



ERGONOMICS

WHILE WORKING REMOTELY:
WORKING FROM HOME GUIDE

Environmental Health & Safety Department

WHAT IS ERGONOMICS?

It's about making the environment fit you

to reduce stress on the body from job tasks to prevent health problems and improve work efficiency

- We know that too much time sitting or standing, poor posture, poor ergonomics and task design can have a negative effect on the musculoskeletal system. Research tells us that a sedentary working environment, that is inactivity like sitting for long periods of time, can have a negative impact on your body.
- **Humans are designed to move!** Dynamic muscle activity is essential for proper blood flow, nourishment, and oxygenation of tissues.
- Many employees working from home use their kitchen table or couch as their workstation, which can make adhering to best practices more difficult.
 - ❑ Risks of Poor Ergonomics:
 - Musculoskeletal Disorders (MSDs) from: awkward/static postures, repetition
 - Increased fatigue
 - Low productivity
 - Damage to nerves, interruption of blood flow, and trauma to soft tissues through contact stress
 - Spinal disc degeneration through prolonged sitting (lower back more susceptible due to slumped postures)

MUSCULOSKELETAL DISORDERS (MSDs)

- One of the most reported work-related illnesses
- Characterized as discomfort and pain in joints, muscles, and soft tissues
- Common types include strains, sprains, tendonitis, and ligament damage
- Early intervention/reporting
 - Prevents progression to larger issue
 - Quicker recovery time

High Risk Postures Associated w/ MSDs

- Neck:
 - Forward head posture / flexion – common when slumped or looking down to read
 - Extension – looking up
 - Combined – head forward of shoulders w/ chin tilted up; sitting slumped and/or wearing multifocal lenses
 - Lateral flexion – side bending
- Back:
 - Trunk flexion – seated position
- Shoulder:
 - Flexion/Abduction – elevating shoulder in frontal or lateral plane (reaching)
- Elbow:
 - Flexion/Extension – Static or repetitive inside or outside neutral (90 degrees)
- Wrist:
 - Flexion/Extension – deviation from straight position



Possible Pathway to MSDs

MSD injuries may begin as fatigue or stiffness; as the injury progresses, the pain comes and goes and eventually the pain becomes continuous. If action is not taken, the injury can result in loss of function. (2)

SETTING UP YOUR SPACE

- Have a dedicated work location
- Ensure adequate lighting – natural light is best and always beware of glare
- **Office versus Home:**
 - While in the office we likely had a nice large set up with multiple adjustable monitors but now we are working from a laptop. What does this mean? How does this impact us?
 - Smaller screen (harder to see, may lead to leaning forward/slumped postures), inability to raise screen to eye level (flexing neck down), contact stress on wrists and forearms while typing, smaller typing area (awkward posture in hands, wrists, elbows, shoulders)
 - Office chair to dining chair. While the dining chair is a better alternative to setting up on the couch, it still poses a lot of ergonomic problems.
 - No adjustability for height or angles (cannot adjust to non-adjustable work surface like your kitchen table, cannot angle seat pan or seat back), hard surfaces (contact stress), no lumbar support (creates slouching postures)
- Due to the awkward posture you are likely to be in, try to break more regularly than you would in the office. Aim for a rest break every 15-20 minutes.



Contact Stress

- Direct pressure on tissues from pressing on hard objects
- Table/desk/chair surfaces and edges, arm rests




Move!

- Set a timer
- Stand up
- Perform stretches
- Walk around



WHAT'S IDEAL?




BODY POSITION

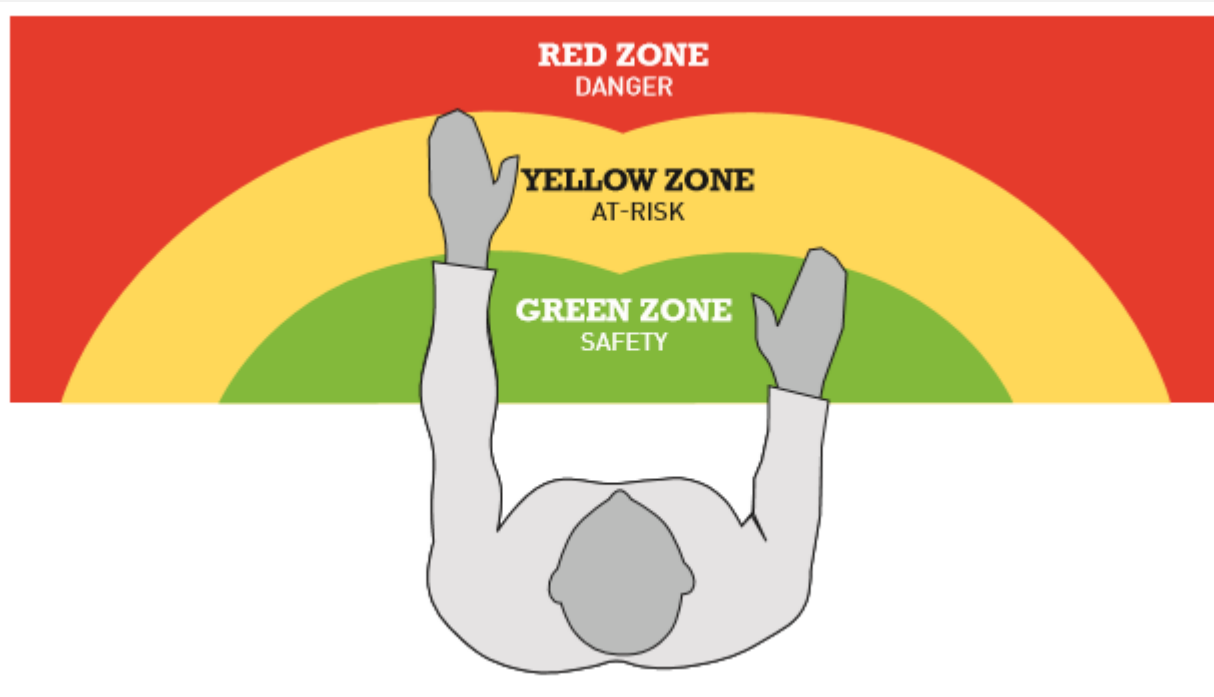
- Legs parallel to the floor
- Feet out in front and flat
- Lumbar support positioned to the natural curve of spine
- Elbows at 90-degree angle
- Forearms parallel to the floor
- Wrists straight while typing/mousing
- Shoulders back and relaxed

