

New Ergonomic Trends in Office Ergonomics

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A little about me

- Ergonomist with 25 years of experience
- Prior, working as a graphic designer, I developed repetitive strain injury resulted from excessive work with a computer mouse
- I retrained as an ergonomist and graduated from San Jose State University with a Masters degree in Human Factors and Ergonomics

Reducing MSD's



Goals Remain the Same

- Decrease injuries
- Reduce Risks
- Hazard Identification
- Reduce costs

Prevention

- is your best measure
the key to reducing time loss
due to work place injuries
in contrast to a cure

Medical vs Industry Cost (per individual)

Surgery, medicines, splints and therapy:

Payments while off work:

Replacement staff or replace worker:

Cost of BEST Ergonomic Modifications

(this number includes: sit/stand adjustable desk, good ergonomic chair, dual monitor arms, ergo keyboard and mouse)

Usually LESS!

A resource: Washington_State_Ergonomics_Cost_Benefit_Calculator_2016_version
<https://www.pshfes.org/cost-calculator>

Working from home without appropriate equipment or workplace assessments has increased MSD

- More than 1/3 reported more aches, pain and discomforts in the **neck (37%)** and **back (35%)** than usual.
- An increased level of fatigue was seen at **42%**
from: Wellbeing under lockdown, Occupational Health at work
- With **two in five** workers reporting new pain or increased pain in their shoulders, back or wrists, it's time to make home workstations more ergonomically sound.

<https://news.chubb.com/Chubb-Survey-of-Americans-Working-from-Home> Ergo Pandemic Study: Chubb

Risk of Not Correcting/Injury Prevention

- If you expose yourself to the risk factors and perform poorly, injury can result
- Warning signs: pain, fatigue, numbness, tingling, weakness etc
- Symptoms can be intermittent or persistent but listen to them and INSPECT what you are doing and HOW!

