



This information sheet is designed to increase your awareness of factors that can contribute to the formation of Musculoskeletal Injuries (MSI's). It is a guideline for early intervention programming and this information should be used for the immediate care of MSI's. This sheet is not a substitute for qualified medical care. If symptoms continue or worsen, always consult your doctor, physiotherapist or chiropractor.

The Following Movements Can Increase Your Risk of Back Injuries



Bending forward from the lower back, either repetitively or statically, can increase your risk of disc injury.



Sitting in a slouched or pelvic-tilted posture places uneven strain on the discs and can increase your risk of disc injury.



Lifting with the spine in a pelvic tilted or bent forward-posture places uneven wear on the discs and can increase your risk of disc injury.

Some More Information on Back Injuries

When we stand up straight with the hollow in our lower back we are in a neutral spinal posture. Working repetitively or statically out of this neutral posture places stress on the discs in the back. Commonly, people sit or work in a bent-forward posture that places extra pressure on the back wall of the disc. Use of a bent-forward posture can lead to injury if continued over months and years. This sort of injury is characterized by pain at the site of the injury and radiating pain into the hips and legs.

Risk factors include static or repetitive forward bending at the back with or without weight.

The Signs and Symptoms of MSI's and Some First Aid Tips

Musculoskeletal Injuries are usually characterized by soreness and discomfort, swelling and sometimes redness at or around the joint. Occasionally, you may feel radiating, sharp, stabbing, or throbbing pain. MSI's can become aggravated by certain movements and if ignored can progress into a major injury. If you are feeling these signs and symptoms:

- Report the injury to first aid and your immediate supervisor.
- Place ice on the injured area for 10 minutes (the ice may become uncomfortable but remove the ice if it begins to hurt).
- Try to avoid the movements that aggravate the injury. When you are able to, rest the area,
- Do some gentle stretching for the injured area throughout your day. If any stretches hurt the injury or make it worse, don't do them!
- Whenever possible, rotate to another job with different demands and take small 5-10 second microbreaks throughout your shift to relax the sore area and allow blood to flow back in.

Preventative Stretching and Exercise


The following stretches and exercises are safe for the majority of people. As with any exercise program, if you feel faint or experience pain or discomfort, stop! The best way to stretch is a light stretch called stretch point stretching. The stretch point is the first feeling of a light stretch in a muscle-tendon. For some individuals it is felt as a slight stretch or resistance to the movement, while others may feel nothing. The stretch point sensation should begin to disappear after 10 to 15 seconds. This is usually an indication that the tissue is releasing or stretching. The benefits of stretch point stretching are cumulative and are experienced over several sessions.

Purpose

- Restores normal disc pressure throughout spine following prolonged forward bending.
- Stretches front of neck, chest, shoulders, and abdominals.

Technique

- Stand straight and extend arms straight above head, reach up and hold for 20 - 30 seconds
- Repeat 10 times per hour or whenever possible.




Purpose

- To maintain equal pressure on the intervertebral discs and to optimize force generation in the major muscle groups.

Technique

- Position body close to load or tool.
- Keep head and shoulders up and feet shoulder-width apart.
- Bend at the hips, allowing the buttocks to move backward.
- Draw the belly button toward spine and hold.
- Keep heels on the floor throughout movement.
- Keep the shoulders over the knees and the knees over the toes.

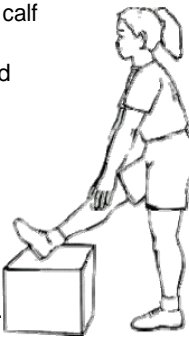


Purpose

- Stretches gluteals, hamstrings, and calf muscles.
- Improves the flexibility of the hip and knee.

Technique

- Place leg on low object.
- Attempt to stand up and deepen the hollow in the lower back until an even stretch point is felt in the back of the leg.
- Hold until the stretch point releases.

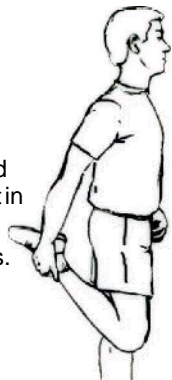


Purpose

- Stretches quadriceps muscles.

Technique

- Stand with good posture.
- Grasp the front of one ankle with the hand of the same side of the body.
- Gently pull the sole of the foot toward the buttock until a stretch point is felt in front of thigh.
- Hold the stretch point until it releases.



