



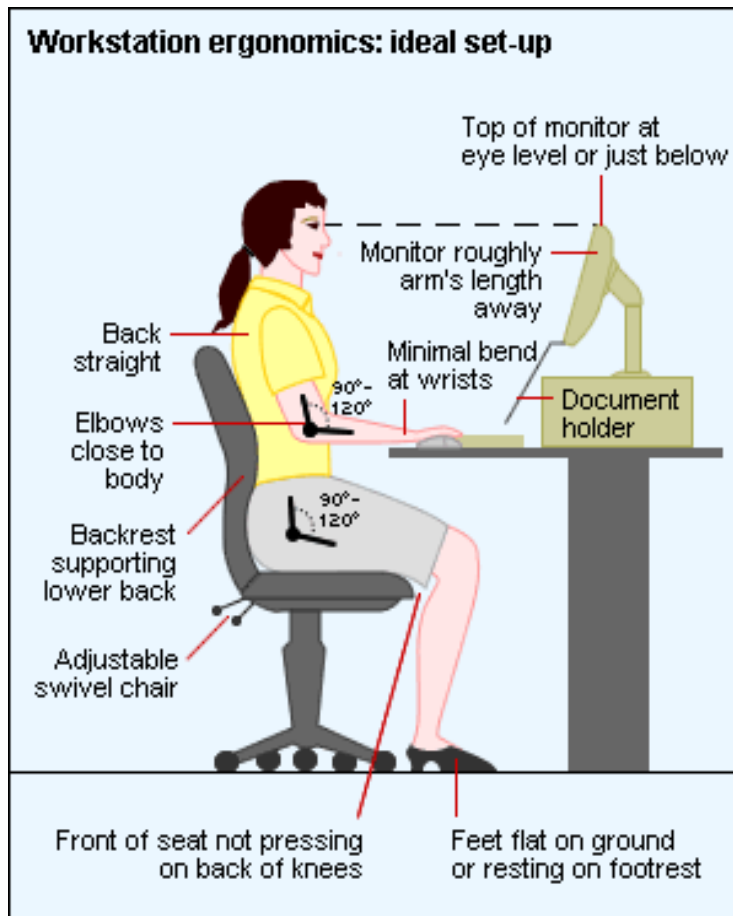
Office & Workstation Ergonomics



ACU Human Resources



Setting Up the Workstation



Some suggested steps for setting up a workstation:

1. Rest your feet flat on the floor or on a foot rest.
2. Keep your thighs parallel to the floor and avoid pressure on the back of the thighs.
3. Back rest should be upright and provide firm support on the lower back.
4. Shoulders relaxed and arms hanging loosely by your side.
5. Keep forearms loose and wrists straight.
6. Your document holder and screen should be placed at comfortable viewing distances.
7. Adequate leg room should be available under the work surface.
8. Adjust the chair height so that the level of the elbows is approximately the same height as the keyboard.



Work Surface Layout

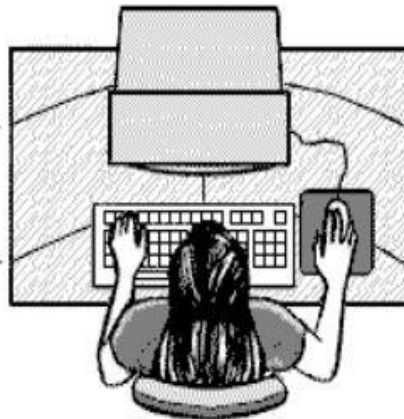
Helpful Hints

1. Avoid positioning items where trunk and neck rotation is required for use.
2. Ensure there is sufficient leg space underneath the desk.
3. Do not compromise leg space by the storage of items underneath the desk e.g. boxes, old equipment.

"Rare" zone: 26 in.+
 (~65 cm.+)

"Occasional" zone:
 10-20 in. (~25-50 cm.)

"Usual" zone: up to 10 in.
 (~25 cm.)