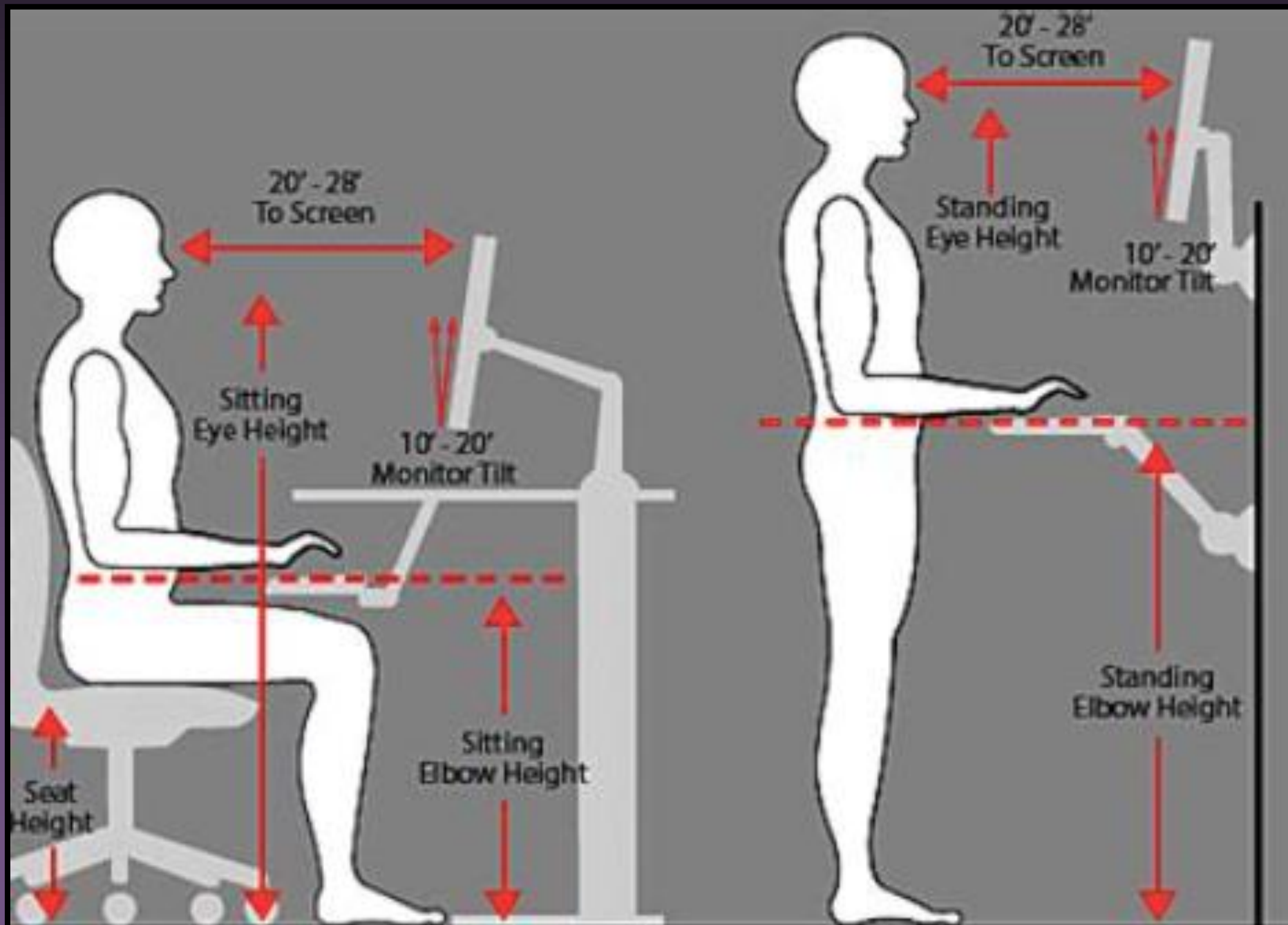
NEUTRAL POSTURE

- Sit on 'sitz' bones with good alignment
- Line up your ear, shoulder, elbow and hip
- Eyes should be 1-2" from the top of the monitor
- Bend your elbow so forearm is parallel to ground while maintaining your natural hand and wrist position
- Hips should be higher than knees

Red area are the "sitz" bones.