Where to Find More Information on MSI's

For more information and education on Musculoskeletal Injuries, visit the Ergonomics section at www.healthandsafetycentre.org. Your first aid staff, local physiotherapist, kinesiologist, or doctor is also an excellent resource. You can also ask your FARSHA safety representative when they are on-site.

Workstyle Considerations for Back Injuries

If you are experiencing the signs and symptoms of back injuries, consider the following:

1. Keep the hollow in your lower back as much as possible. Try not to get your pelvis tilted or bent forwards. Lift, push, or pull using the power position shown above.
2. If you are sitting for extended periods of time, use the lumbar support in your chair to keep the hollow in your lower back. It may not be as comfortable at first, but this posture will save your back over the long run.
3. If you have been bent forward at the lower back for a while, stand up and use the lumbar extension stretch (top left) above to reverse the pressure within your disc.



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The Following Movements Can Increase Your Risk of Knee Injuries



Crouching places extra strain on the kneecap and can increase your risk of knee injury.



Kneeling on grating or concrete without padding under the knee places contact strain on the tendon that runs over your knee cap and can lead to knee injury.

Some More Information on Knee Injuries

The most common knee injuries occur under the kneecap and in the tendon just below the kneecap. Deep knee bends, when jumping or lifting weight, increase pressure under the kneecap, resulting in increased wear and tear on the cartilage under the kneecap. This can result in pain and swelling under and around the kneecap.

Knee injuries can also result from contact pressure between the knee and the ground. This occurs commonly when people kneel on the floor without padding under their knees. The tendon is repeatedly bruised where it joins onto the lower leg and localized swelling results.

The Signs and Symptoms of MSI's and Some First Aid Tips

Musculoskeletal Injuries are usually characterized by soreness and discomfort, swelling and sometimes redness at or around the joint. Occasionally, you may feel radiating, sharp, stabbing, or throbbing pain. MSI's can become aggravated by certain movements and if ignored can progress into a major injury. If you are feeling these signs and symptoms:

- Report the injury to first aid and your immediate supervisor.
- Place ice on the injured area for 10 minutes (the ice may become uncomfortable but remove the ice if it begins to hurt).
- Try to avoid the movements that aggravate the injury. When you are able to, rest the area.
- Do some gentle stretching for the injured area throughout your day. If any stretches hurt the injury or make it worse, don't do them!
- Whenever possible, rotate to another job with different demands and take small 5 - 10 second microbreaks throughout your shift to relax the sore area and allow blood flow back in.

Preventative Stretching and Exercise

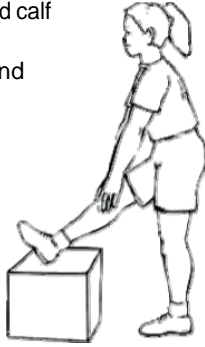
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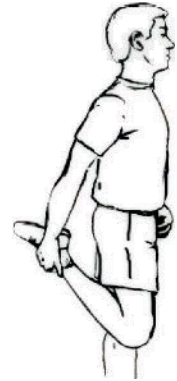


Purpose

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- Stand with good posture.
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Purpose

- To maintain equal pressure on the intervertebral discs and to optimize force generation in the major muscle groups.

Technique

- Position body close to load or tool.
- Keep head and shoulders up and feet shoulder-width apart.
- Bend at the hips, allowing the buttocks to move backward.
- Draw the belly button toward spine and hold.
- Keep heels on the floor throughout movement.
- Keep the shoulders over the knees and the knees over the toes.



Purpose

- Restores normal disc pressure throughout spine following prolonged forward bending.
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Technique

- Stand straight and extend arms straight above head, reach up and hold for 20 - 30 seconds
- Repeat 10 times per hour or whenever possible.



Where to Find More Information on MSI's

For more information and education on Musculoskeletal Injuries, visit the Ergonomics section at www.healthandsafetycentre.org. Your first aid staff, local physiotherapist, kinesiologist, or doctor is also an excellent resource. You can also ask your FARSHA safety representative when they are on-site.

