



Common Sense Ergonomics While *Temporarily* Working From Home



Thank you

Active duty and former military,
and their families

Pick a song for chest compressions

- “Stayin’ Alive” – Bee Gees – 103 BPM
- “Dancing Queen” – ABBA – 100 BPM
- “Hard To Handle” – The Black Crowes – 104 BPM
- “Rock Your Body” – Justin Timberlake – 100 BPM
- “I Will Survive” – Gloria Gaynor – 117 BPM
- “MMMBop” – Hanson – 104 BPM
- “Girls Just Want to Have Fun” – Cyndi Lauper – 120 BPM
- “Just Dance” – Lady Gaga, Colby O’Donis – 119 BPM
- “Hips Don’t Lie” – Shakira – 100 BPM
- “Work It” – Missy Elliott – 102 BPM
- “Crazy” – Gnarlz Barkley – 112 BPM
- <https://www.procpr.org/blog/training/cpr-chest-compression-rate>



Save a Life

100-120 compressions per minutes

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ERGOhealthy Team

We have a variety of unique backgrounds, interests and perspectives. Along with EXCEPTIONAL service and technical skills, we’re patient, compassionate, and have a genuine and love (yes love!) for people.



Presenters

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Comparison of traditional ergo and common sense ergo for the home

Common sense and logic prevail

Traditional – semi-creative ergonomics

- Desk with “ergonomic chair”
- Limited use of laptop
- No use of couch, recliner or other
- Keyboard tray
- Sit-stand workstation

Out-of-the-box thinking ergonomics

- Desk, kitchen table, lap, non-traditional desktop
- Laptop, tablet, and smart phone use
- Couch, recliner, dining chair
- Working with the equipment and tools at hand
- Integrating good posture, breaks, and common sense approaches for ergonomic health
- Alternate mouse between right and left hand

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Where to start

Ergonomics is not a perfect science – rules are flexible

Work from home - ergonomic basics

- Position of function – and comfort
- Everyone is unique - we're each made differently
- “Ergonomic” positions may not work for everyone
- Move, fidget, and re-adjust
- Posture, posture, posture
- Stay well-hydrated
- About every 20-30 minutes take a posture break and stand and move for a couple of minutes
- Alternate mouse

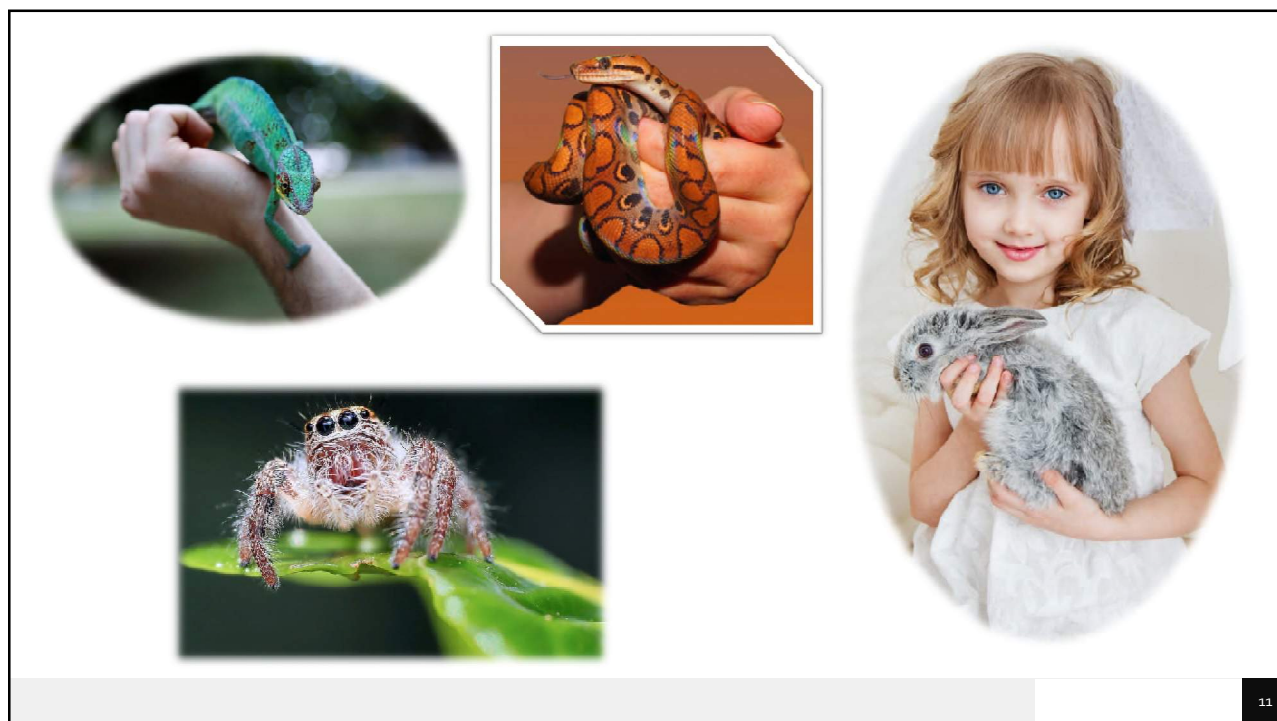


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Comfortable... but not too comfortable

Maybe a bit more casual? Routines are also important.