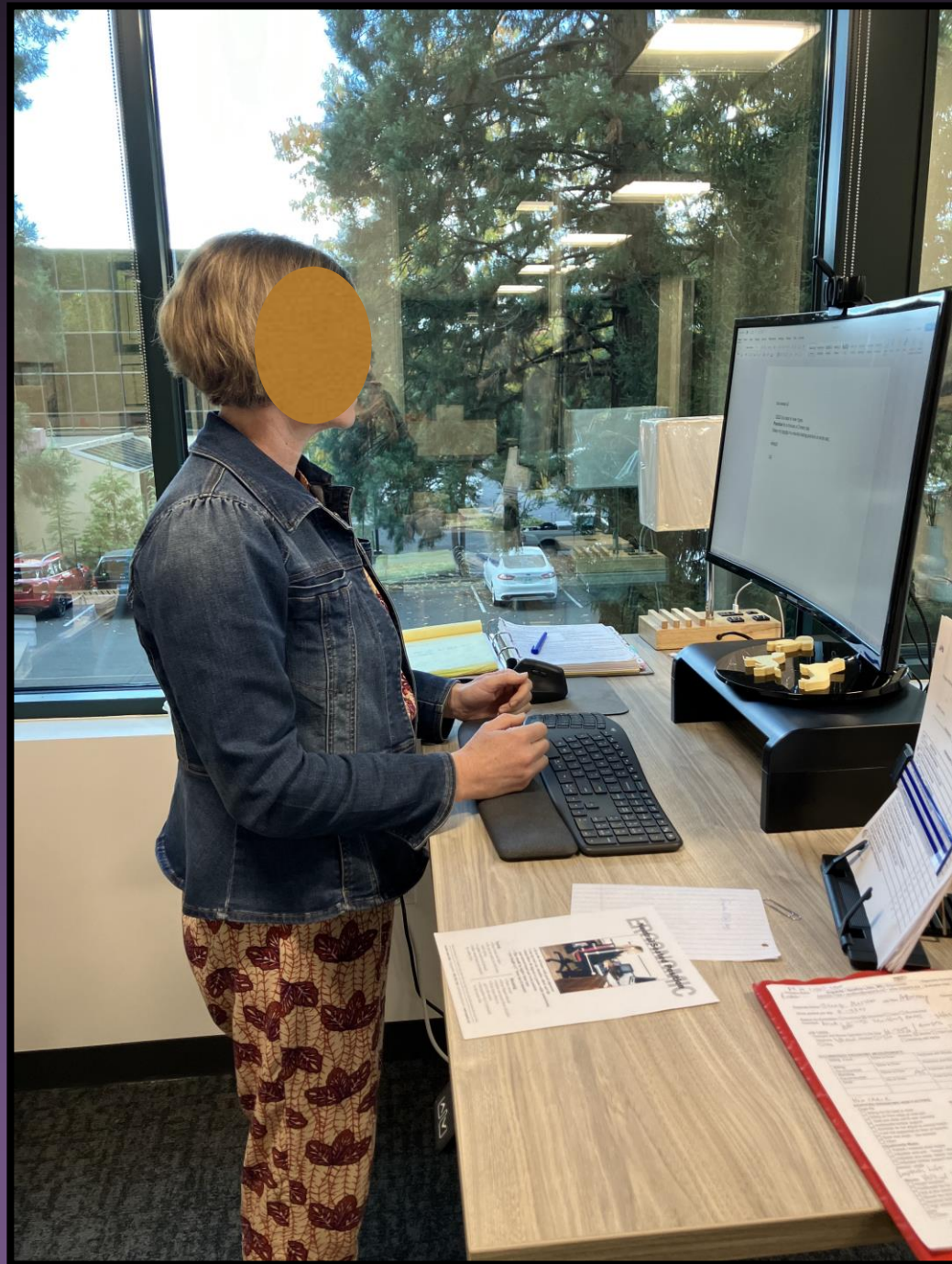


SITTING/STANDING