Workstyle Considerations for Knee Injuries

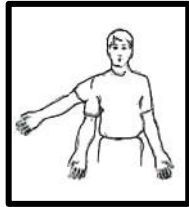
If you are experiencing the signs and symptoms of knee injuries consider the following:

1. Use proper lifting posture (shown above, bottom left) rather than crouching. If you lift from floor height many times per day, try to find ways of getting those objects off the floor.
2. Rather than kneeling directly on grating or hard surfaces, place padding under your knees. You can carry around a section of padding or you can have pockets sewn into the front of your coveralls or pants. Place some foam inserts into the pockets and you have kneepads that won't make you hot or uncomfortable.
3. If you spend a lot of time walking and climbing stairs, take microbreaks throughout your day to stretch out the legs.

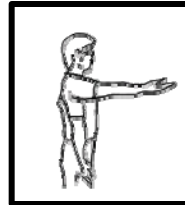


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The Following Movements Can Increase Your Risk of Shoulder Tendonitis



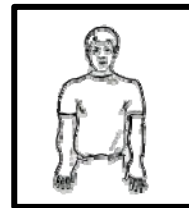
Working repetitively or statically with the arms above the level indicated in the picture can increase your risk of shoulder tendonitis.



Working repetitively or statically with your arm above shoulder height in front can increase your risk of shoulder tendonitis.



Rotating the upper arm to the outside repetitively or with a forceful motion can increase your risk of shoulder tendonitis.



If your chest muscles become more powerful than your back muscles, it can cause your shoulders to draw inward and increase your risk of shoulder tendonitis.

Some More Information on Shoulder Tendonitis

There are several types of shoulder tendonitis. Here are two of the most common:

1. Bicipital Tendonitis occurs where the biceps muscle tendon joins onto the shoulder blade. Risk factors include repetitively raising the arm in front of the body or slightly to the side of the body. This can occur when working on a surface that is too high or too far away from the body.
2. Rotator Cuff Tendonitis occurs when one or more of the four rotator cuff muscles tendons become injured and inflamed. Risk factors usually involve use of the shoulder in an extended or static posture such as overhead work. Force and repetition added on top of bad posture increase the risk further.

The Signs and Symptoms of MSI's and Some First Aid Tips

Musculoskeletal Injuries are usually characterized by soreness and discomfort, swelling and sometimes redness at or around the joint. Occasionally, you may feel radiating, sharp, stabbing, or throbbing pain. MSI's can become aggravated by certain movements and if ignored can progress into a major injury. If you are feeling these signs and symptoms:

- Report the injury to first aid and your immediate supervisor.
- Place ice on the injured area for 10 minutes (the ice may become uncomfortable but remove the ice if it begins to hurt).
- Try to avoid the movements that aggravate the injury. When you are able to, rest the area.
- Do some gentle stretching for the injured area throughout your day. If any stretches hurt the injury or make it worse, don't do them!
- Whenever possible, rotate to another job with different demands and take small 5-10 second microbreaks throughout your shift to relax the sore area and allow blood to flow back in.

Preventative Stretching and Exercise


The following stretches and exercises are safe for the majority of people. As with any exercise program, if you feel faint or experience pain or discomfort, stop! The best way to stretch is a light stretch called stretch point stretching. The stretch point is the first feeling of a light stretch in a muscle-tendon. For some individuals it is felt as a slight stretch or resistance to the movement, while others may feel nothing. The stretch point sensation should begin to disappear after 10 to 15 seconds. This is usually an indication that the tissue is releasing or stretching. The benefits of stretch point stretching are cumulative and are experienced over several sessions.

Purpose

- Stretches neck, shoulder, and upper back muscles.

Technique

- Place one arm behind back, tilt chin towards chest, tilt head to opposite side.
- Hold the stretch for 20 - 30 seconds.




Purpose

- Improves flexibility of pectoral muscles at front of shoulder and chest and helps reduce rounded shoulder posture.

Technique

- Bend arm at elbow and raise to shoulder height.
- Place palm against wall or flat surface.
- Gently lean forward.
- Hold the stretch for 20 - 30 seconds.

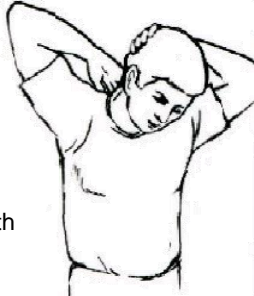


Purpose

- Stretches the muscles at back of neck and improves flexibility of shoulder muscles crossing through the armpit.