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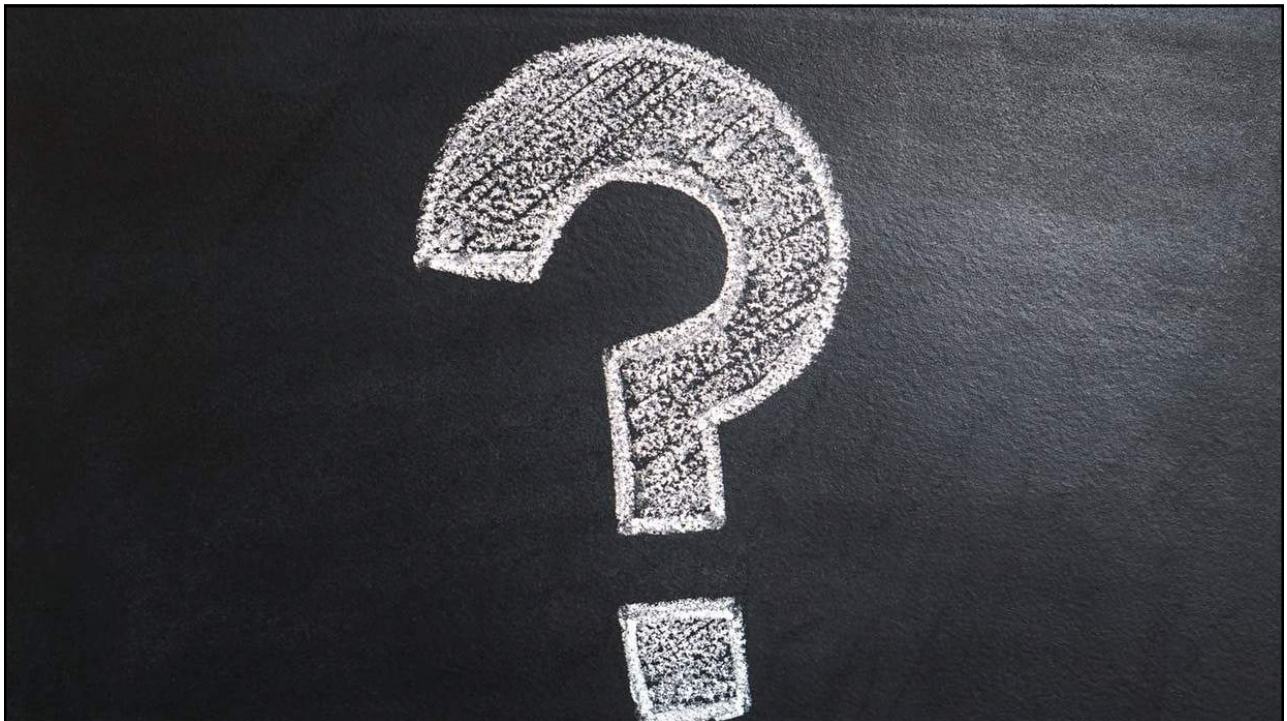
Courtesy of
<https://www.flexjobs.com/>