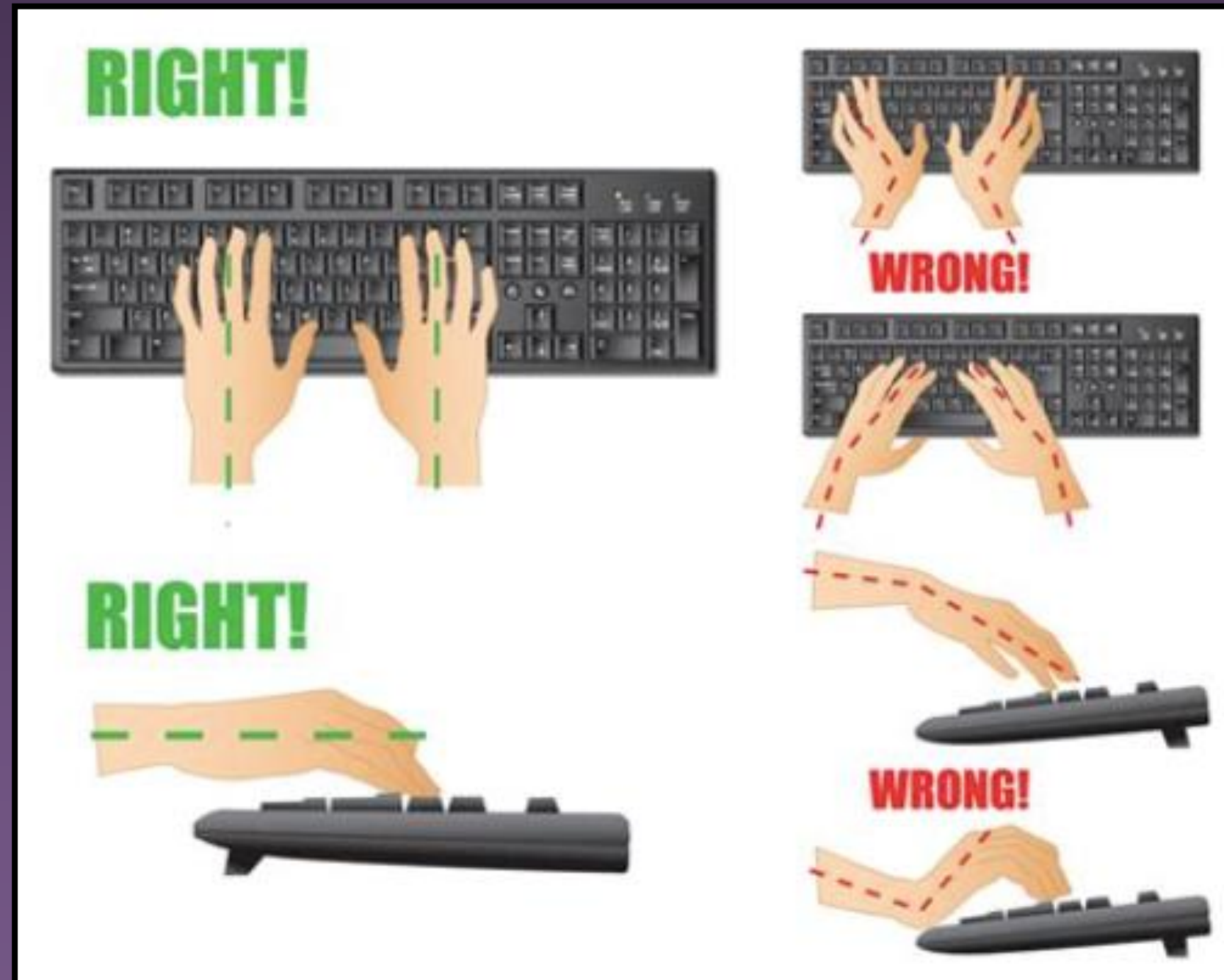


Standing

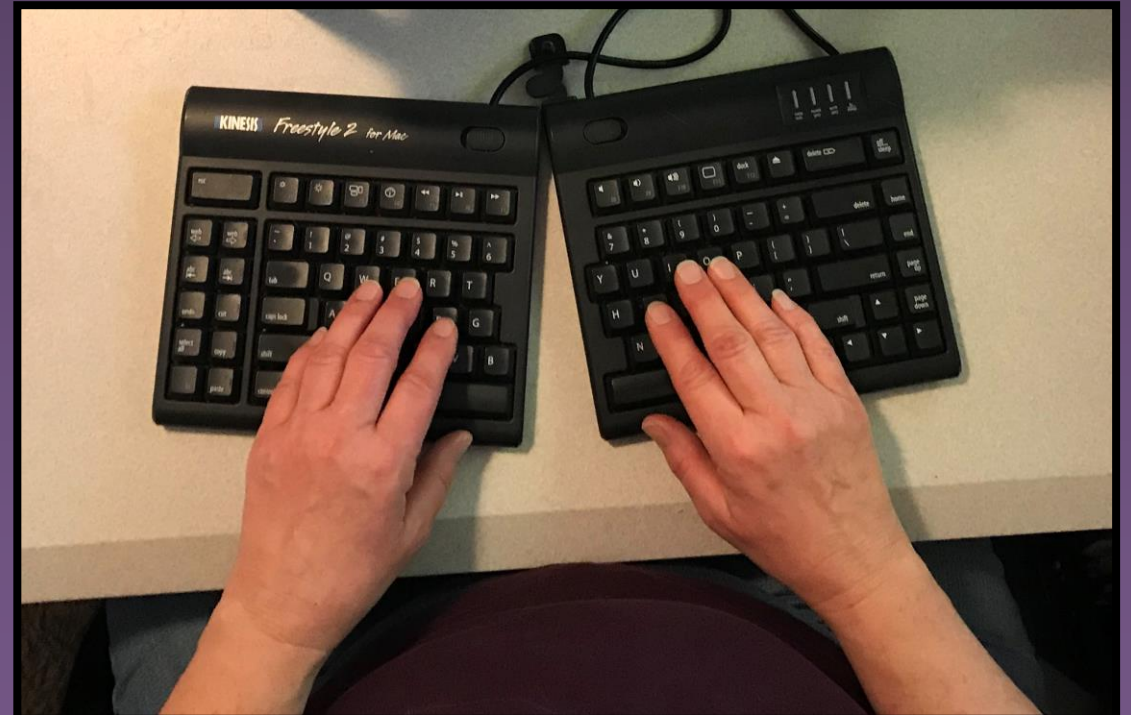
