



MOBILITY GUIDE FOR INJURY PREVENTION

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LOWER BACK MOBILITY



PRONE PRESS UP

Benefits:

- Relieves lower back pain, improves lumbar mobility, and the negative effects of prolonged sitting

How to do it:

- Lie on your stomach
- Place your forehead on the floor
- Inhale
- Press up: Keeping back, neck, and head in alignment, exhale and press forearms or palms into the floor to push trunk up
- Perform stretch in pain-free range of motion
- Hold the position for 3 seconds and return to starting position
- Repeat 10 – 15 times

Note: The prone position increases the arch in the lower back. If this is uncomfortable, place a pillow under the abdominal area. Only perform stretch in a pain-free range of motion.

LOWER BACK AND HIP MOBILITY



SINGLE LEG OVER STRETCH

Benefits:

- Improves hip and lower back mobility; reduces lower back pain, and could be used in warm-up and cool-down phases of workouts

How to do it:

- Supine position with arms out to sides, palms down, feet together, and head on the ground
- Keep shoulders flat on the floor
- Bend the right hip and knee to 90-degrees over the left leg
- Grasp the outside of the right knee with the left hand and pull toward the left
- Hold this position for 20 – 30 seconds for 2 – 3 repetitions, and repeat on the opposite side

LOWER BACK AND HIP MOBILITY



SINGLE KNEE TO CHEST STRETCH

Benefits:

- Develops flexibility in the lower back and glutes; relieves lower back pain

How to do it:

- Lie on your back with knees straight
- Bring one knee to the chest
- Keep the other foot flat on the floor (or the other leg straight, whichever feels better on your lower back)
- Keep lower back pressed to the floor and hold for at least 20 – 30 seconds
- Relax and lower the knee to the starting position
- Repeat for 2 – 3 sets with each leg

Note: To get a deeper stretch, put the other leg flat on the floor while pulling the knee to the chest.

LOW BACK AND HIP MOBILITY



PRONE HIP FLEXOR/QUAD STRETCH

Benefits:

- Improves hip and lower back mobility; relieves lower back pain, and could be used in the warm-up and cool-down phases of workouts

How to do it:

- Lie prone with involved side on a table or bed
- Place a strap around the middle of the involved foot
- The opposite foot is placed on the floor with the hip flexed to attain a neutral spine position
- Pull on the strap to bend the effected knee until a stretch is felt on the front of the effected thigh
- Hold for 30 - 60 seconds and relax
- Perform 3 repetitions on each leg
- With each attempt a gentle stretch should be felt; do not go to the point of pain

ANKLE MOBILITY AND CALF STRETCH



SOLEUS STRETCH



GASTROC STRETCH

CALF STRETCH

Benefits:

- Improves ankle mobility, relieves calf tightness, achilles tendon, and plantar fasciitis pain

How to do it:

- Stand staggered-stance with the front leg bent at the knee, and the back leg either bent or straight, depending on the stretch
- SOLEUS STRETCH – Bend rear knee while keeping the heel on the ground; while leaning forward toward a solid structure, you should feel the stretch in the lower part of the calf and/or achilles tendon
- Hold the stretch for 20 – 30 seconds
- GASTROC STRETCH – Keep rear knee locked straight with the heel on the ground
- Lean forward and feel the stretch in the upper portion of the calf
- Hold the stretch for 20 – 30 seconds; perform 2 – 3 sets for each stretch
- Alternate legs as needed

HIP, KNEE, & LOWER BACK MOBILITY



HAMSTRING STRETCH

Benefits:

- Keeps hamstring muscles loose and flexible, improves posture, and relieves lower back pain

How to do it:

- Lie on your back
- Raise left leg and place a strap around the arch of left foot
- Keep left knee locked out, and right leg flat on the floor
- Slowly extend left leg to the point of a gentle stretch
- Gently pull on the strap
- Hold for 20 – 30 seconds
- Perform 2 – 3 sets on each leg

Note: Ensure right leg maintains contact with the ground; do not pull strap so hard that it forces the right leg off the ground.

