

# “Oh My Aching Back”

Trying To Stay Pain Free While Working Remotely

Presented By

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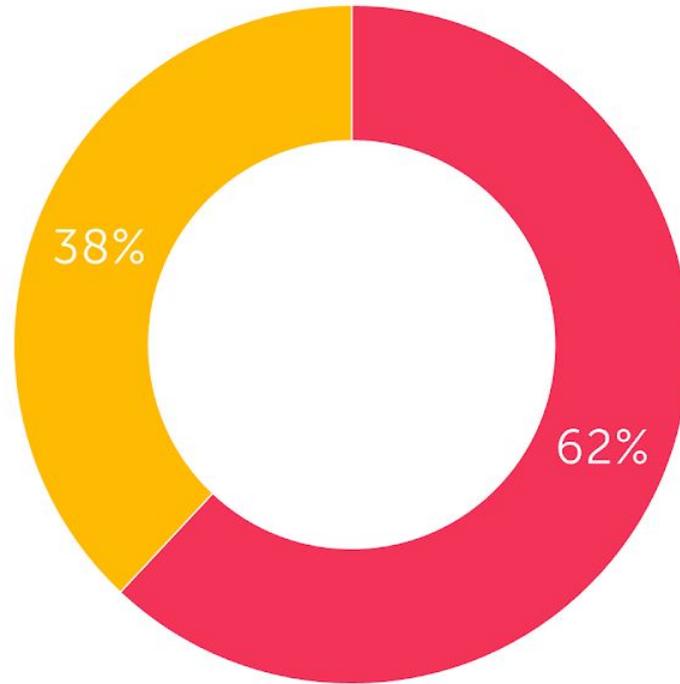
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# The Shift to Working Remotely

- Prior to the Covid 19 Pandemic: “According to a report by Pew Research Center based on data from the Bureau of Labor Statistics’ most recent National Compensation Survey, Only 7% of workers in the U.S. had access to a “flexible workplace” benefit or telework . In Europe, most countries had up to 10% of employees working remotely, up to 20% in Sweden, Netherlands, and Denmark.<sup>1</sup>
- At present time , during the Pandemic, 62% of Americans currently say they are working from home during the crisis according to Gallup Panel<sup>1</sup>

Source: TalentLyft.com

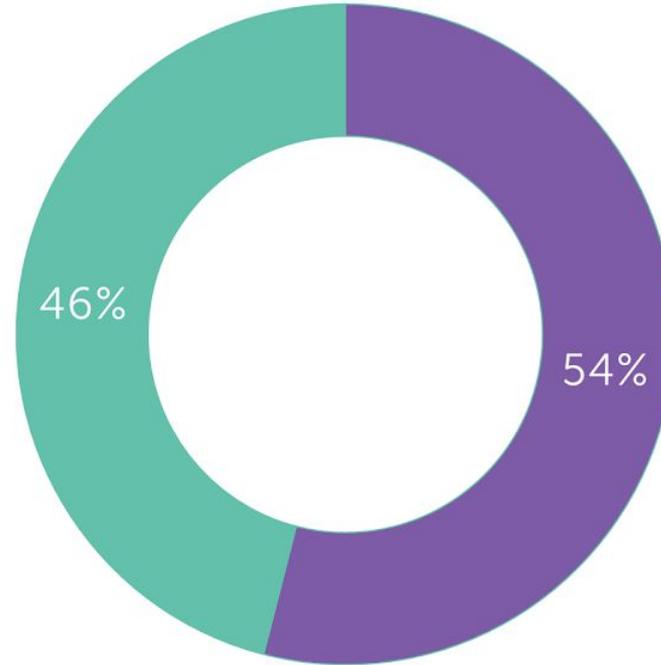
# Remote work during COVID-19



62% of US employees are working from home due to COVID-19.