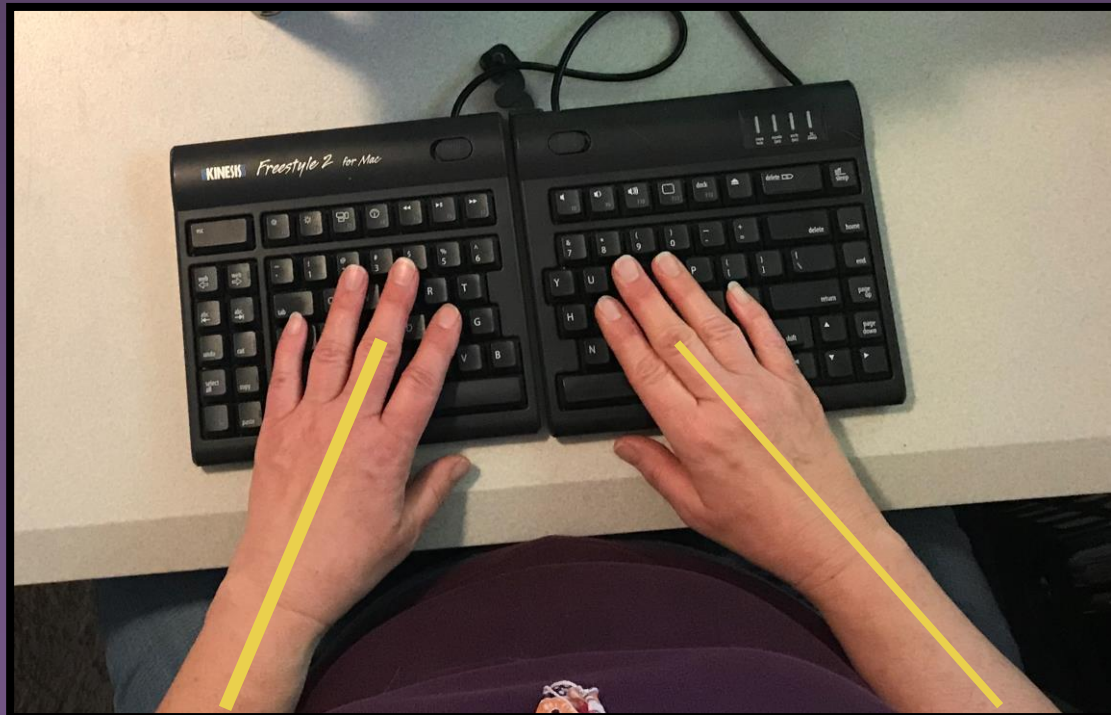
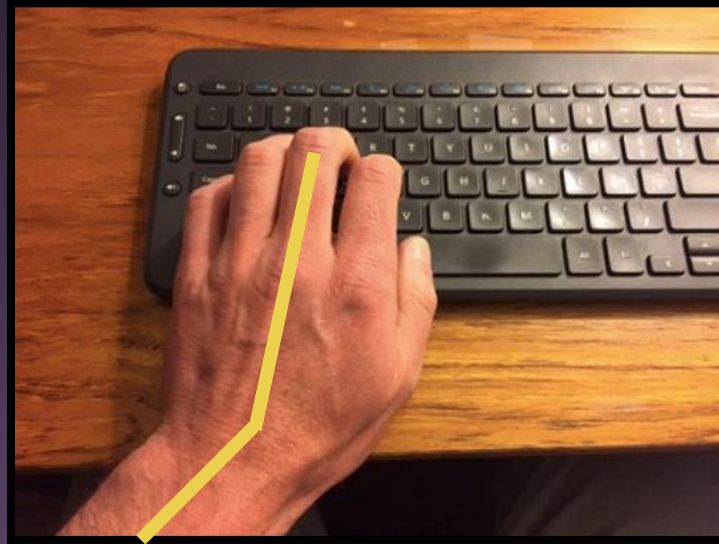