EQUIPMENT

- Top of monitor screen in line with eyebrows
- Keyboard/mouse close to body
- Document holder to prop up papers



WORKSTATION ERGONOMICS LEVERAGE ZONES



Information provided from SAIF Corporation

GREEN ZONE | SAFETY

- Elbows are close to your body.
- Pivot point is your elbow.
- Less force is needed to lift, because weight is closer to your body.
- Low back muscles work less.

YELLOW ZONE | AT-RISK

- Elbows are about six inches from your body.
- Pivot point moved to your shoulder.
- Force moves to your shoulder and upper back, can be up to six times greater than green zone.
- Shoulder muscles rely on back muscles for help.

RED ZONE | DANGER

- Arms and elbows are stretched straight out from your body.
- Pivot point changes to your low back.
- Force on your low back can be up to 50 times greater than green zone.
- Back muscles engage to complete task.

WORKING AT HOME TIPS



- Use a laptop stand to raise to eye level
 - May also stack books
 - This set up will require an external keyboard and mouse
 - If you can't raise your laptop, you'll likely be flexing your neck often to look down – make sure you regularly look up
- Keep your laptop close to edge of your desk
 - Prevents: Leaning forward, contact stress, reaching
- Sit on a seat cushion
 - Memory foam ergonomic seat cushions
 - May also use pillows
- Use an external mouse instead of laptop trackpad
- Support your lower back with an external lumbar support
 - A small pillow or rolled up towel would work as well
- If you're using a tablet avoid typing on the screen whilst flat. This may hurt your neck and wrist. Use a stand and Bluetooth keyboard to keep your hands in a more comfortable position, this will also raise the screen and help reduce neck strain.

STRETCHES

Use caution when performing stretches. Stop immediately if you experience any pain.
These stretches will help counteract some of the effects of poor posture.

Hold each stretch for 5-10 seconds.

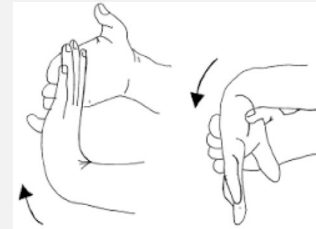
Back Extension

- Perform every time you stand up
- Move hips forward and lean back



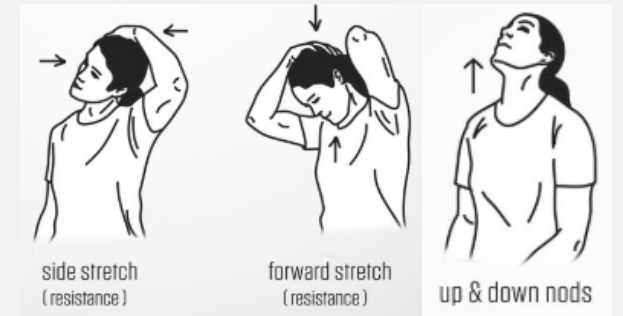
Wrist Stretch

- Flex/extend your wrist
- Carefully apply light pressure



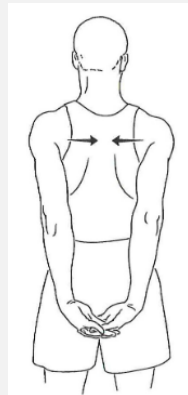
Neck Stretches

- Stretch to sides and apply light resistance
- Tilt head down and apply light resistance
- Perform several up/down nods



Shoulder/Back Stretches

- Clasp hands behind back
- Squeeze shoulder blades, keeping hands close to body
- Hold stretch



- From that position, slowly raise your arms until you feel a comfortable resistance
- Hold stretch



- Raise arms overhead
- Reach and hold
- You may also side stretch to the left and right



RESOURCES

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Contact for questions or help with setting up your workspace

Available for consult through email, Zoom, or Google Hangout

You may also place a [work request](#) for a remote ergonomic assessment

- [SAIF Corporation Ergonomics Webpage](#)
- [OSHA Workstation eTool - Self-Evaluation Checklist](#)
- [Working From Laptops Factsheet](#)
- [Working From Tablets Factsheet](#)
- [Mobile Working Exercises](#)