Technique

- Reach over top of shoulder with one arm and attempt to touch the base of your neck.
- Bend head forward and slightly to the other side until the stretch point is felt.
- If the stretch point is not felt, reach up behind the head and gently pull the head downward until the stretch point is felt.




Purpose

- Reduces general shoulder tension and keeps shoulders loose and flexible.
- Increases awareness of tension building up in shoulders.

Technique

- Shrug shoulders up toward ears.
- Allow arms to hang loosely at sides.
- Hold 5 - 10 seconds and then relax shoulders.
- Repeat 5 - 10 times.



Where to Find More Information on MSI's

For more information and education on Musculoskeletal Injuries, visit the Ergonomics section at www.healthandsafetycentre.org. Your first aid staff, local physiotherapist, kinesiologist, or doctor is also an excellent resource. You can also ask your FARSHA safety representative when they are on-site.

Workstyle Conditions for Shoulder Tendonitis

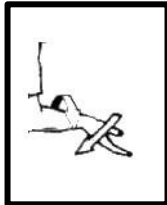
If you are experiencing the signs and symptoms of shoulder tendonitis, consider the following:

1. Try to keep your upper arm as close to your body as possible when working. The closer your arm is to your body, the less the force on the rotator cuff muscles.
2. Working overhead, especially in a static posture, can place strain on the shoulder. If you can, reorient yourself to the work so that your shoulders are in a stronger posture. If you can't change the job at all, make sure you take frequent microbreaks to relax your arms at your sides and allow the blood back into the working muscles.
3. If your job involves a lot of work in front of the body, take frequent stretch breaks and reverse your most common movements. Stretch out the muscles you have been using and contract the ones you have not been using.



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The Following Movements Can Increase Your Risk of Tennis Elbow



Repetitively or forcefully turning the forearm over to the outside while extending the wrist back can increase your risk of tennis elbow.



If your wrist is in an extended posture and is then forced back to straight by an outside force, you are at an increased risk of tennis elbow.



Using tools that vibrate and involve movement at the wrist and elbow can increase your risk of tennis elbow.



Repetitive or forceful bending of the wrist to the side (radial deviation) can increase your risk of tennis elbow.

Some More Information on Tennis Elbow

Tennis elbow is an inflammation of the tendon where the muscles that extend the wrist attach to the elbow. Repetitive or forceful use causes small tears in the tendon. This causes the area to inflame, resulting in tenderness and pain over the outside of the elbow.

Biomechanical risk factors include repetitive or static wrist extension and turning of the forearm so that the palm of the hand faces up.

The Signs and Symptoms of MSI's and Some First Aid Tips

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- Report the injury to first aid and your immediate supervisor.
- Place ice on the injured area for 10 minutes (the ice may become uncomfortable but remove the ice if it begins to hurt).
- Try to avoid the movements that aggravate the injury. When you are able to, rest the area.
- Do some gentle stretching for the injured area throughout your day. If any stretches hurt the injury or make it worse, don't do them!
- Whenever possible, rotate to another job with different demands and take small 5 - 10 second microbreaks throughout your shift to relax the sore area and allow blood to flow back in.

Preventative Stretching and Exercise

The following stretches and exercises are safe for the majority of people. As with any exercise program, if you feel faint or experience pain or discomfort, stop! The best way to stretch is a light stretch called stretch point stretching. The stretch point is the first feeling of a light stretch in a muscle-tendon. For some individuals it is felt as a slight stretch or resistance to the movement, while others may feel nothing. The stretch point sensation should begin to disappear after 10 to 15 seconds. This is usually an indication that the tissue is releasing or stretching. The benefits of stretch point stretching are cumulative and are experienced over several sessions.

Purpose

- Stretches the muscles and tendons on the outside of the elbow.

Technique

- Hold your arm at your side.
- Keep your hand flat and flex your wrist back like a waiter expecting a tip.
- If you do not feel a stretch point, gently rotate your forearm to the outside so that your hand points away from your body. Find the stretch point and hold until it releases.

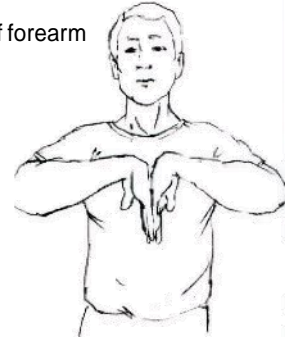


Purpose

- Stretches outer surface of forearm and elbow.
- Increases wrist flexibility.