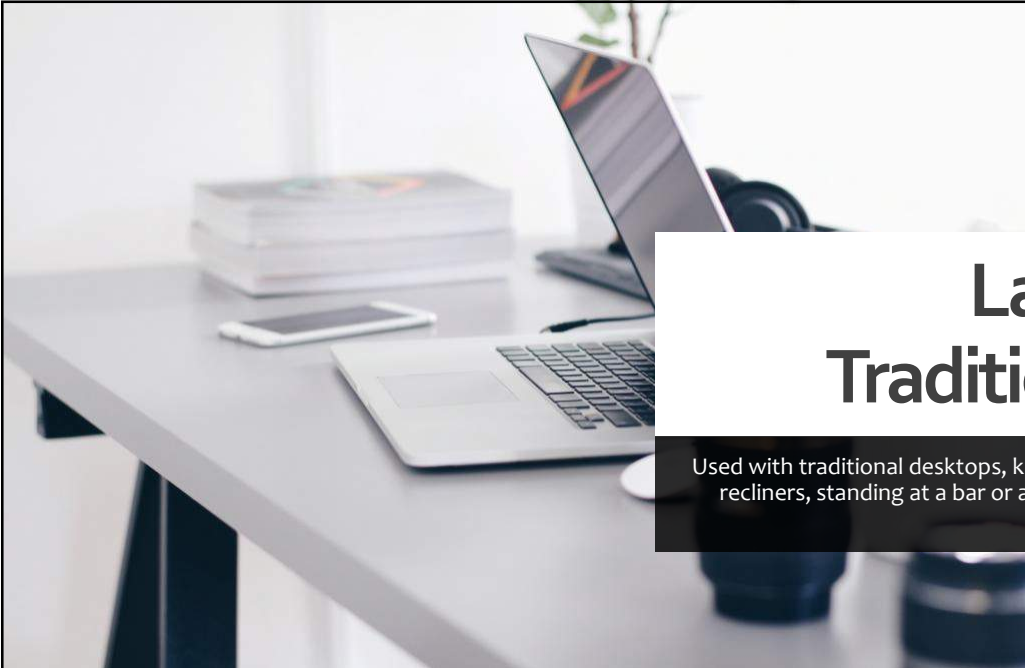
12



Courtesy of
<https://www.flexjobs.com/>

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Laptop & Traditional PC



Used with traditional desktops, kitchen tables, couches, recliners, standing at a bar or airport table, and other locations ☺

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Some things not to do – BAD

... other than for a few seconds to read an email heading or look at an image

- Twisting of body
- Feet/legs not supported
- Awkward postures



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Some things not to do – BAD

... other than for a few seconds to read an email heading or look at an image

- Shoulder pulled forward / elbow positioning
- Hard / not-needed wrist support
- Alcohol may impair work product

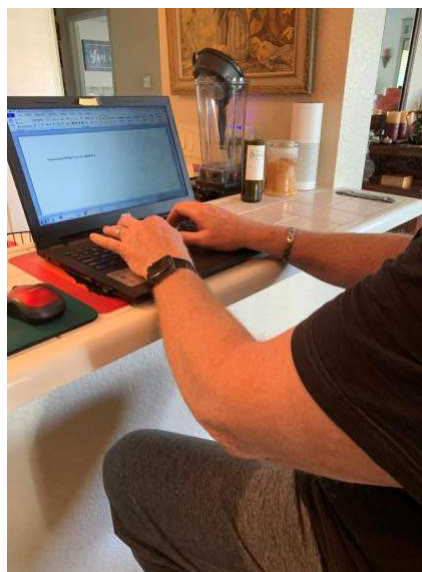


17

Some things not to do – BAD

... other than for a few seconds to read an email heading or look at an image

- Shoulders pulled forward / elbow positioning
- Pressure on forearms
- Watch and jewelry



18

Some things not to do – BAD

... other than for a few seconds to read an email heading or look at an image

- Couch would have to be about 6 inches off ground
- Outstretched arms
- Neck / back posture



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Some things not to do – BAD

... awkward body postures

- Right arm outstretched / shoulders forward
- Keyboard and mouse
- Armrests on chair (remove or lower)



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Some things not to do – BAD

... awkward body postures

- Wrist pressure
- Large wrist watch on left wrist
- Possible awkward position of fingers



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Some things not to do – BAD

... awkward body postures

- Difficult to maintain abdominal posture
- Neck strain
- Wrist hyper flexion / pressure point
- Smoking / nicotine may increase pain



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Some things not to do – BAD

... awkward body postures

- Increased pressure on forearm / elbow
- Awkward body hip and shoulder postures
- Display panel angle



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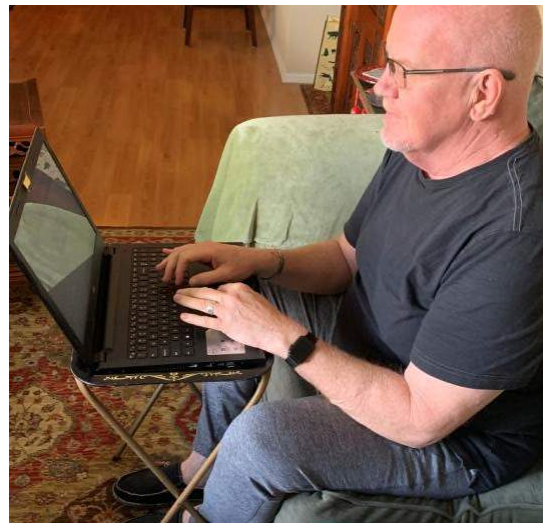
SLIGHTLY BETTER

Short-mid duration (1 to 2 hours)

- Shoulders back, elbows at 90-ish degrees
- Wrists straight / comfortable
- Minimal pressure on forearms

Best Practices

- Firmer tabletop if available
- Sit on pad or pillow for better wrist position
- Check angle of screen for neck posture
- Stretch break every hour
- Fidget



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BETTER

Mid-long duration (2 to 4 hours)