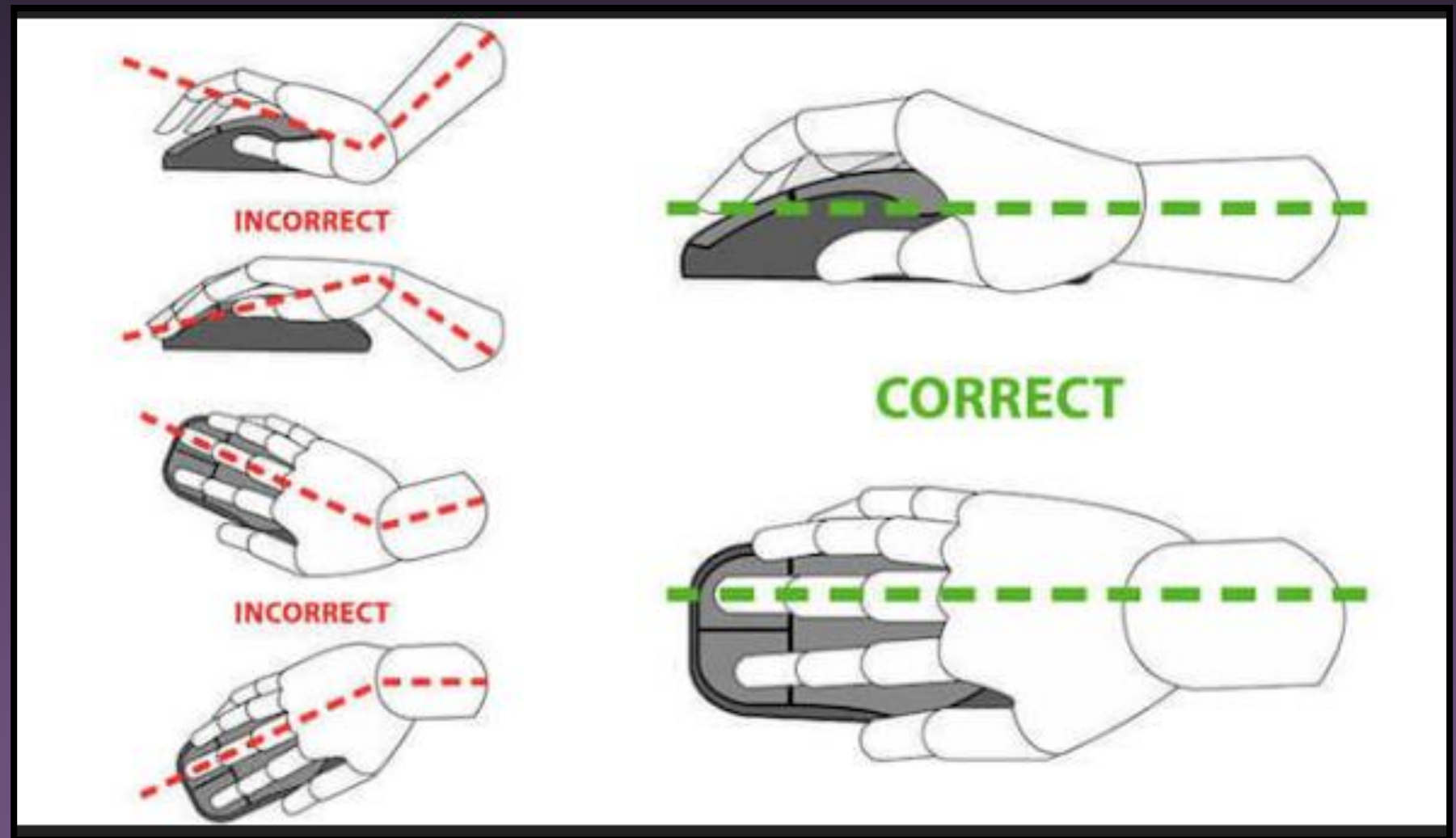
KEYING



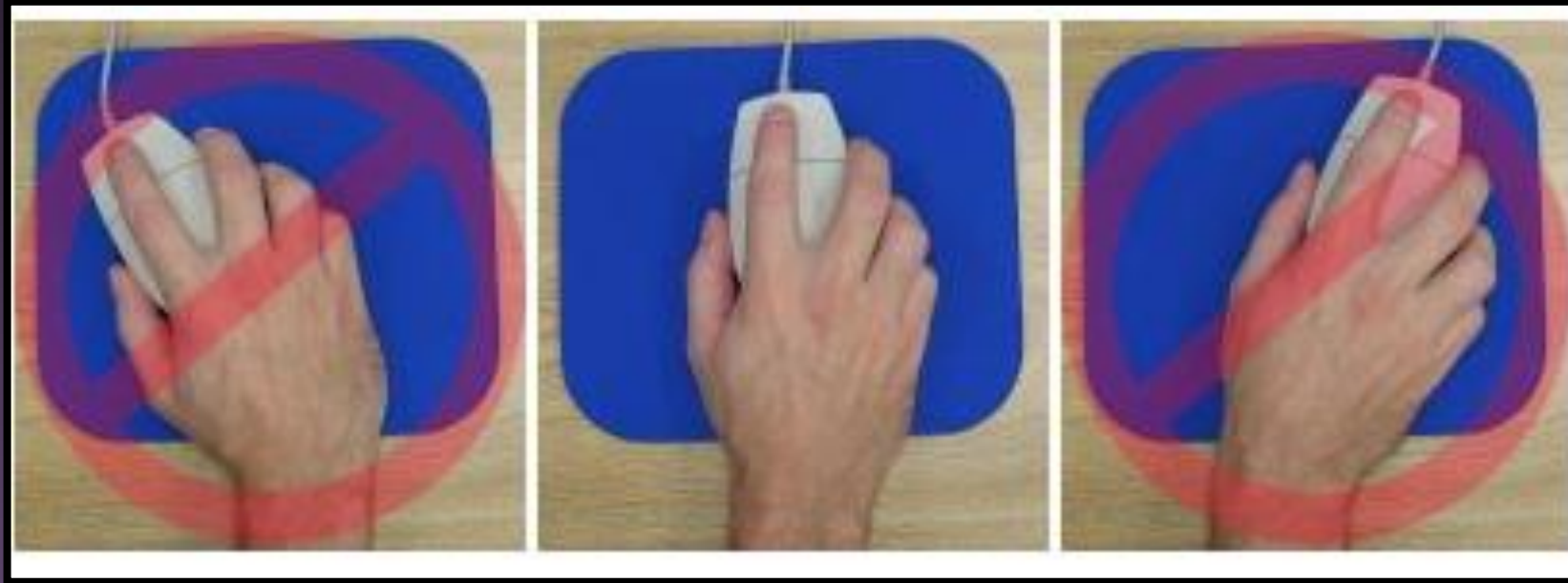
KEYING



Mousing



MOUSING



MONITOR HEIGHT AND DISTANCE



MONITOR HEIGHT AND DISTANCE



Head and Neck Position



Mobile Devices

- Additional risks have been introduced to the **neck, thumbs and hands**
 - Conference rooms and meeting spaces
 - Unassigned work spaces
 - Cafeterias
 - Collaborative work lounges
 - Planes, trains and shuttle buses
 - Home
 - Hotels
 - Airports
 - Cars
- Activities include access to email, calendar and internet from all the devices used
- Personal and work tasks as well as social media are more interspersed through the day