Technique

- Place knuckles or back of hands together (fingers pointing down) in front of chest.
- Gently push hands together until a stretch point is achieved. Hold until it releases.

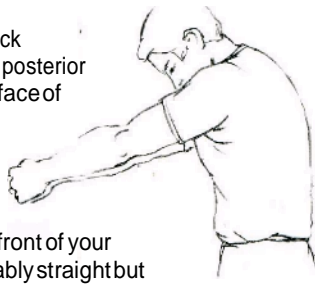


Purpose

- Stretches muscles of neck (extensors) upper back, posterior shoulder, and upper surface of forearm.
- Helps maintain mobility of shoulder

Technique

- Extend arms straight in front of your body with arms comfortably straight but not locked.
- Interlock fingers with palms facing but not touching.
- Gently push arms forward and pull shoulder blades apart to achieve stretch point.

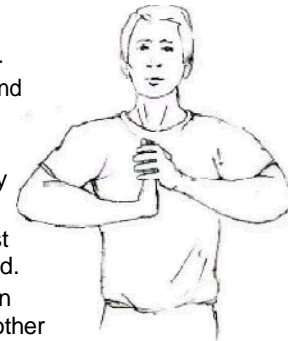


Purpose

- Stretches the entire flexor (inside) surface of forearm.
- Increases wrist flexibility and lengthens finger tendons.

Technique

- Keep elbow bent and away from side of body.
- Place hand in front of chest with fingers pointing upward.
- Press fingers into extension (backward) using palm of other hand.



Where to Find More Information on MSI's

For more information and education on Musculoskeletal Injuries, visit the Ergonomics section at www.healthandsafetycentre.org. Your first aid staff, local physiotherapist, kinesiologist, or doctor is also an excellent resource. You can also ask your FARSHA safety representative when they are on-site.

Workstyle Considerations for Tennis Elbow

If you are experiencing the signs and symptoms of tennis elbow, consider the following:

1. Try to avoid motions that force you to roll your forearm over so that your hand is facing up while extending your wrist back. Keep your wrist as straight as possible and try not to work at the ends of your range of motion for the elbows and wrists.
2. Try to dampen the vibration from tools you use on a regular basis. For example, chainsaws, concrete saws, and similar tools have vibration-damping mounts that need to be replaced on a regular basis.
3. Try to avoid situations where you are resisting movements instead of creating the movement. Unexpected or quickly applied external forces can increase your risk of damage to the tendons inflamed in tennis elbow.



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The Following Movements Can Increase Your Risk of Wrist Tendonitis



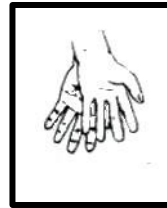
Repetitive or forceful use of the wrist at or near the end of its range of motion in extension can increase your risk of wrist tendonitis.



Repetitive or forceful use of the wrist at or near the end of its range of motion in flexion can increase your risk of wrist tendonitis,



Repetitive or forceful use of the wrist at or near the end of its range of motion in side bending (radial deviation) can increase your risk of wrist tendonitis.



Repetitive or forceful use of the wrist at or near the end of its range motion in side bending (ulnar deviation) can increase your risk of wrist tendonitis.

Some More Information on Wrist Tendonitis

Wrist tendonitis is the inflammation of a tendon passing through the wrist. These tendons originate from a muscle in the forearm and insert into a segment of the thumb or fingers. It occurs when the tendons are stressed beyond their capacity, resulting in tiny tears in the tendon. This is followed by increased blood flow to the area resulting in swelling of the tissues, discomfort and pain.

Biomechanical risk factors include repetitive gripping, use of the wrist in end range postures, and forces that exceed the strength of the tendon whether applied all at once or repetitively over months and years.

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Purpose

- Stretches inner surface of forearm and elbow.
- Increases wrist flexibility.

Technique

- Place hands together in front of chest in a praying position (palms together).
- Gently press palms together, stopping when stretch point is achieved. Hold until stretch releases.

