lb) cuff weight.



Exercises:

1) Abduction Lifts

Lift top leg 12 inches from bottom leg, lower top leg down. Don't let legs touch. Top foot is flexed the entire time.



2) Abduction Lifts with Internal Rotation

Repeat exercise #2, except top knee and foot are turned in. Top foot is flexed the entire time.



3) Bent Knee Abduction Lifts aka: Fire Hydrants

90 degrees of hip flexion and knee flexion. Foot is flexed. Lift leg up and out without losing 90/90 position or rolling torso/hips back. Start and end with top leg parallel to floor.



4) Large Clockwise Circles

Looking down at feet, make a large clockwise circle with top leg. Leg reaches long with pointed toe. Don't let top leg touch down. Keep it lifted at least an inch from the bottom leg.



5) Large Counter-clockwise Circles

Repeat exercise #4, except with counter-clockwise circles with top leg.



6) Small Clockwise Circles

Repeat exercise #4, except place L Leg in slight hip extension and foot is flexed. While keeping leg at hip height, make small clockwise circles the size of a dinner plate with L leg.



7) Small Counter-clockwise Circles

Repeat exercise #6, except make counterclockwise circles.



8) Toe Taps

Top foot is pointed entire time, tap foot in front of bottom leg and then behind bottom leg.

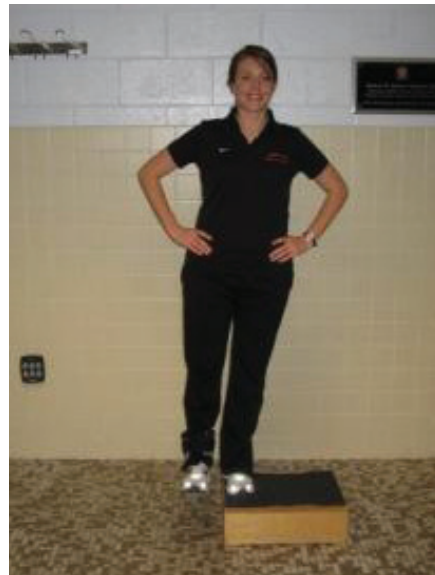


Circuit B:

Equipment: Box (At least 6 inches in height) and Small Cuff Weight (2.5 lb)

Start Position: Place cuff weight on R ankle. Step onto the edge of the box and balance on L leg. It is important to stand up straight, keep the torso still and engage abdominals throughout all exercises. L shoulder must be kept stacked directly over L hip. The R leg does not rest in between movements nor does it touch the box. After completing entire series, switch, and place cuff weight on L ankle and reference starting position of stance leg. You will perform a prep exercise for circuit B called a pelvic drop to ensure proper form during circuit B.

Reps: Start with 5 reps for each exercise. Do each rep slowly and controlled. Continuously flow from one exercise to the next without resting. Progress up to a maximum of 12 reps.



Prep Exercise for Circuit B: Pelvic Drop

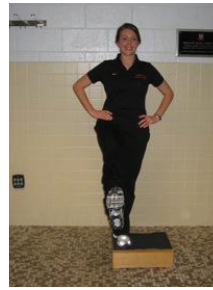
Step onto the edge of the box and balance on L leg. Place hands on hips. Stand tall with abdominals engaged. The R hip should be lower than L hip at start position. Then lift R hip on stance leg up to level of L hip. Be sure not to hip hike L hip, as the focus is on the R hip. Fatigue should be felt in the R hip and gluteal.



Exercises:

1) Hip Flexion:

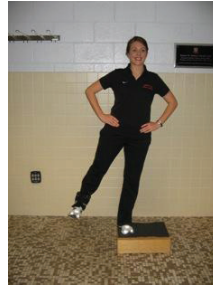
Lift leg in front of you. Foot is flexed the entire time. Return to start position.



2) Abduction:

Lift leg out to the side only as far as you can control and maintain your center (small movement). Foot is flexed entire time. Return to start position and repeat.

Keep leg in line with body throughout exercise.