Remote Working

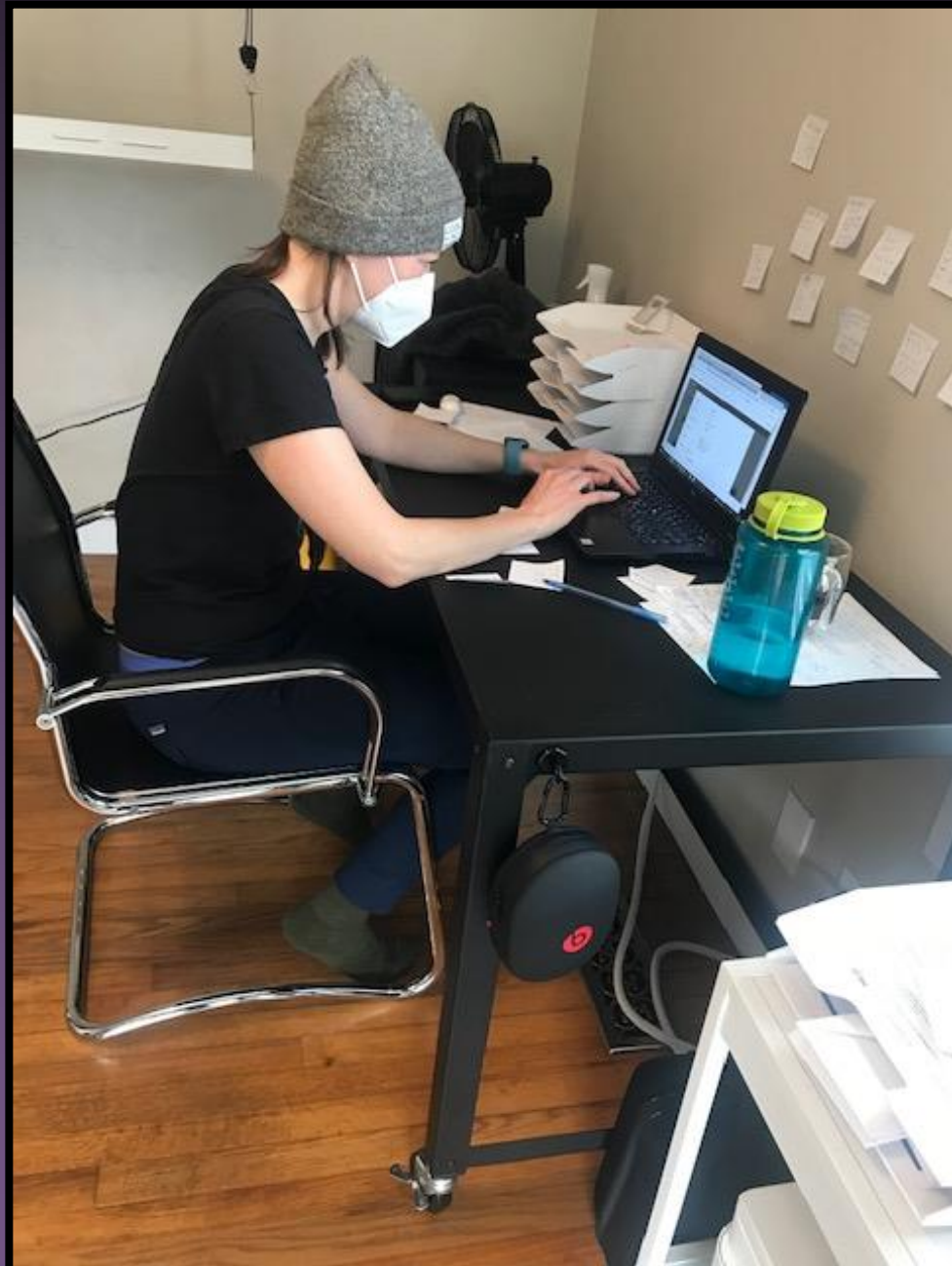
According to the Pew Research Center, around **22 million** employed adults (aged 18 and over) in the U.S. work from home all the time, equal to roughly **14%** of all employed adults.⁴ (2024)

They report less stress than hybrid and in person employees

At home Ergo Equipment

- What are you providing your at home workers?