Source: Gallup

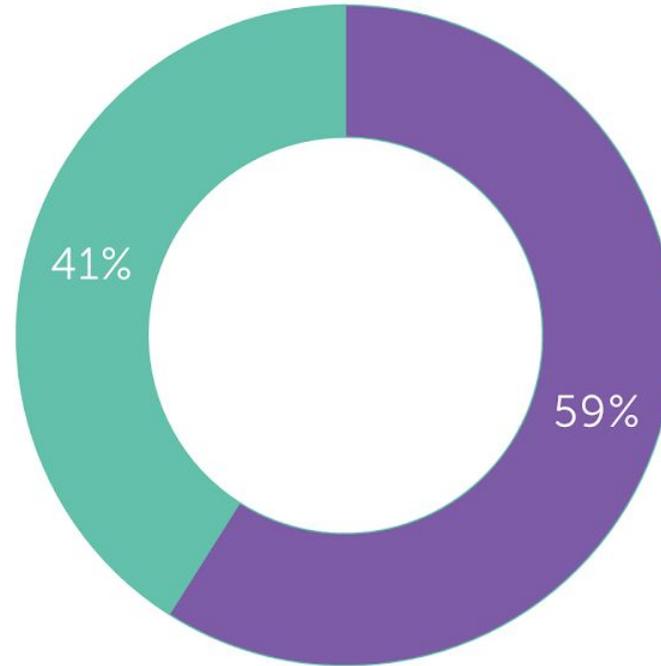
# Remote work – sought after perk



**54% of office workers would be willing to quit their job for one that allows them to work remotely.**

Source: Gallup

# Remote work after COVID-19



**59% of US workers who have been WFH during the COVID-19 prefer to continue to work remotely.**

Source: Gallup

# More interesting facts:

- Recent research by [Gartner](#) found that 74% of companies they surveyed expect some of their employees to continue working remotely after the pandemic ends.<sup>1</sup>
- In a recent [Citrix-One-Poll study](#) of 10,000 global employees, 69% of respondents report that they are more focused and productive when working from home than they are in the office.<sup>1</sup>
- 99% of people say they'd like to work remotely at least some of the time for the rest of their careers, as reported by [ResumeLab](#).<sup>1</sup>
- This is why almost half of those employees would like to continue working from home even after the pandemic. Employees want to work from home because this allows them to save time on an everyday commute, have a better work-life balance and make them more productive. <sup>1</sup>

# What is “Ergonomics?”

Ergonomics can roughly be defined as the study of people in their working environment. The goal is to eliminate discomfort and risk of injury due to work.<sup>2</sup>

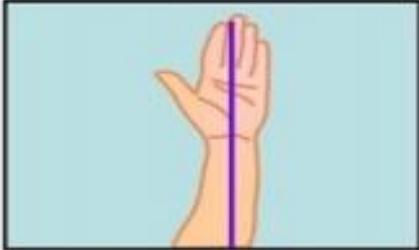
Officially:

*“Ergonomics (or human factors) is the scientific discipline concerned with the understanding of the interactions among human and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimize human well-being and overall system performance.”*

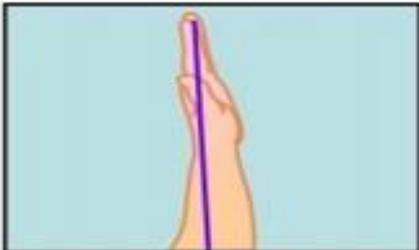
*International Ergonomics Association Executive Council, August 2000 <sup>2</sup>*

## Neutral Posture

View #1  
(minimal radial/ulnar deviation)

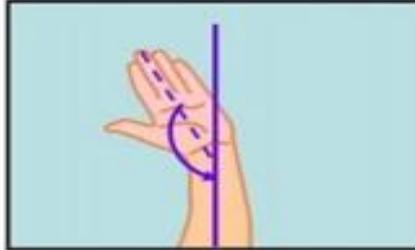


View #2  
(minimal flexion/extension)