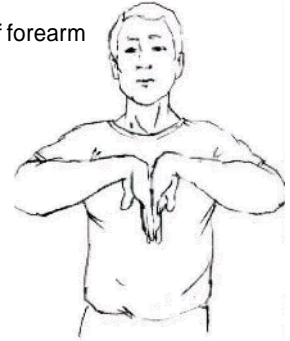


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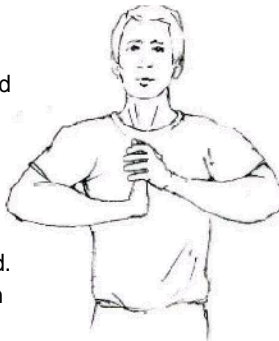


Purpose

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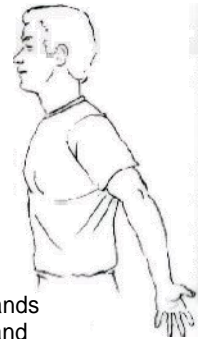


Purpose

- Improves posture by strengthening the muscles of upper back and rotator cuff.
- Stretches the front of the shoulder capsule and muscles of chest.

Technique

- Stand with good posture (chin tucked, neck retracted, belly button pulled toward spine).
- With arms straight at sides, twist hands outward with thumb pointing back and simultaneously squeeze shoulder blades together and slightly downward.
- Should feel stretch point stretch at front of shoulders.
- Hold 5 - 10 seconds, repeat 5 - 10 times.



Where to Find More Information on MSI's

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Workstyle Considerations for Wrist Tendonitis

If you are experiencing the signs and symptoms of wrist tendonitis, consider the following:

1. Try to decrease the force or repetition involved in your job. Try to reduce the weights of objects being handled, the number of objects being handled, and the number of similar hand and wrist oriented tasks you perform on a daily basis.
2. If you work with tools, try to ensure that all of your tools have a 1" to 1.25" grip diameter on the handles. Don't use more force than you have to grip the tool. If you wear gloves, make sure they fit well. Loose-fitting gloves can increase the amount of force required to grip objects and tools.
3. Keep your wrist as straight as you can throughout your day. Avoiding the ends of your range of motion will place less strain on the wrist.



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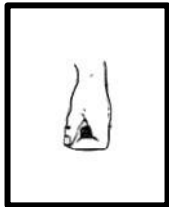
The Following Movements Can Increase Your Risk of Carpal Tunnel Syndrome



Static or repetitive work with the wrist in extension can increase your risk of carpal tunnel syndrome.



Static or repetitive work with the wrist in a flexed posture can increase your risk of carpal tunnel syndrome.



Narrow diameter and awkward gripping can increase your risk of carpal tunnel syndrome if done repetitively or held statically.



Vibration or jarring impacts to the hand, wrist and forearm can increase your risk of carpal tunnel syndrome.

Some More Information on Carpal Tunnel Syndrome

Carpal tunnel syndrome is a set of symptoms resulting from compression of the median nerve that passes through the carpal tunnel of the wrist. Compression may be due to swelling of the tendons or muscles which all travel throughout the carpal tunnel. The individual may feel pain, numbness, tingling and weakness, often originating at the wrist and radiating intermittently or constantly into the palm and fingers.

Biomechanical risk factors include highly repetitive movements of the fingers, hand, and wrist. It is also associated with high forces, prolonged flexion at the wrist, cold temperature and vibration.

The Signs and Symptoms of MSI's and Some First Aid Tips

Musculoskeletal Injuries are usually characterized by soreness and discomfort, swelling and sometimes redness at or around the joint. Occasionally, you may feel radiating, sharp, stabbing, or throbbing pain. MSI's can become aggravated by certain movements and if ignored can progress into a major injury. If you are feeling these signs and symptoms:

- Report the injury to first aid or your immediate supervisor.
- Place ice on the injured area for 10 minutes (the ice may become uncomfortable but remove the ice if it begins to hurt).
- Try to avoid the movements that aggravate the injury when you are able to rest the area. Do some gentle stretching for the injured area throughout your day. If any stretches hurt the injury or make it worse, don't do them!
- Whenever possible, rotate to another job with different demands and take small 5-10 second microbreaks throughout your shift to relax the sore area and allow blood to flow back in.