CERVICAL/NECK MOBILITY



UPPER TRAPEZIUS STRETCH

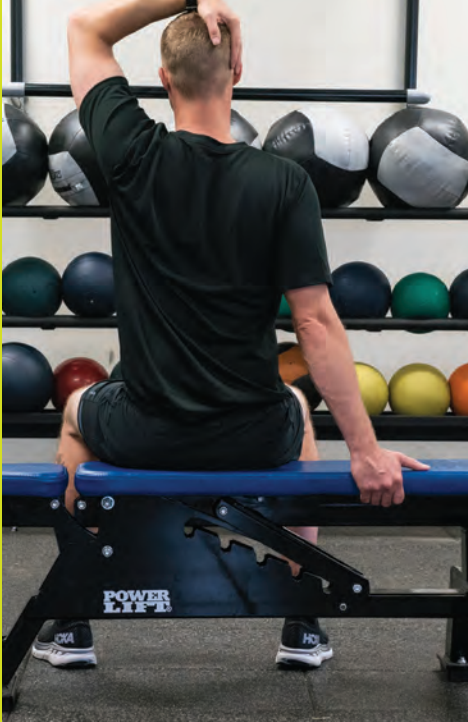
Benefits:

- Relieves neck and shoulder tension; improves neck mobility

How to do it:

- Sit up straight with both hands at the sides
- Reach over the top of head with left arm and grasp right side of head
- Place the right hand behind the lower back or grab hold of bench
- Gently apply pressure with left hand, causing head to bend to the left and stretch right upper trapezius muscle
- Hold gentle stretch through a pain-free range of motion for 30 – 60 seconds
- Repeat on other side

CERVICAL/NECK MOBILITY



LEVATOR SCAPULAE STRETCH

Benefits:

- Improves cervical mobility; alleviates neck pain and stiffness

How to do it:

- Sit up straight with both hands at the sides
- Reach over the back with the left hand grasping the back of the head
- Place the right hand behind the lower back or hold onto the surface you are sitting on
- Gently pull the nose toward the left armpit
- Tilt the chin downward until a good stretch is felt on the back right side of the neck
- Hold gentle stretch through a pain-free range of motion for 20 – 30 seconds
- Repeat on other side

CERVICAL MOBILITY



NECK ROTATION WITH OVERPRESSURE

Benefits:

- Improves cervical mobility and alleviates neck pain

How to do it:

- Sit in an upright position or stand with shoulders against a wall
- Look to the left or right as far as possible
- Use the opposite hand to gently push farther and increase the stretch
- Perform in pain-free range of motion; don't push through pain
- Hold 3 – 5 seconds and perform 10 repetitions
- Perform 2 – 3 sets in each direction

CERVICAL STRENGTH & STABILITY



DEEP NECK FLEXOR STRENGTHENING

Benefits:

- Improves posture and decreases neck pain and/or headaches.

How to do it:

- Lie on your back facing ceiling
- Rest your head and keep shoulders flat
- Gently push base of skull/top of neck into bench
- Target muscles are small stabilizers thus force needed is minimal and you should not be contracting larger muscles at the front of neck
- Hold for 5 – 10 seconds
- Perform 2 – 3 sets

Note: The overall effect is the head and neck move backwards as far as possible while keeping the face parallel to the ceiling.

SHOULDER MOBILITY



POSTERIOR SHOULDER STRETCH

Benefits:

- Addresses posterior shoulder capsule mobility; assists the internal rotation and adduction of the shoulders

How to do it:

- Place one arm out forward
- With the other arm, grab the arm by the triceps, and pull it across the chest
- Hold for 30 seconds
- Repeat this stretch with the other arm

SHOULDER MOBILITY



SLEEPER STRETCH

Benefits:

- Addresses posterior shoulder capsule mobility; assists the internal rotation and adduction of the shoulders

How to do it:

- While lying on your left side, roll slightly backward onto your shoulder blade
- With the left arm positioned in front of you, and bent at 90 degrees at the elbow, roll slightly forward onto this arm
- Use the right hand to push the left hand down towards the surface as depicted
- You should feel no pain while doing the sleeper stretch
- The closer you are to 90 degrees, the more stretch you should feel

Note: Because of prepositioning a small amount of force is required for this stretch.