- Shoulders back, elbows at 90-ish degrees
- Wrists straight / comfortable
- Minimal pressure on forearms

Best Practices

- Check angle of screen for neck posture
- Stretch break every hour
- Fidget, wriggle, and squirm



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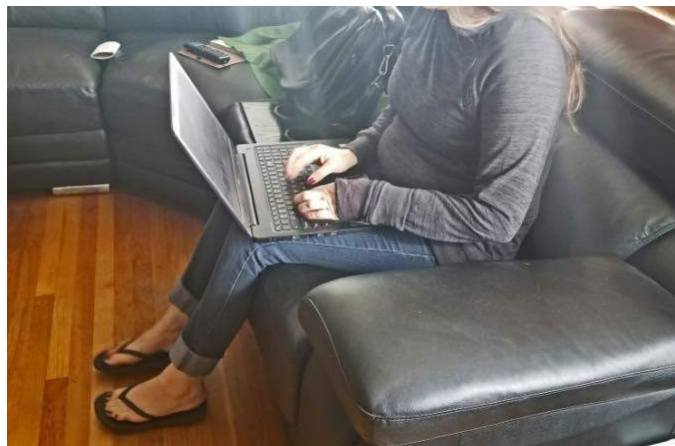
BETTER

Mid-long duration (2 to 8 hours)

- Neck posture good (check display angle)
- Shoulders back, elbows at 90-ish degrees
- Wrists straight / comfortable

Best Practices

- Base under laptop for stability and separation
- Reduce laptop heat
- Stretch break every hour
- If EMR / EMF concerns
 - Use unplugged and without WIFI & Bluetooth



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BETTER

Mid-long duration (2 to 8 hours)

- Neck posture good (check display angle)
- Shoulders back, elbows at 90-ish degrees
- Soft part of hands / palm on laptop edge
- Inexpensive laptop tray / support
- Unplugged and no wifi

Best Practices

- Base under laptop for stability and separation
- Stretch break every hour



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BETTER

Mid-long duration (2 to 8 hours)

- Neck posture good (check display angle)
- Shoulders back, elbows at 90-ish degrees
- Soft part of hands / palm on laptop edge

Best Practices

- Base under laptop for stability and separation
- Stretch break every hour
- If EMR / EMF concerns
 - Use unplugged and without WIFI & Bluetooth



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BETTER

Mid-long duration (2 to 8 hours)

- Neck posture good (check display angle)
- Shoulders back, elbows at 90-ish degrees
- Wrists elevated – no point pressure
- Inexpensive laptop riser, keyboard, mouse

Best Practices

- Alternate mouse between right and left hand
- Stretch break every hour



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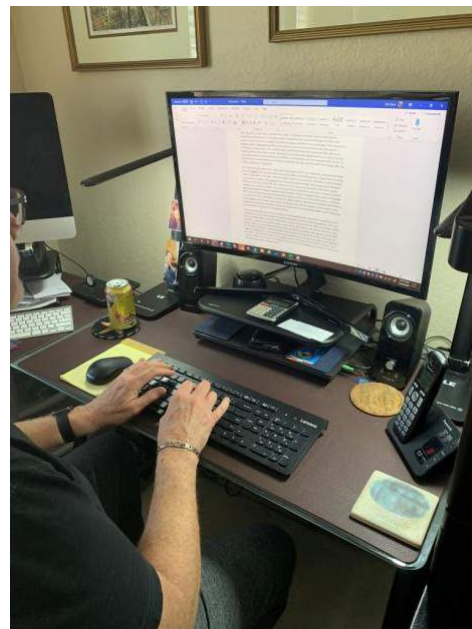
BETTER

Mid-long duration (2 to 8 hours)

- Wrist and elbow position
- Watch and jewelry – no pressure on desk
- Mouse use (left hand) . 😊
- Organized work space

Best Practices

- Stretch break every hour
- Fidget
- Alternate mouse between right and left hand



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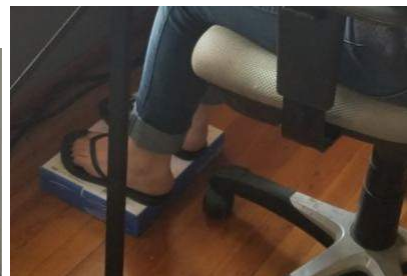
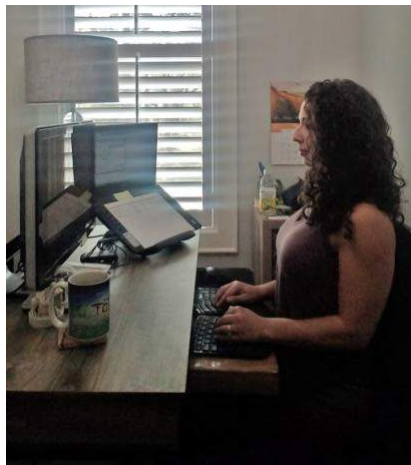
BETTER