3) Abduction with Internal Rotation:

Repeat exercise #2, except foot is pointed down and in.



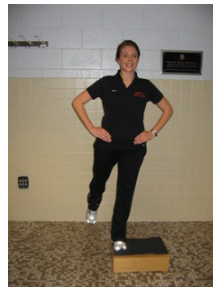
4) Abduction with Hip Extension:

Lift straight leg diagonally, out and behind at a 45 degree angle. Foot is pointed entire time. Minimize lumbar extension.



5) Hip Extension:

Lift straight leg behind you. Foot is pointed entire time. Return to start position and repeat. Minimize/avoid lumbar extension.



6) Large Clockwise Circles:

Move straight leg in large clockwise circles. Foot is pointed entire time.

Circles are as large as you can control while maintaining while centered.



7) *Large Counterclockwise Circles:*

Repeat exercise #6, except make counterclockwise circles.



8) *Single Leg Box Squat:*

Bend knee of stance leg until opposite heel touches floor lightly. Straighten stance leg back to start position. Keep pelvis level throughout exercise. As you squat, avoid bending knee over toe. Foot with cuff weight is flexed the entire time. Sit back, engage gluts.



Advanced Lateral Hip and Gluteal Strengthening Exercises

Fire Hydrants

Position and Movement: On all fours, hands directly under shoulders and knees over hips. Abdominals are engaged. Lift leg up and out maintaining 90 degrees of hip flexion and knee flexion. Avoid rotating hips or arching back as you lift the leg. Goal is to lift thigh to level of torso. Foot is flexed the entire time.

Reps: 8-10 lifts

Sets: 2-3 on each side



Physioball Sidelying Pelvis Static Holds:

Position and Movement: Physioball placed between legs at the ankle. Begin with smaller physioball. Elbow under shoulder. Body in neutral alignment. Top hand on hip, do not use it to lift the body off the floor. Squeeze Physioball between legs while lifting pelvis off the floor. Lift until only foot is touching the floor.

Reps: 4: hold for 10-15 seconds, alternate sides to avoid overload to upper extremity

Sets: 2-4 on each side.



Physioball Sidelying Pelvis Raises and Lowers:

Position and Movement: Physioball placed between legs at the ankle. Begin with smaller physioball. Elbow under shoulder. Body in neutral alignment. Top hand on hip, do not use it to lift the body off the floor. Squeeze Physioball between legs while lifting pelvis off the floor. Lift until only foot is touching the floor. Lower pelvis back towards the mat until it is 1 inch above the mat.

Reps: 4 to 6 raises and lowers. Alternate sides to avoid overload to upper extremity.

Sets: 2-4 on each side.



Frankenstein Slides

Position and Movement: Set the core. Hands on hips. Legs straight. Take small lateral steps. Can add resistance band at ankles or knees or (both for advanced challenge).

Reps: 15-20 steps

Sets: 2-4



On all 4's Clockwise and Counterclockwise Circles with Hip in Extension

Position and Movement: On all fours, hands directly under shoulders and knees over hips. Both hands and one knee are placed on an unstable surface such as a dynadisk. To increase instability, don't allow foot of bent knee to touch the mat. Lift opposite leg into hip extension. While hip is lifted in extension, make small clockwise and counterclockwise circles with the leg. This is an advanced core and balance challenge while working the gluteals. Avoid rotating hips or arching back as you lift the leg.

Reps: 5 clockwise and 5 counterclockwise circles on each leg

Sets: 2-4 each leg



Modified Raised Sideplank Abduction Leg Raises and Lowers

Position and Movement: Sidelying with arm extended under shoulder. Bend knee of bottom leg. Top leg is straight and toe is pointed. Body is aligned in a straight line. Top hand rests on hip. Lift top leg to abducted position. The goal is to lift it to parallel. Raise and lower top leg without coming into contact with the mat.

Reps: 4-6 raises and lowers, alternate sides to avoid overload to upper extremity

Sets: 2-4 on each leg