SHOULDER MOBILITY



SHOULDER/TRICEPS/UPPER BACK OPENER

Benefits:

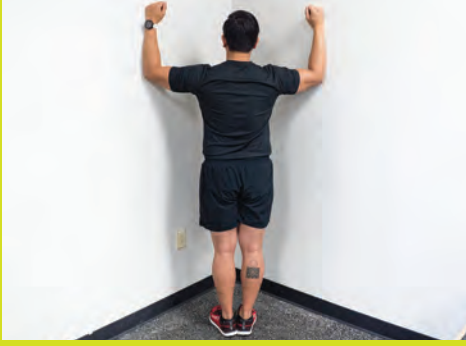
- Addresses posterior shoulder capsule mobility; assists the internal rotation and adduction of the shoulders

How to do it:

- Stand straight, feet shoulder width apart, knees relaxed, and squared hips
- Hold a strap in your right hand
- Bring right elbow up by the right ear, draping the strap behind the back
- Reach behind your back with the left hand and grab the strap
- Ensure your left arm is bent 90 degrees at the elbow while holding the strap
- Pull the right hand up a few inches and then back down with the left hand to get a good stretch
- Perform 6 – 10 repetitions, 2 – 3 sets on each side

Note: Perform stretch in pain-free range of motion; do not stretch to the point of pain.

PECTORALIS STRETCH



PECTORALIS STRETCH

Benefits:

- Helps maintain proper posture
- Flexible chest muscles ensure full mobility in the shoulder joints without limitations

How to do it:

- Stand in an open doorway or corner
- Raise each arm up to the side (or a single arm)
- Bend arms to 90 degrees at elbow
- Rest palms on the door frame or wall
- Stand straight, do not lean forward and slowly step forward with one foot until you feel a stretch in the chest
- Hold for 30 seconds
- Step back and relax
- Perform 2 – 3 sets

SHOULDER MOBILITY



SHOULDER FLEXION RANGE OF MOTION

Benefits:

- Improves shoulders' range of motion following injuries that limit mobility or after surgery

How to do it:

- In the standing position, hold a wand/cane with both arms as shown
- Raise wand/cane up allowing the unaffected arm to push up the affected arm

SHOULDER MOBILITY



SHOULDER ABDUCTION RANGE OF MOTION

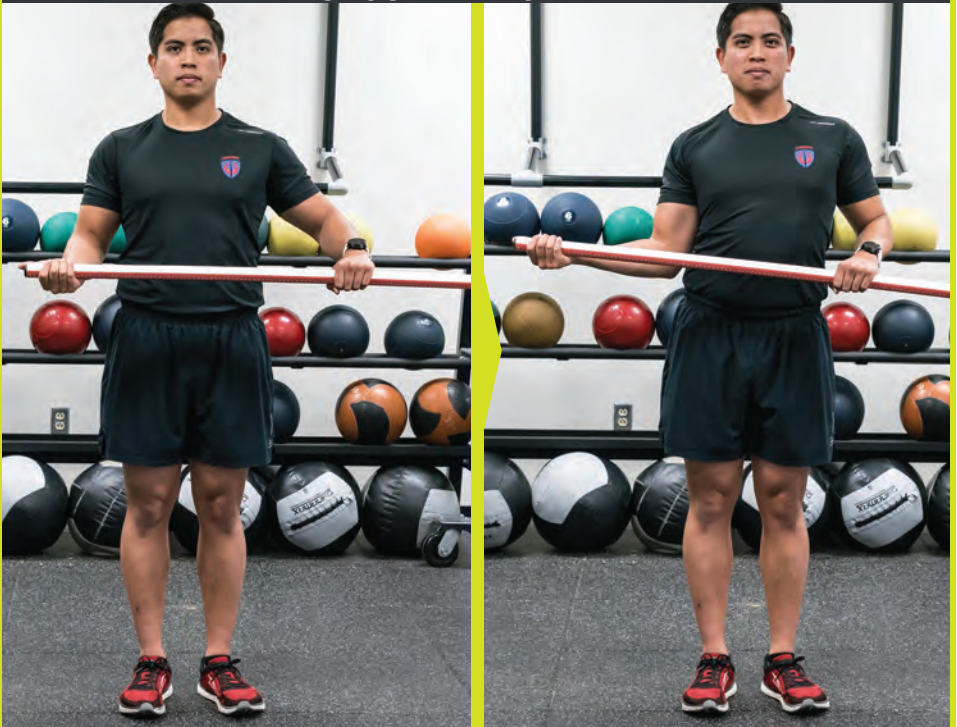
Benefits:

- Improves shoulders' range of motion following injuries that limit mobility or after surgery