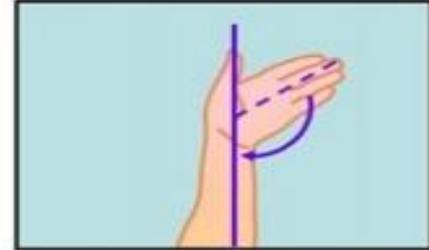


## Awkward Postures

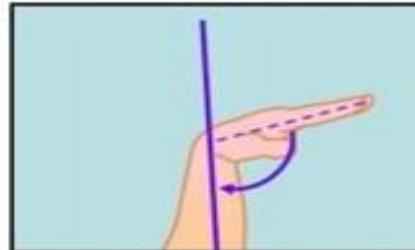
Radial Deviation



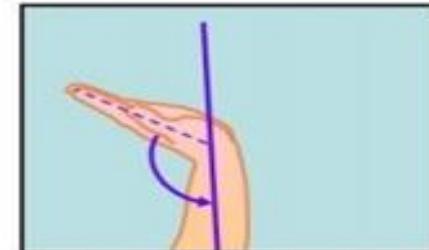
Ulnar Deviation



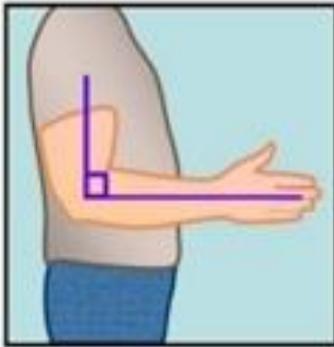
Flexion



Extension

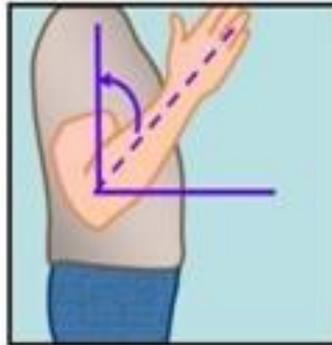


## Neutral Posture

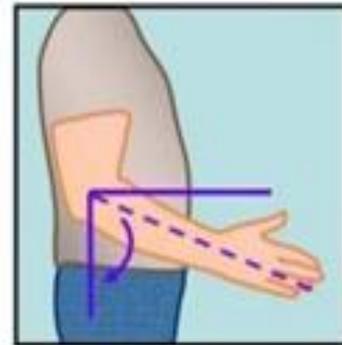


## Awkward Postures

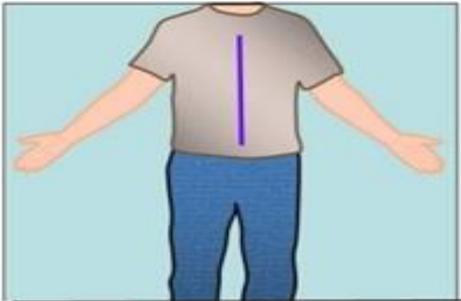
Elbow Flexion



Elbow Extension

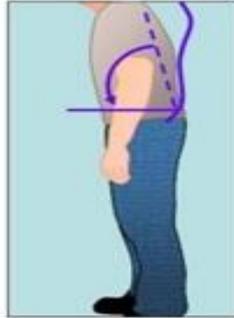


## Neutral Posture

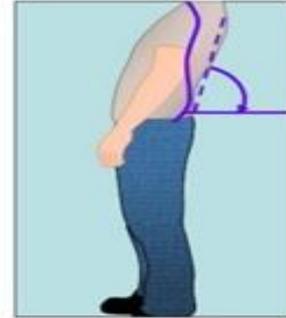


## Awkward Postures

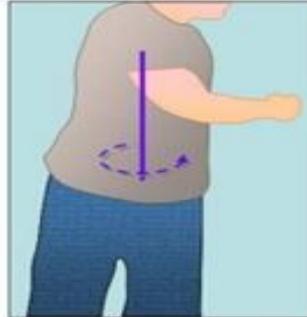
Back Flexion



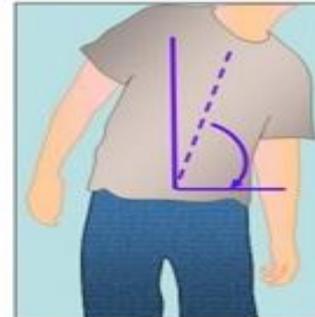
Back Extension



Twisting about Waist



Lateral Bending



# Repetitive Stress Injuries

Repetitive stress injuries (RSI) occur by repeatedly performing the same or similar movements over a period of time. This can ultimately result in injury to the soft tissues, such as muscles, nerves, and tendons. We know these injuries by various names - tennis elbow, tendonitis, bursitis, carpal tunnel syndrome, and, more recently, texting thumb. With over 25 bones, our hands can be one of the most common joints affected by **RSI**.