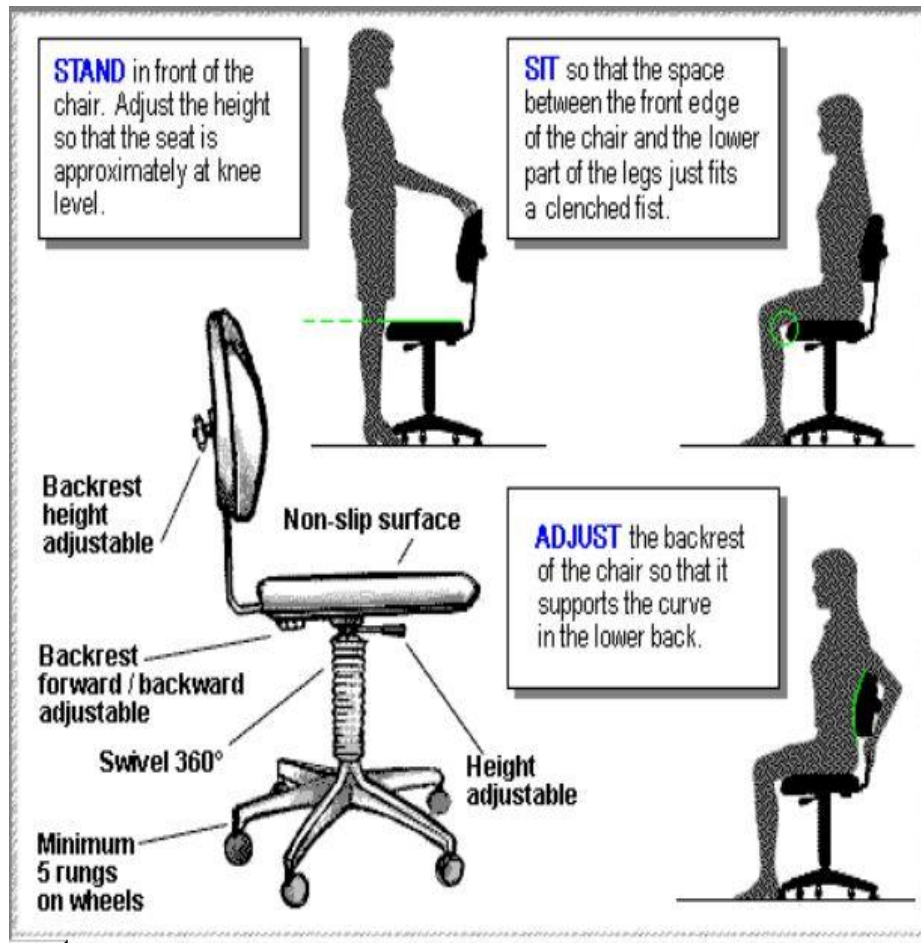
Usual Zone: This area should contain only items that are used most frequently, e.g. keyboard, mouse, note pad.

Occasional Zone: This area should contain items that are used periodically, e.g. telephone, calculator, in-out tray, rolodex.

Rare Zone: This area should contain only items that are seldom used or for display only, e.g. pen/pencil cup, desk plant, photos, clock.