How to do it:

- While holding a wand/cane with palm face up on the injured side and palm face down on the uninjured side, slowly raise up your injured arm to the side
- Use the uninjured arm to assist in guiding the movement

SHOULDER MOBILITY



SHOULDER EXTERNAL ROTATION RANGE OF MOTION

Benefits:

- Improves shoulders' range of motion following injuries that limit mobility or after surgery

How to do it:

- Begin with hand in line with elbow
- With elbow at 90 degrees, and in line with the shoulder, use wand/cane to assist hand into external rotation
- Keep elbow at side
- Use the uninjured arm to assist in guiding the movement

SHOULDER MOBILITY



SHOULDER EXTERNAL ROTATION RANGE OF MOTION

Benefits:

- Improves shoulders' range of motion following injuries that limit mobility or after surgery

How to do it:

- Lie on your back holding a wand/cane with both hands
- Maintain approximately 90 degree bend at the elbows and shoulders
- Use your other arm to push the wand/cane to rotate the affected arm back into a stretch
- Hold and then return to starting position
- Repeat

SHOULDER MOBILITY



LATISSIMUS DORSI

Benefits:

- Improves range of motion required for overhead activities and pain associated with heavy lifting

How to do it:

- Kneel down on the floor facing a foam roller
- Put palms on the foam roller shoulder-width apart
- Ensure palms are not facing up, and elbows are straight
- Move buttocks back towards the heels
- Lower upper body down towards the foam roller
- Try to touch forehead to the foam roller

Note: Move hands further apart to make the stretch more difficult.

THORACIC MOBILITY



THORACIC ROTATIONS

Benefits:

- Improves thoracic and shoulder mobility; alleviates pain associated with poor posture

How to do it:

- While lying on your side, with your arms stretched in front of your body, slowly twist your upper body to the side and rotate your spine
- Your arms and head should also be rotating along with the spine as shown
- Follow your hand with your head
- When your top leg begins to come off the bottom leg you have reached end range
- Return to starting position and repeat 10 times for 2 – 3 sets

HIP & KNEE MOBILITY



FOAM ROLLING OR BALL ROLLING QUADRICEPS

Benefits:

- Self-myofascial release technique to relieve muscle tightness, soreness, inflammation, and increase joint range of motion
- Effective for warm-up or cool-down before and after exercise:
 - Eases muscle pain
 - Relieves back pain
 - Helps relaxation

Note: Typically perform for 60 seconds on each muscle group; additional time can be added to muscles with increased tightness or soreness.

HIP & KNEE MOBILITY



FOAM ROLLING OR BALL ROLLING ILIOTIBIAL (IT) BAND

How to do it:

- Roll up and down along muscle until tenderness is felt in the affected area
- Roll forward and back in addition to up and down
- Keep roller on this area; wait for discomfort to diminish
- When the area is no longer sensitive, begin rolling up and down again, checking for other sensitive areas and repeat
- When affected area is free of pain and can be rolled over, continue rolling the entire muscle regularly to keep area relaxed

Note: Avoid rolling over bony areas such as the knee cap, and joints; softballs, baseballs, or lacrosse balls are effective for the shoulders and feet arches.