Symptoms of **repetitive stress injuries** include sore, achy joints, a tingling or numbness in the area, and weakness. RSI **injuries** typically develop over time, and get worse as time goes on and the movements are repeated again and again. RSI injuries are not life threatening, but they can be painful and incapacitating.<sup>3</sup>

Musculoskeletal disorders, which include more than 100 different types of disorders, make up about 30 percent of all workplace injuries that result in lost workdays. They also account for a third of the money doled out in workers compensation claims. According to the Occupational Safety and Health Administration (OSHA), RSI affects some 1.8 million workers per year. One government study puts the cost of RSI between \$17 billion and \$20 billion a year. <sup>4</sup>

According to one survey, nearly 60 percent of computer office workers nationwide suffer from wrist pain while at the computer, and 51.2 percent say their keyboards are placed too high. But ergonomics are not the only problem: 49.7 percent of employees say they ignore recommendations to take breaks from their computers. <sup>4</sup>

# Transition From Work to Home

According to The New York Times:

“In an April Facebook survey from the American Chiropractic Association, 92 percent of chiropractors (out of 213 respondents) said that patients report more neck pain, back pain or other musculoskeletal issues since the stay-at-home guidance began.

The typical pattern: In March, people thought they would work from home for just a couple of weeks, so it was no problem to work from the couch. Or perhaps their spouse or roommate, also working from home, claimed the one serviceable desk.<sup>5</sup>

For many people, what they thought would be a temporary work-from-home arrangement has become the norm. And with many schools and colleges opening remotely this fall, the problem is even more widespread.<sup>5</sup>

# Anticipate Increase in RSI

In the home, working chairs are unlikely ergonomic. Many people are sitting on kitchen chairs, stools that are not height adjustable. Some companies, such as Raytheon, have purchased office chairs for their employees to use at home to help with this problem.

People are sitting on sofas with their laptops on pillows, or sitting at a desk that is too high or too low.

People are less mobile through the day as they no longer need to walk to someone's office to ask a question, or walk to the lunch room to get coffee.

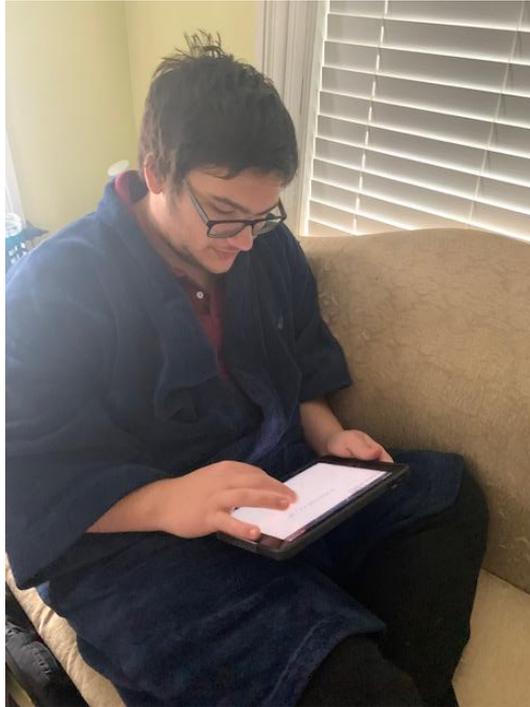
As stated in NY Times article, often multiple people working from the home including spouses and children, making it difficult to create set workspace.

# Workstation Example #1



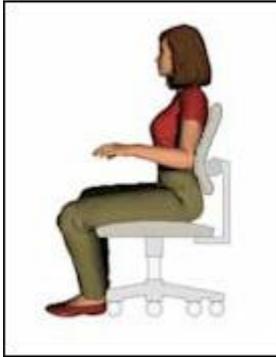
This woman is working remotely while also caring for her mother. Her computer setup is on a card table with her monitor attached by a clamp. She does have an external keyboard which is larger than that of the laptop. However, she is sitting on a low sofa that does not provide any back support.