Mid-long duration (2 to 8 hours)

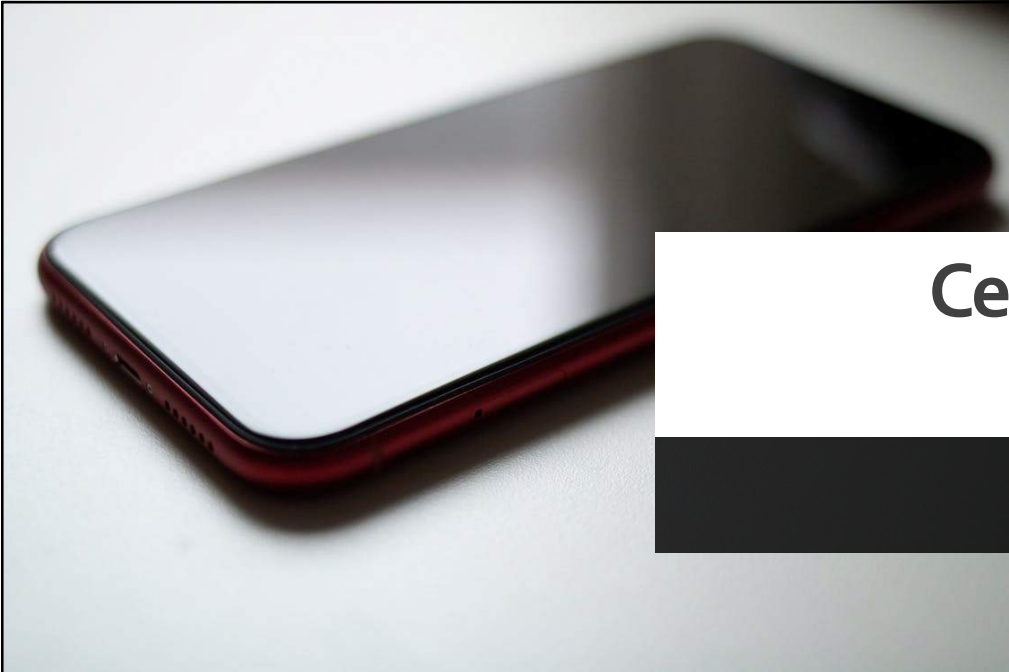
- Wrist and elbow position
- Shoulders back
- Central monitor in front
- Laptop riser
- Feet flat on floor

Best Practices

- Stretch break every hour
- Fidget
- Alternate mouse between right and left hand



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A red smartphone is lying on a white surface. The phone is slightly angled, showing its screen and back. The background is a plain white surface.

Cell Phone

Used everywhere!

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Some things not to do

... other than for a few seconds to read an email heading or image

- Neck flexion / posture

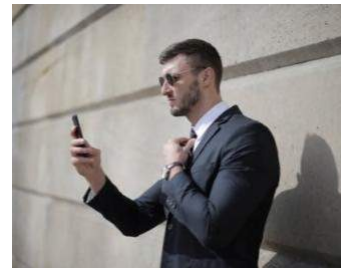


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BETTER

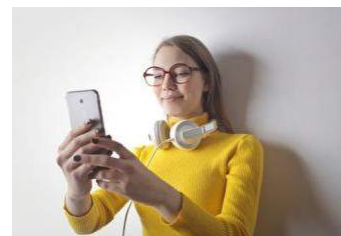
Short duration

- Improved neck position



Best Practices

- Some shoulder stress – so temporary
- Position elbows closer to body
- Headset



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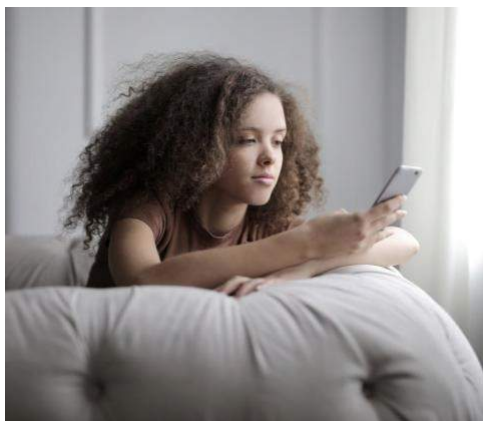
BETTER