Working From Home



Hybrid Work

- What is your company doing for Hybrid Work?
 - Do you offer a stipend for home office?
 - Do you give any guidelines on - chair?, desk?, peripherals?
 - Do they have a dedicated desk that suits their neutral position?
 - Do they have an adjustable chair to suit their neutral position?
 - Do they have a docking station with external monitor set up in their home?
 - These are essential to physical well being while working from home.
- Are you moving to shared cubes?
 - Will your company invest in training your employees to use this equipment and the importance of EVERY time they come into work to setting up their workstation for them to work in neutral for their specific physique?

Hybrid Work Drives Flexible Ergonomic Solutions

- Demand for flexible, portable and adaptable ergonomic equipment



Wellbeing-Integrated Workstations



Ergonomic Wearables

- Features:
 - Posture monitoring
 - Vibration reminders to move
- Fostering a proactive approach to well being



AI - Is it Safe?

- AI Proficiency Survey found that the vast majority of organizations aren't ready to deploy AI.
- Most of the workforce is untrained and unprepared for an AI-augmented world – and it's making them anxious.
- <https://www.sectionschool.com/ai/the-ai-proficiency-report>

Wherever Employee Works

- They need to be trained to use what equipment is provided to them using neutral posture principles
- Getting the equipment is maybe 1/2 the issue - the other important 1/2 is to train employees.

Ergo Evaluations

- Providing in person ergonomic evaluations
- Using an ergonomic software/system to have employees learn about office ergonomics with on-line training
- Providing virtual ergonomic evaluations for those working from home

Ergonomic Softwares/Systems

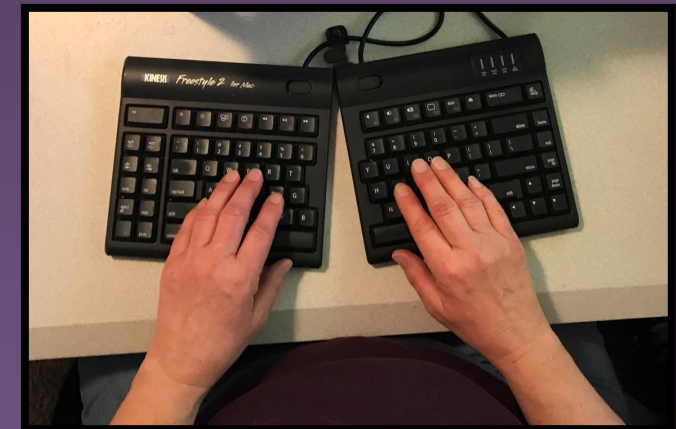
1. Cardinus risk management
2. Ergo IQ fit
3. Cority OES
4. Velocity EHS
5. Virtue Health
6. Wellnomics
7. Tumeke
8. Ergo-Case Tracker

Virtual Ergo's

Photos:

Need 3 photos of different angles:

1. Side head to toe
2. Overview of hands on keyboard
3. Rear photo including chair



Virtual Ergo's

- Video
 - You need to demonstrate how to take measurements
 - Make sure the person being evaluated can see your head to toe example.
 - You need to demonstrate how to work in neutral to them
 - Instruct them on how to modify their work area

Lighting

- Important to help prevent eye strain
- Mitigate glare of overhead lighting with task lights or indirect light sources

Breaks



<https://ergo.human.cornell.edu/CUESitStandPrograms.html>

Breaks

For a 7.5 hr day:

- 16 sit-to-stand transitions
- 2 hours of total standing time
- 0.5 hours of movement
- 5 hours of total sitting time

Break Software



PostureMinder



Stretchly



Break Timer



Smart Watch



Stand Up!

Break Taker: <https://breaktaker.en.softonic.com/?ex=RAMP-2639.1>

Increase engagement with IT

- In choosing mobile devices and the accessories that come with the device when purchased
- Alignment will reduce ergonomic risk while saving time and money for the end users and the company as a whole
- Increasing knowledge of software efficiencies and skill will reduce time wasted, improve productivity and reduce exposure to risk of discomfort or injury

Management Commitment

- Educate
- Communicate
- Develop and write a plan
- Get a budget
- Demonstrate success

Ergonomics is Good Economics

- Companies showing in range of 50% decrease in W/C costs
- 15-40% increase in productivity
- BLS shows decrease in MSD's coincides to increase in ergo programs

Comprehensive Ergonomic Program

- Proactive
- All areas/departments
- Interfaces with Safety Program
- Self responsibility
- Objective data
- Quick action

Employee Responsibility

- It is the responsibility of the employee to work in a safe manner
- Sitting posture
- Standing posture
- Working postures
- Safe work practices
- Using ergonomic equipment as it was designed

Questions

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YouTube: ErgoArts

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