## Workstation Example #2



In this example, the student is sitting on the sofa with his IPAD on his lap. His forward head and rounded shoulders increase the possibility of a repetitive stress injury. Ironically, he has a desk with an office chair in the same room.

# Sitting Posture Recommendations



Ideal sitting position . elbow, knee, hip at 90°

All these positions are considered neutral positioning for the spine.

# What to look for in your chair:

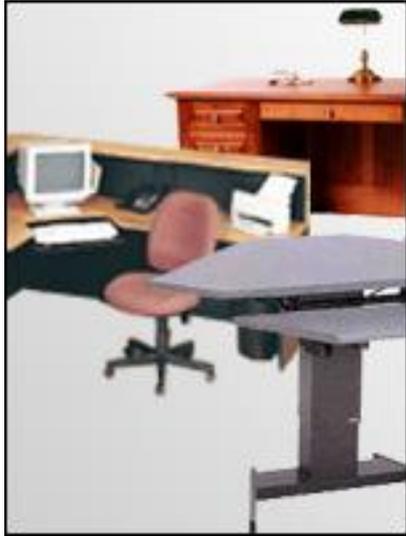
A good chair provides necessary support to the back, legs, buttocks, and arms, while reducing exposures to awkward postures, contact stress, and forceful exertions.

## Chair Quick Tips

- The backrest should conform to the natural curvature of your spine, and provide adequate lumbar support.
- The seat should be comfortable and allow your feet to rest flat on the floor or footrest.
- Armrests, if provided, should be soft, allow your shoulders to relax and your elbows to stay close to your body.
- The chair should have a five-leg base with casters that allow easy movement along the floor.



# What to look for in your desk:



## Desk Quick Tips

- Desk surface should allow you to place the monitor directly in front of you, at least 20 inches away.
- Avoid storing items, such as a CPU, under desks.
- Desks should be able to accommodate a variety of working postures.

# Do I need a document holder?

Document holders keep printed materials needed during computer tasks close to the user and the monitor. Proper positioning of document holders depends on the task performed and the type of document being used. Appropriate placement of the holder may reduce or eliminate risk factors such as awkward head and neck postures, fatigue, headaches, and eye strain.

## Document Holder Quick Tips

Documents should be at the same height and distance as the monitor.



# Keyboard: To split or not to split?

Keyboards, **pointing devices**, or **working surfaces** that are too high or too low can lead to awkward wrist, arm, and shoulder postures. For example, when keyboards are too low you may type with your wrists bent up, and when keyboards are too high, you may need to raise your shoulders to elevate your arms. Performing keying tasks in awkward postures such as these can result in hand, wrist, and shoulder discomfort.



- Adjust the chair height and work surface height to maintain a **neutral body posture**. Elbows should be about the same height as the keyboard and hang comfortably to the side of the body. Shoulders should be relaxed, and wrists should not bend up or down or to either side during keyboard use.
- A keyboard tray (Figure 1) may be needed if the work surface or chair cannot be properly adjusted.

# Choosing Your Monitor

## Monitors

Choosing a suitable monitor and placing it in an appropriate position helps reduce exposure to forceful exertions, awkward postures, and overhead glare. This helps prevent possible health effects such as excessive fatigue, eye strain, and neck and back pain.



# Mouse vs. Trackball vs. Touchpad



Pointing devices such as a mouse now come in many sizes, shapes, and configurations. In addition to the conventional mouse, there are trackballs, touch pads, finger tip joysticks, and pucks, to name a few. Selection and placement of a pointer/mouse is an important factor in creating a safe computer workstation.

## ■ **Pointer/Mouse Quick Tips**

Keep the pointer/mouse close to the keyboard.

Alternate hands with which you operate the pointer/mouse.

Use keyboard short cuts to reduce extended use.

# Wrist or Palm Supports



Wrist or palm rests can also increase your comfort. Although opinions vary regarding the use of wrist/palm supports, proper use has been shown to reduce muscle activity and to facilitate neutral wrist angles.