Preventative Stretching and Exercise

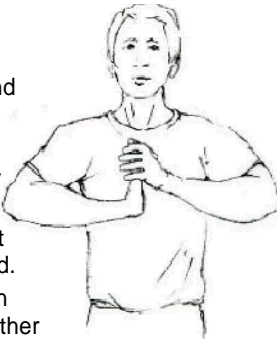
The following stretches and exercises are safe for the majority of people. As with any exercise program, if you feel faint or experience pain or discomfort, stop! The best way to stretch is a light stretch called stretch point stretching. The stretch point is the first feeling of a light stretch in a muscle-tendon. For some individuals it is felt as a slight stretch or resistance to the movement, while others may feel nothing. The stretch point sensation should begin to disappear after 10 to 15 seconds. This is usually an indication that the tissue is releasing or stretching. The benefits of stretch point stretching are cumulative and are experienced over several sessions.

Purpose

- Stretches the entire flexor (inside) surface of forearm.
- Increases wrist flexibility and lengthens finger tendons.

Technique

- Keep elbow bent and away from side of body.
- Place hand in front of chest with fingers pointing upward.
- Press fingers into extension (backward) using palm of other hand.




Purpose

- Stretches inner surface of forearm and elbow.
- Increases wrist flexibility.

Technique

- Place hands together in front of chest in a praying position (palms together).
- Gently press palms together, stopping when stretch point is achieved. Hold until stretch releases.




Purpose

- Stretches outer surface of forearm and elbow.
- Increases wrist flexibility.

Technique

- Place knuckles or back of hands together (fingers pointing down) in front of chest.
- Gently push hands together until a stretch point is achieved. Hold until it releases.




Purpose

- Improves flexibility of pectoral muscles at front of shoulder and chest and helps reduce rounded shoulder posture.

Technique

- Bend arm at elbow and raise to shoulder height.
- Place palm against wall or flat surface.
- Gently lean forward.
- Hold the stretch for 20 - 30 seconds.



Where to Find More Information on MSI's

For more information and education on Musculoskeletal Injuries, visit the Ergonomics section at www.healthandsafetycentre.org. Your first aid staff, local physiotherapist, kinesiologist, or doctor is also an excellent resource. You can also ask your FARSHA safety representative when they are on-site.

Workstyle Considerations for Carpal Tunnel Syndrome

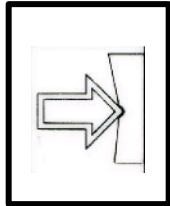
If you are experiencing the signs and symptoms of carpal tunnel syndrome, consider the following:

1. Keep the wrist as straight as you can, as much as you can. A straight wrist posture will place less stress and strain on the tendons and nerves in the wrist.
2. Whenever possible, avoid highly repetitive finger and wrist movements.
3. If your medical care provider recommends wrist splints, try not to wear these while working. Use a "mental splinting" technique and consciously practice keeping your wrists straight.
4. If you are working in a cold environment, find some way to keep your hands and wrists warm, but not hot.

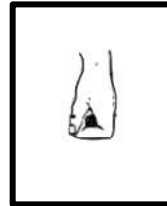


This information sheet is designed to increase your awareness of factors that can contribute to the formation of Musculoskeletal Injuries (MSI's). It is a guideline for early intervention programming and this information should be used for the immediate care of MSI's. This sheet is not a substitute for qualified medical care. If symptoms continue or worsen, always consult your doctor, physiotherapist or chiropractor.

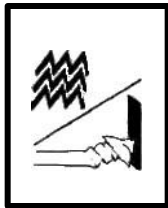
The Following Movements Can Increase Your Risk of Trigger Finger



Contact pressure in the palm of the hand from sharp objects or tools can increase your risk of trigger finger.



Repetitive and forceful gripping can increase your risk of trigger finger.



Tools that vibrate can increase your risk of trigger finger.

Some More Information on Trigger Finger

Tenosynovitis is a swelling of the sheath that surrounds a tendon. Friction between the sheath and the tendon can occur when the tendon passes around corners and over bones. To reduce this irritating friction, the body increases the volume of synovial fluid in the sheath. This causes the sheath to swell and become painful.

Contact pressure in the palm of the hand from tools or sharp objects can lead to a tenosynovitis such as trigger finger. Trigger finger is the locking of the thumb or finger in a bent position. A nodule or cyst forms on the tendon, which then gets caught in the tendon sheath when the finger is bent.