LEG MOBILITY



UPPER BACK MOBILITY

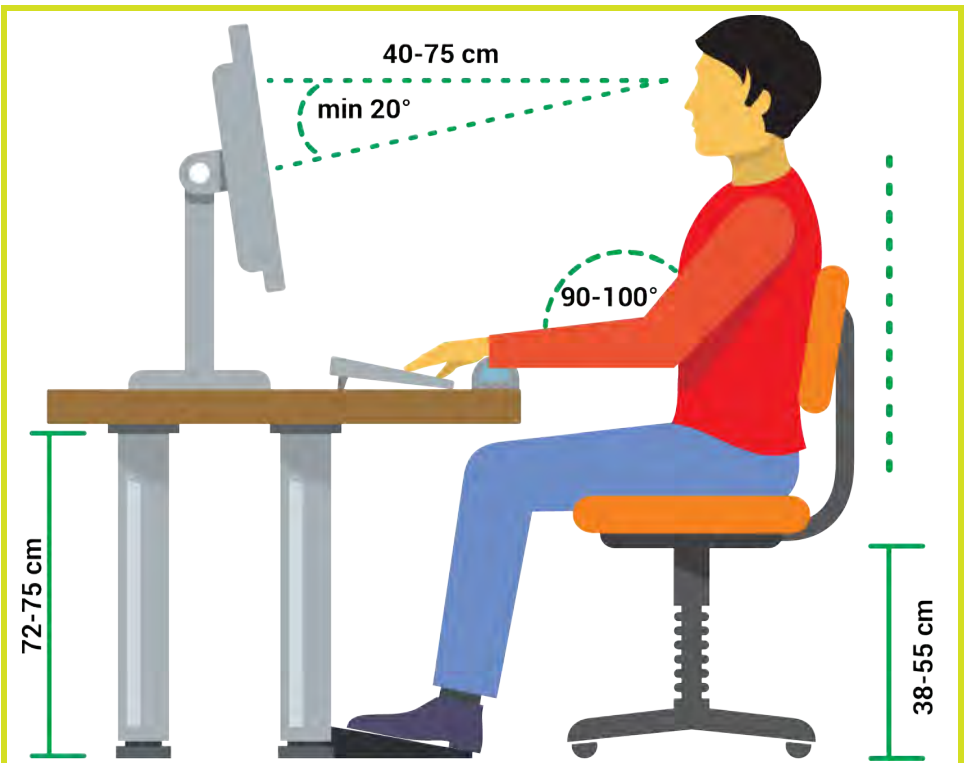


UPPER BACK



SHOULDER

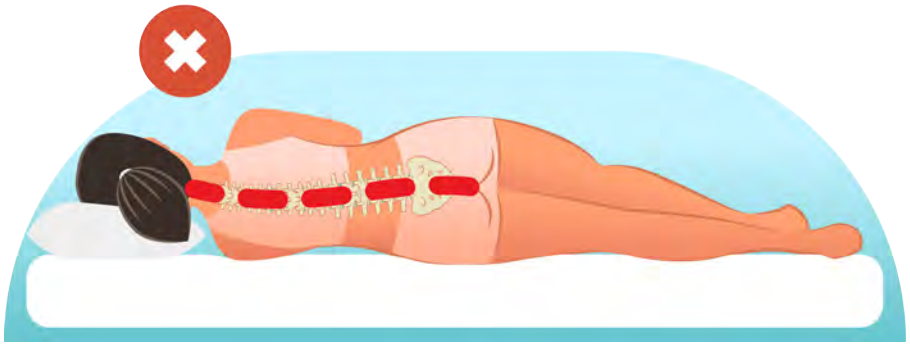
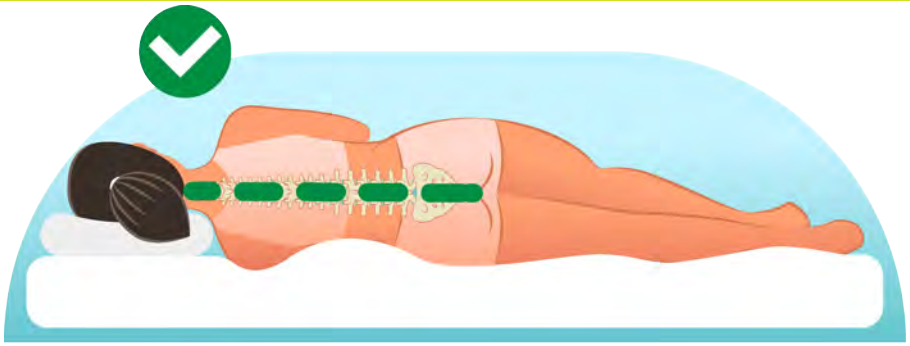




OFFICE POSTURE

Consequences of poor posture:

- Stiffness
- Loss of mobility
- Neck pain
- Mid back pain
- Lower back pain
- Jaw pain
- Tension headaches
- Shoulder pain
- Radiating pain into arms or legs
- Numbness and tingling in arms or legs



PROPER SLEEPING POSITIONS

Benefits:

- Sleeping position has a major impact on sleep quality as well as overall health
- Poor posture causes back and neck pain, fatigue, sleep apnea, muscle cramping, impaired circulation, headaches, and heartburn

Best positions:

- On your back
- On your side
- On your stomach
- Fetal position

Pillow placement:

- Between knees when on side
- Under stomach when prone