Short duration

- Improved neck position
- Device supported

Best Practices

- Temporary positions
- Headset for calls
- Seated 😊



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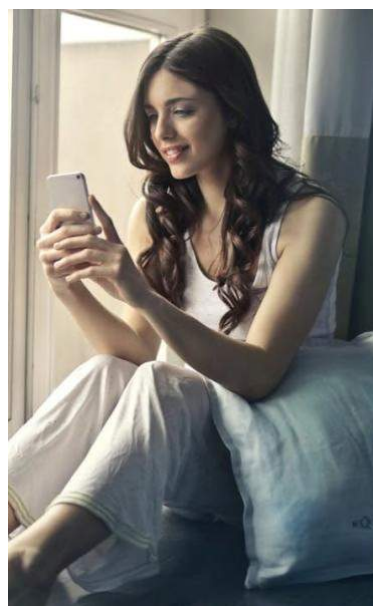
BETTER

Short duration

- Improved neck position
- Device supported

Best Practices

- Temporary positions
- Headset for calls
- Seated 😊



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Best Practices – Smart Phone

- Sit comfortably with good posture and body alignment
- Limit activities that may cause neck problems – when possible, bring your phone closer to eye level
- Integrate stretching of your neck muscles regularly – take a short (1-2 minute break) for every 15-30 minutes
- Take regular breaks from prolonged sitting
- Don't cradle phone
- Alternate hand usage

Texting

- Speakerphone or headset
- Voice-text function for occasional breaks
- NEVER text while driving

The burden of staring at a smartphone

Effective weight on the spine as forward tilt increases

0° 12lb	15° 27lb	30° 40lb	45° 49lb	60° 60lb
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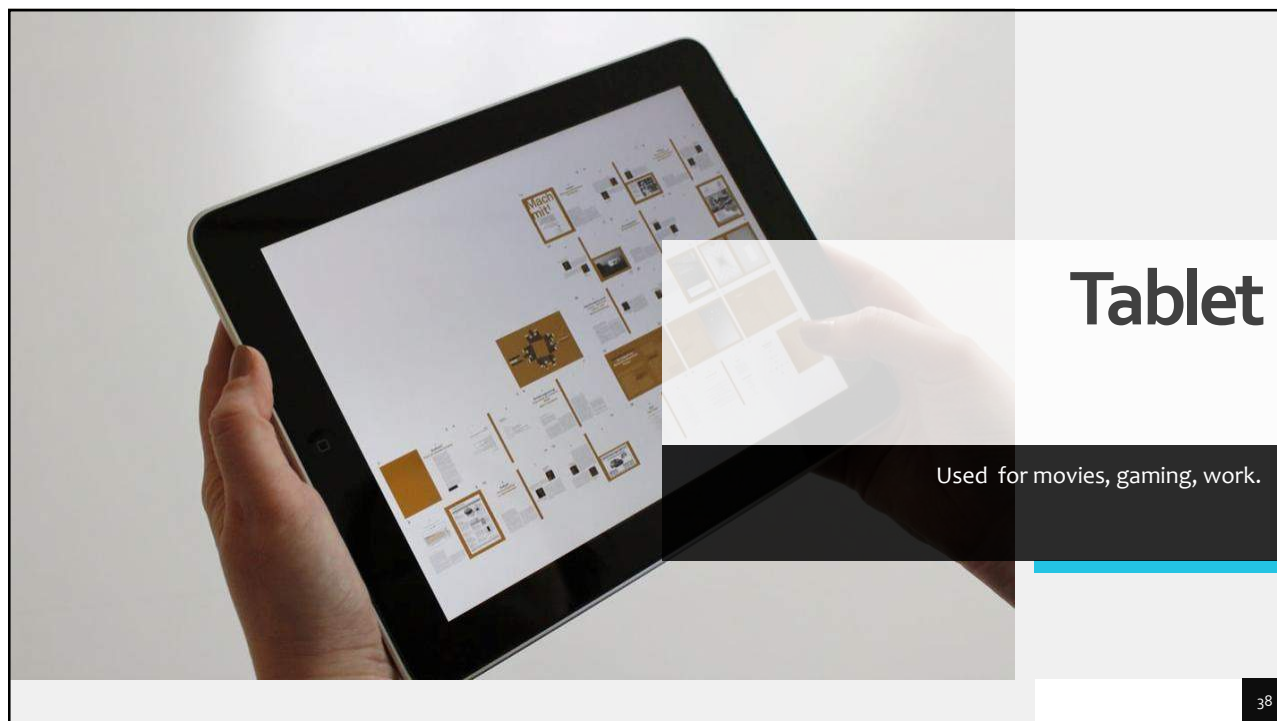
Guardian Graphic. Source: Surgical Technology International

25 pounds = an average 2 year old | 33 pounds = a cinder block

36 pounds = a mid-size microwave | 40 pounds = a 5-gallon bottle of water

50 pounds = a small bale of hay | 55 pounds = a 5000 BTU air conditioner

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Tablet

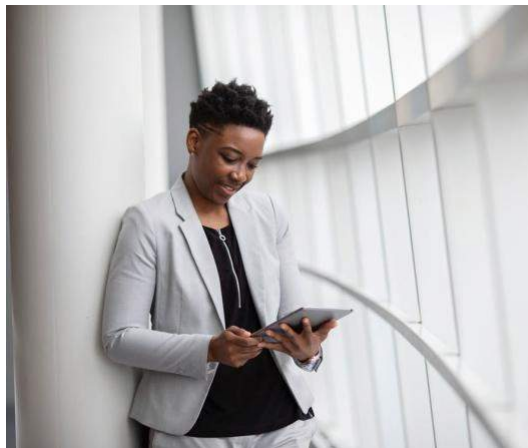
Used for movies, gaming, work.