Your Chair



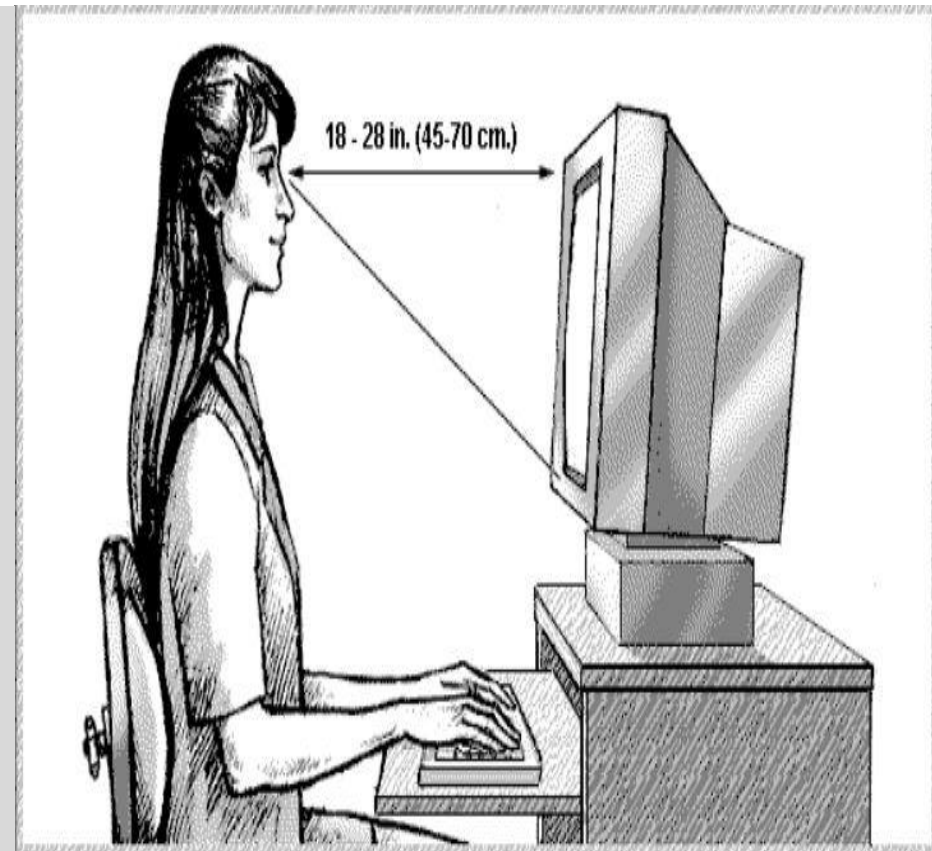
Useful Hints:

1. A good chair should have adjustable height, arms, seat back and lumbar support.
2. Armrests are optional, should be adjustable or removable and should not restrict movement or impede your ability to get close to the work surface.
3. Feet flat to floor. Footrest to be used where seat height is greater than lower leg length.
4. Place lumbar support slightly above waistline.
5. Allow 2-5 cm between the edge of the seat and the back of your knees.
6. If possible, use a high back chair that supports your shoulder blades.



Your Monitor/Screen

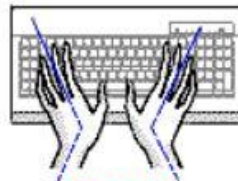
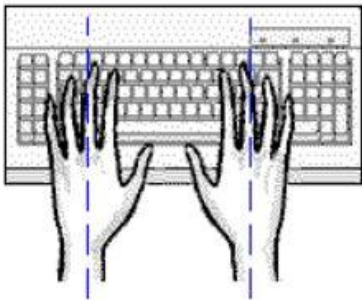
- **The ideal screen should be:**
 - ✓ About 75cm from your eyes, but this will depend on your vision;
 - ✓ Adjusted to ensure the top of the screen is about eye level; and
 - ✓ Positioned so your neck is at rest or relaxed.
- If your screen is not adjustable, place a wedge under one end to change the angle or place it on a stand if it's too low.
- Consider using a screen filter if reflections are a problem.



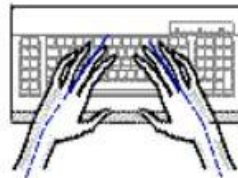


The Keyboard & Keyboarding

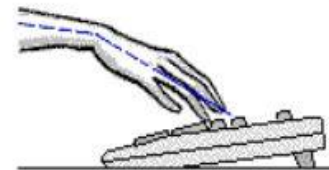
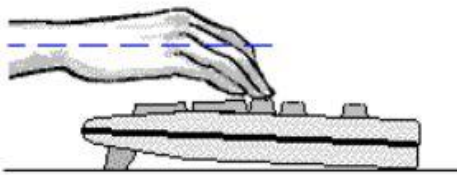
RIGHT!