# Other Devices



A yoga ball chair is thought to engage the core more when sitting

An adjustable height desk could be used sitting or standing



An under the desk treadmill could provide exercise while working

- Make sure your work station is set up to put the minimum amount of stress on your hands and back. Adjust it so that you can sit comfortably while typing.
- Try to use a soft touch while keying in information.
- Set up your monitor so it is directly in front of you, with the top of the screen at or slightly below eye level.
- Be sure your keyboard and mouse are low enough to allow you to relax your shoulders; install a keyboard tray if necessary. When you're typing, make sure your wrists are straight (and level with your elbows). Never rest your wrists on the desk or armrests while you are typing or using a mouse or trackball.
- Don't bend your hands up at the wrists, even if you're using a wrist rest.
- Sit up straight and make sure your chair supports your spine.

- Keep your feet flat on the floor.
- Stretch frequently while at the computer. If you're not suffering hand pain, make circles with your wrists and stretch your fingers back to ease up on pinched nerves and increase microcirculation. If your home is too cold, try to keep your hands warm by using gloves with the fingertips cut off.
- Take frequent breaks. Take a "minute break" every 15 minutes and a five-minute break every 20 to 30 minutes.
- If you have symptoms of RSI, cut down on your computer use. Try leaving a voicemail message instead of sending e-mails, and take notes by hand instead of using the computer.

# Exercises to prevent repetitive strain

## **FINGER STRETCH**

Extend your arm in front of your body, with palms facing away from you and fingers pointed down. With your fingers spread apart, gently massage each finger from the base to the tip. You can also hold the tip of each finger and gently stretch it towards your chest. Start with your pinky and end with your thumb.

## **ONE-ARM WRIST STRETCH**

Similar to the finger stretch, extend your arm in front of your body with palms facing away from you and fingers pointed down. Keeping your shoulder down and relaxed, grab the tips of all your fingers with your other hand and stretch them towards your chest. To stretch the top of your wrist, flip your hand so that your fingers and palm are pointed down. Grab the tips of all your fingers with your other hand and stretch them towards your chest.

# More exercises

## **WRIST ROLLS**

Make both hands into a soft fist and roll your wrists in circles 10 times in each direction. After that, make a prayer hand and touch your inner wrists together. Roll your wrists so that your inner wrists touch, and then your outer wrists touch, and so on. Your fingers should be following the movement.

## **FINGER-WRIST-SHOULDER STRETCH**

Interlace your fingers and stretch your arms horizontally out, with palms facing away from you. Keep your shoulders pressed down while you're doing this. After holding this stretch for 20 seconds, keep your fingers interlaced and slowly move your hands and arms over your head, palms facing the sky. Focus on keeping your shoulders pressed down and engage your core. Hold this stretch for 20 seconds as well.

# Exercises continued...

## **SHOULDER ROLLS**

Roll your shoulders up towards your ears then back down in a circular motion. Visualize it as a circular shrug. At the height of this stretch, you can hold your shoulders still for a second, then come back down. Do this stretch 5 times, then repeat in the other direction.

## **FOREARM STRETCH**

Standing next to a desk or table, place both hands down with fingers pointed towards you. Keeping the base of your palms on the table, slowly shift the weight of your body to your heels while leaning back. You should feel a nice stretch on your forearms. Be mindful to not hurt your low back while you're leaning back.

Also- Get out and WALK! Try YOGA, strength training anything!! Drink plenty of fluids, take frequent rests, set a timer to get up and walk or stretch. Turn off your email at the end of the day and disengage , de stress!

Questions?

# Sources

- 1) COVID-19 & Work From Home Stats: Is Remote Work Here to Stay?

Anja Zojecka, TalentLyft.com May 18,2020

- 2) [www.ehc.unc.edu](http://www.ehc.unc.edu): UNC Institutional Integrity and Risk Management

- 3) [www.advancedct.com](http://www.advancedct.com): Repetitive Stress Injuries: Why Ergonomics Matters

- 4) Bernard, BP. Musculoskeletal Disorders and Workplace Factors: A critical review of epidemiologic evidence for work-related musculoskeletal disorders of the neck, upper extremity, and low back. U.S. Dept. of Health and Human Services. Center for Disease Control and Prevention. National institute for Occupational safety and Health. Cincinnati, Ohio.

# Sources

5) The Pandemic of Work-From-Home Injuries, Jeff Wilser, New York Times, 9/4/2020