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Some things not to do

... other than for a few seconds to read an email heading or image

- Neck / back posture



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BETTER

Short duration

- Placed on a table or other surface

Best Practices

- Stretch break every hour
- Extended keyboard
- Fidget



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BETTER

Short duration

- Elbows against body
- Minimal neck flexion

Best Practices

- Periodically outstretch arms
- Stretch break every hour
- Fidget



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BETTER

Short duration

- “Comfortable “ position
- Tablet resting on surface
- Neck posture - adequate



Best Practices

- Periodically outstretch arms
- Stretch break every hour
- Fidget



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Best Practices – Tablet

- When sitting, maintain comfortable and natural posture
- When holding the tablet, keep your elbows close to your body and vary the tablet position.
- Switch hands to keep neck postures – healthy
- Limit postures that cause you to lean or hunch forward
- Take a short (1-2 minute break) for every 15-30 minutes



Additional

- Lightly tap the tablet (virtual) keyboard
- If EMR / EMF concerns
 - Use unplugged and without WIFI & Bluetooth

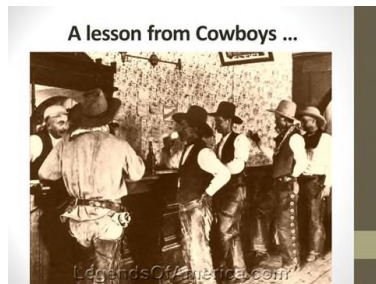


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Standing work / Sit-stand

Used infrequently for work from home

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John Sloan, *McSorley's Bar*, 1912, oil on canvas.

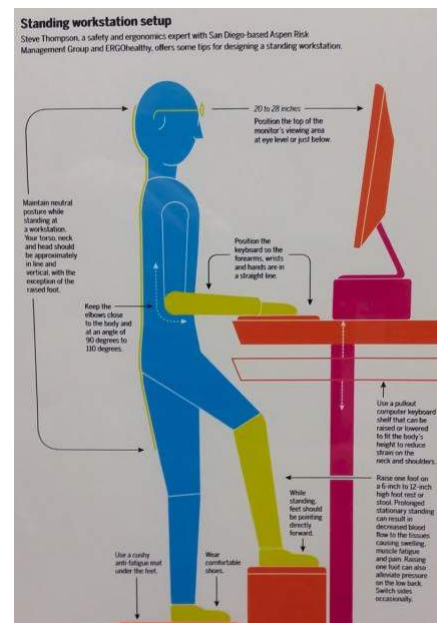
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Best practices – Standing / Sit-stand

- Change positions frequently when standing for prolonged periods
- Use a foot rest/stool/box (approximately six inches) to prop one foot up, and switch sides every so often.
- Vary tasks to avoid static postures
- Work on a carpet pad or mat. Wear shoes in most cases
- Alternate mouse between right and left
- Limit postures that cause you to lean or hunch forward

Additional

- Prolonged standing for some may have health risks
- Can be difficult for single laptop into ergonomic position



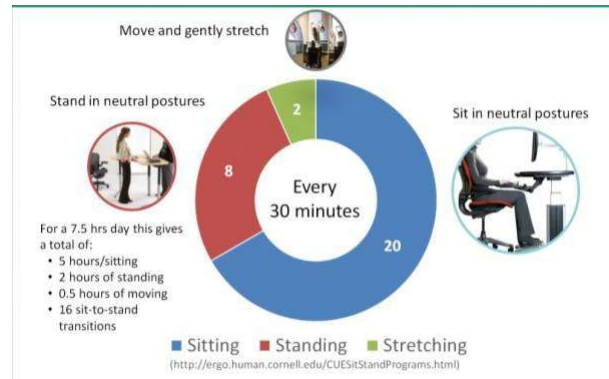
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Sit-stand guidance (Cornell University)

30 minute period

- 20 minutes sitting (in a good posture)
- 8 minutes standing (for sit-stand workstations)
- 2 minutes of standing and moving

For a 7.5 hours workday (lunch is excluded) this means a daily regimen with a total of 5 hours of sitting, 16 sit-to-stand changes, 2 hours of standing and .5 hours of moving.