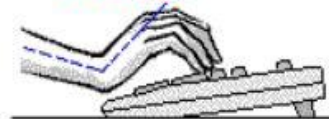
WRONG!



RIGHT!



WRONG!

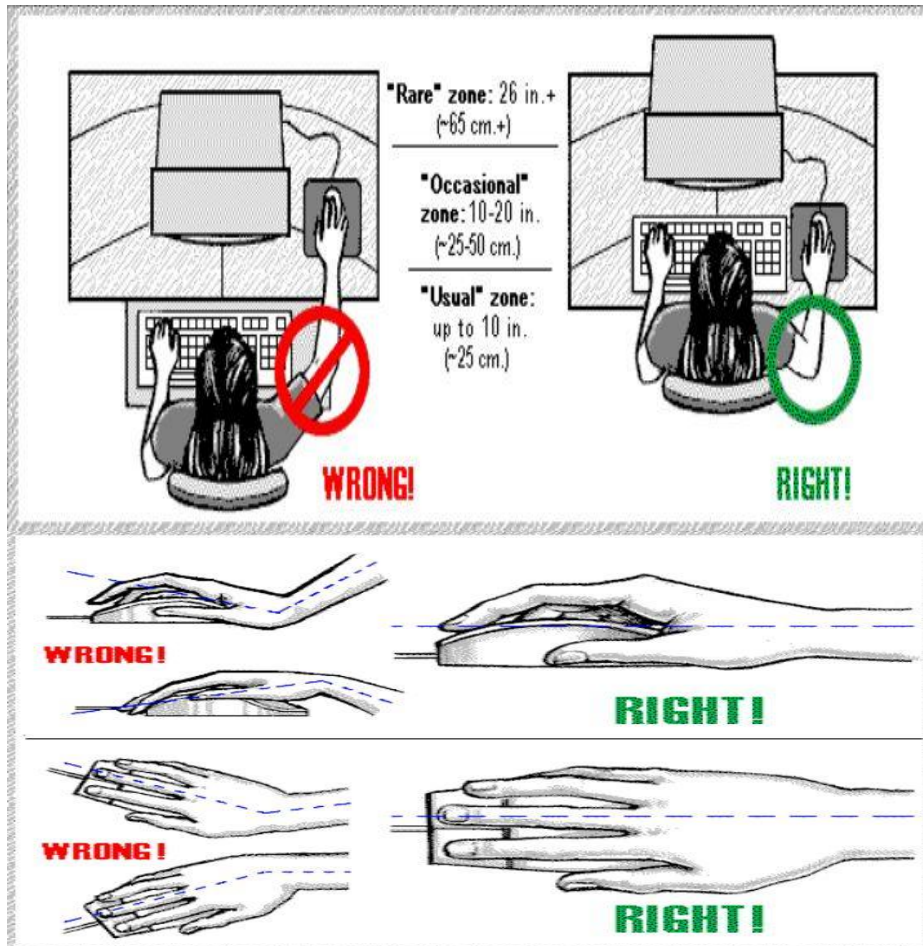


Helpful Tips:

- ✓ Keep forearms close to horizontal
- ✓ Keep wrists straight
- ✓ Hands should NOT be bent up, down or to either side in relation to your forearms.
- ✓ Elbows should be close to body
- ✓ Keyboard should be aligned with monitor and directly in front of you so you do not have to twist.
- ✓ Keyboard should NOT be so far towards you that your wrists rest on the sharp edge of the desk.