The Signs and Symptoms of MSIs and Some First Aid Tips

Musculoskeletal Injuries are usually characterized by soreness and discomfort, swelling and sometimes redness at or around the joint. Occasionally, you may feel radiating, sharp, stabbing, or throbbing pain. MSI's can become aggravated by certain movements and if ignored can progress into a major injury. If you are feeling these signs and symptoms:

- Report the injury to first aid and your immediate supervisor.
 - Place ice on the injured area for 10 minutes (the ice may become uncomfortable but remove the ice if it begins to hurt).
 - Try to avoid the movements that aggravate the injury. When you are able to, rest the area.
 - Do some gentle stretching for the injured area throughout your day. If any stretches hurt the injury or make it worse, don't do them!
- Whenever possible, rotate to another job with different demands and take small 5-10 second microbreaks throughout your shift to relax the sore area and allow blood to flow back in.

Preventative Stretching and Exercise

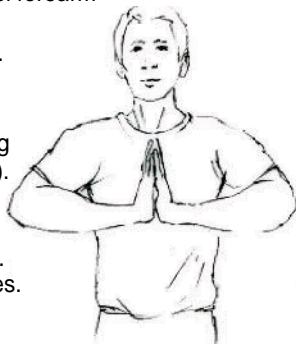
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Purpose

- Stretches inner surface of forearm and elbow.
- Increases wrist flexibility.

Technique

- Place hands together in front of chest in a praying position (palms together).
- Gently press palms together, stopping when stretch point is achieved. Hold until stretch releases.

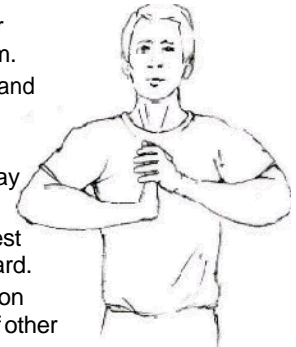


Purpose

- Stretches the entire flexor (inside) surface of forearm.
- Increases wrist flexibility and lengthens finger tendons.

Technique

- Keep elbow bent and away from side of body.
- Place hand in front of chest with fingers pointing upward.
- Press fingers into extension (backward) using palm of other hand.

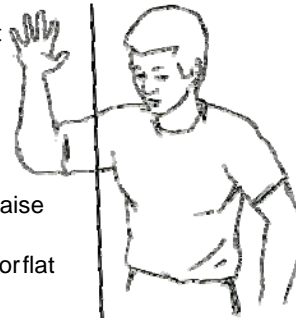


Purpose

- Improves flexibility of pectoral muscles at front of shoulder and chest and helps reduce rounded shoulder posture.

Technique

- Bend arm at elbow and raise to shoulder height.
- Place palm against wall or flat surface.
- Gently lean forward.
- Hold the stretch for 20 - 30 seconds.

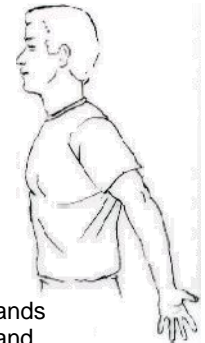


Purpose

- Improves posture by strengthening the muscles of upper back and rotator cuff.
- Stretches the front of the shoulder capsule and muscles of chest.

Technique

- Stand with good posture (chin tucked, neck retracted, belly button pulled toward spine).
- With arms straight at sides, twist hands outward with thumb pointing back and simultaneously squeeze shoulder blades together and slightly downward.
- Should feel stretch point stretch at front of shoulders.
- Hold 5 - 10 seconds, repeat 5 - 10 times.



Where to Find More Information on MSI's

For more information and education on Musculoskeletal Injuries, visit the Ergonomics section at www.healthandsafetycentre.org. Your first aid staff, local physiotherapist, kinesiologist, or doctor is also an excellent resource. You can also ask your FARSHA safety representative when they are on-site.

Workstyle Considerations for Trigger Finger

If you are experiencing the signs and symptoms of trigger finger, consider the following:

1. Examine all of the tools and surfaces your hands interact with on a daily basis. Round out sharp corners wherever you can and pad grips enough to soften the grip without softening it too much and increasing the grip forces necessary to grasp the object.
2. Try not to let your hands get cold. Find ways of keeping them warm without making them hot. Gloves may not be the best option unless they fit well and do not increase the amount of force necessary to grip tools you commonly use.
3. Investigate ways of removing repetitive gripping from your job.