Your Mouse

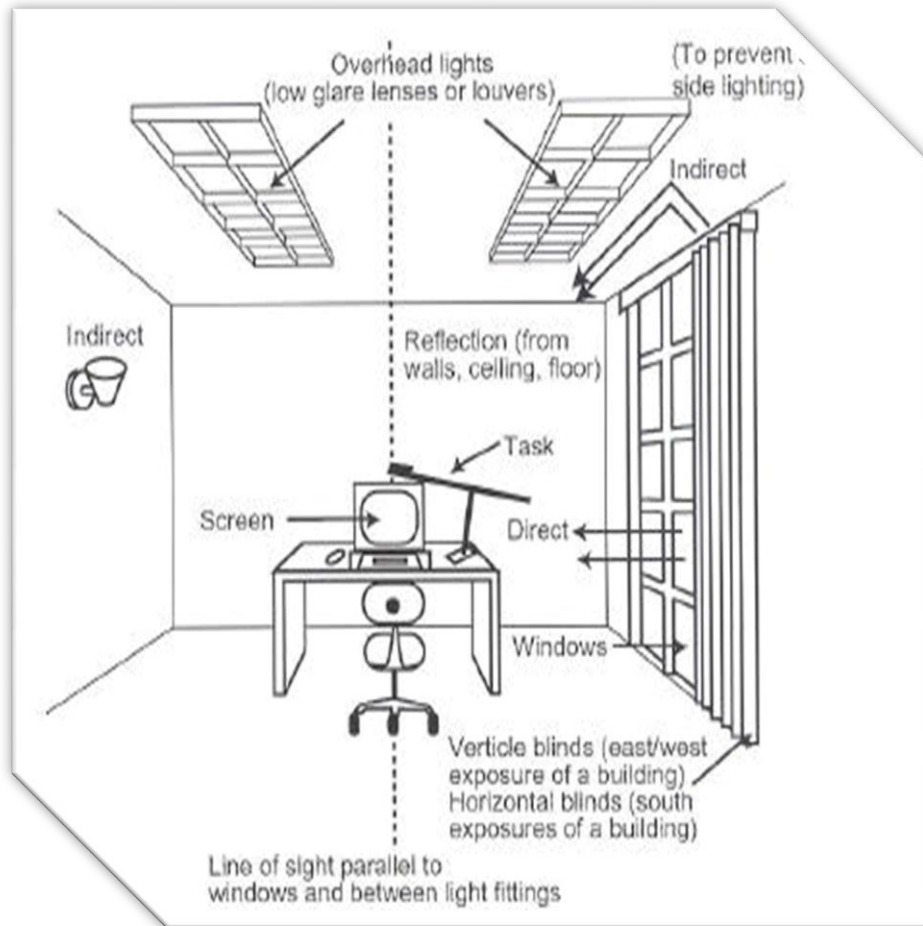


Helpful Hints:

1. Place mouse on the same level as and immediately next to keyboard tray.
2. Keep mouse in the arc line of the keyboard do that you reach it when rotating your arm from the elbow.
3. DO NOT use a wrist rest while using the mouse.
4. Your forearm needs to be free to move so you do not strain the wrist.
5. Mouse should fit size of your hand.
6. Wrist should be in a neutral position.
7. Fingers should be able to rest on the push buttons between actions.
8. Arm should be supported by the desk.
9. Minimise mouse use by using keyboard shortcuts where possible.



Office Lighting



Lighting should be directed so that it does not shine in your eyes and be adequate for you to be able to see the text and the screen.

Helpful hints:

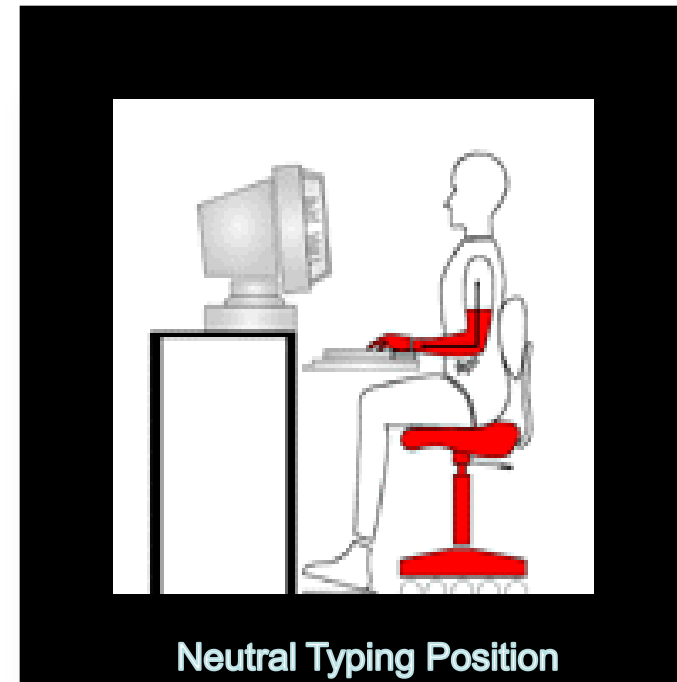
- ✓ Position your screen at a 90 angle to windows (where possible);
- ✓ Adjust the angle of the screen to reduce reflections and glare;
- ✓ Close blinds or curtains if necessary;
- ✓ Use a screen filter to cut down reflections and glare; and
- ✓ Turn some lights off if overhead lighting is too bright.



Posture & Work Habits

To avoid repetitive strain injuries, fatigue, headaches, eye strain, painful neck, back and shoulder injuries:

1. Change posture frequently to minimise fatigue.
2. Take short frequent breaks in which you move around.
3. Mix up your tasks during the day to encourage body movement.
4. Stretch neck, shoulders, wrists, back and ankles.
5. Do not cross your ankles – move feet often.
6. Body position should be neutral & comfortable e.g. "neutral position" of a straight hand, wrist, forearm.
7. Wrists should be kept straight.
8. Shoulders should be relaxed with elbows close to body.
9. Head, shoulders & back in vertical alignment.



Helpful Hint:

Having a colleague check your posture whilst sitting at your workstation may prove useful.



Ergonomic Exercises

- Ergonomic exercises are designed for users at their workstations and can help to reduce Headaches, Eyestrain, Neck, Back, Shoulder and Wrist pain.
- Brief breaks that include short exercises should be taken regularly during the time at your work station.
- Remember! that these exercises should not cause any pain or discomfort.
- Common areas that should be stretched and/or exercised throughout the day include:
 - Back
 - Neck
 - Eyes
 - Wrist and hands
- Examples of stretches and/or exercises for the back, neck, eyes, wrists and hands follow.





Ergonomic Exercises – The Back

(Source: <http://www.ergonomicsnow.com.au/exercises/back.htm>)

Forward Bend – Releases tension in the back

1. Sit comfortably on the chair, feet parallel and resting on the floor (see Figure 1)
2. Place hands on the knees, elongate the spine and back of the neck (see Figure 1)
3. Bend forward from the hips. Leading with the front of the body. (see Figure 2)
4. Release hands onto floor, resting the chest on the knees (see Figure 3)
5. Hold for 10 seconds, then gently come up



Figure 1



Figure 2

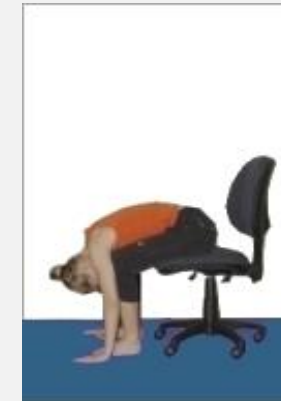


Figure 3



Ergonomic Stretching Exercises for the Neck

(Source: http://dohs.ors.od.nih.gov/ergo_computers.htm)

Side-bend: Neck Stretch

1. Tilt head to one side (ear towards shoulder)
2. Hold for 15 seconds
3. Relax
4. Repeat 3 times on each side



Diagonal Neck Stretch

1. Turn head slightly and then look down as if looking in your pocket
2. Hold for 15 seconds
3. Relax
4. Repeat 3 times on each side





Exercises to Rest Your Eyes

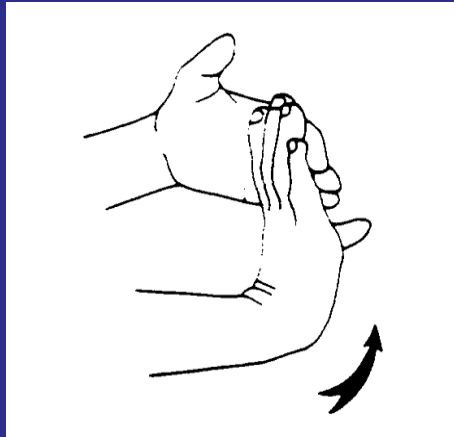
(Source: <http://www.canberra.edu.au/hr/health-safety/ergonomics/eye-exercises>)

	<ol style="list-style-type: none"> 1. Place your fingers gently on your temples as shown. Close eyes and experience the sensation of the upper eyelids touching the lower eyelids. Open for 3 seconds. Repeat 10 times. 2. Blink lightly and quickly as fast you can 10 times. <p><i>Note: Movement under your fingertips indicates that you are blinking too hard.</i></p>
	<ol style="list-style-type: none"> 1. Close your eyes. Imagine a giant clock directly in front of you with your nose at the centre. 2. Move eyes slowly and smoothly: <ul style="list-style-type: none"> • up and down (12 to 6) • Side to side (3 to 9) • Diagonally (11 to 5, 7 to 2) 3. Move eyes clockwise and then anti-clockwise slowly and smoothly in a complete circle
	<ol style="list-style-type: none"> 1. Rub palms together, cup warmed palms over (not on) closed eyes ... allow no light to enter. 2. Experience total darkness for 20-30 seconds 3. Take long, slow, deep breaths. <p><i>Note: Relax eyes, face, brow and jaw. Do not squeeze eyelids shut.</i></p>

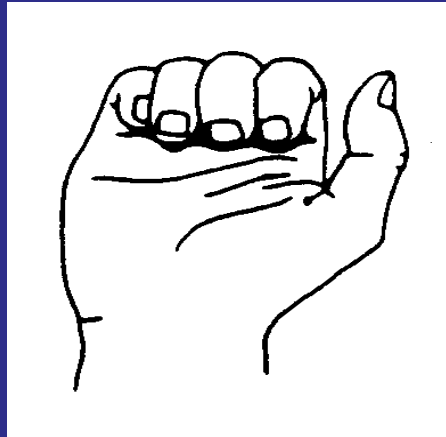


Ergonomic Stretching Exercises – Wrists & Hands

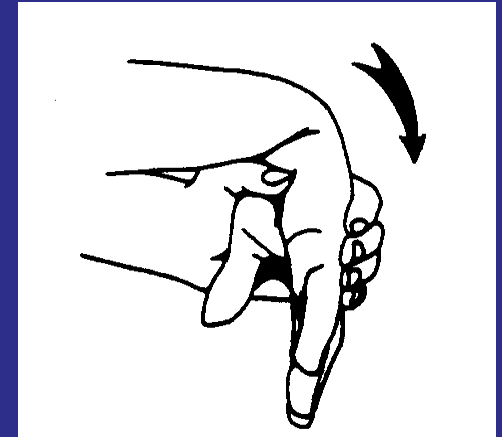
(Source: <http://www.risk-safety.admin.state.mn.us/pdfrtfs/stretch.pdf>)



1. Keep elbow straight
2. Grasp involved hand
3. Slowly bend wrist until a stretch is felt



1. Actively bend fingers of involved hand
2. Start with knuckles furthest from hand
3. Slowly make a fist



1. Keep elbow straight
2. Grasp involved hand
3. Slowly bend wrist down until a stretch is felt