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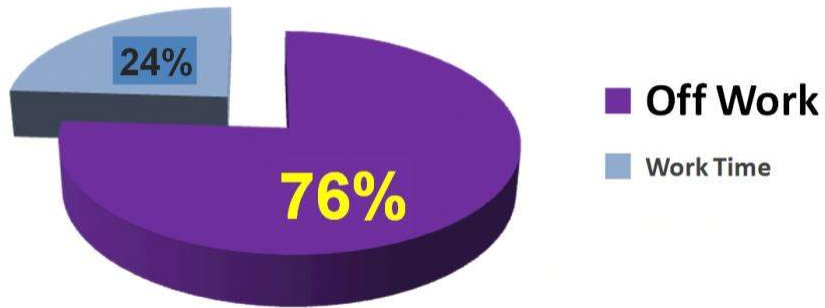
Away from Work

Definitely a digital world

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How much time do we spend "at work"

Time at work versus away from work

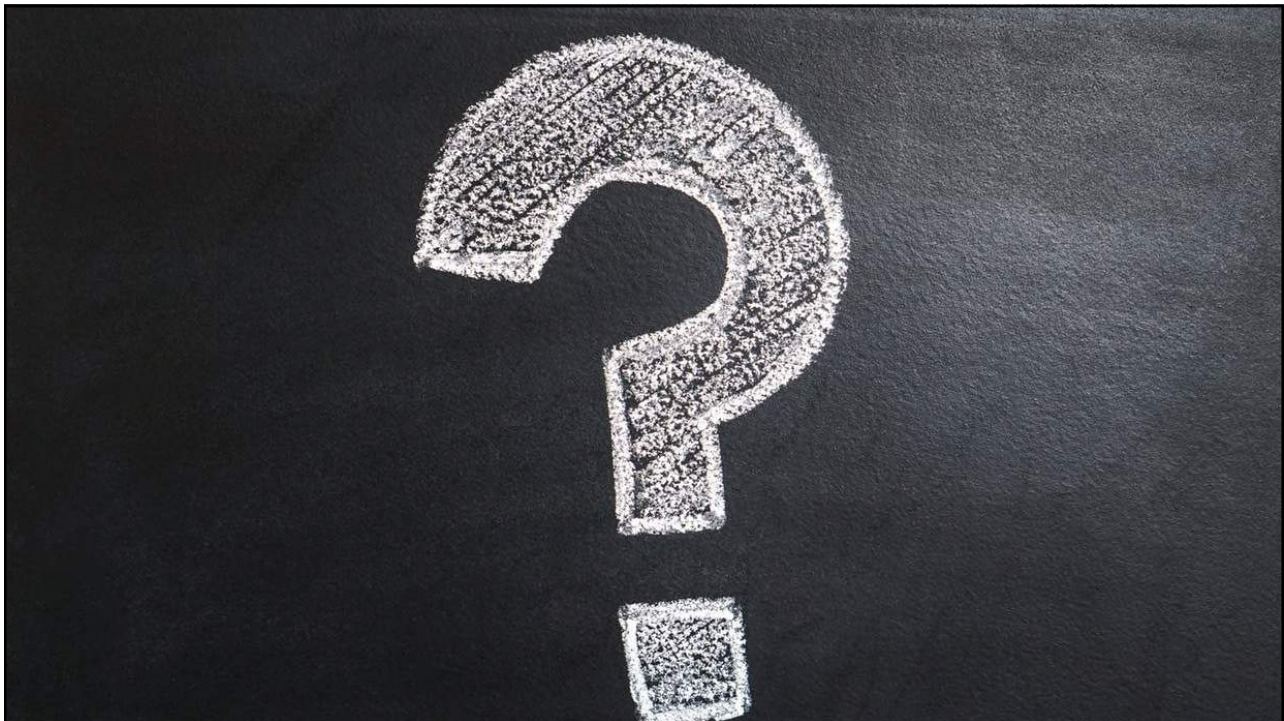


24 hours/day X 7 days = 168 total hours

Average work hours = 40

40 work hours / 168 total hours = 24%

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Away from work activities

Continuous advancement of digital world

- Sedentary nature of activities
- “Explosion” of social networking/communication
- Gaming
- Tablets, smart phones and devices



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Individual Injury Factors

- Gender - some studies have found a higher prevalence of some musculoskeletal disorders in women
- Cigarette Smoking - some studies have found smoking related to pain in the extremities, including the neck and back
- Strength - the risk for musculoskeletal injuries (in some studies) was three times greater in weaker subjects
- Anthropometry - weight, height, body mass index, and obesity have all been identified as indicators for certain musculoskeletal disorders
- Physical Activity - a lack (or over exertion) of physical activity may increase susceptibility to injury (sedentary lifestyles?)



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General best practices

Non-ergonomic safety and common sense tips

- Use electrical cords in good condition and away from heaters
- If necessary, use a surge protector with enough outlets
- Keep flammables like trash, paper, chemicals from surge protectors & cords
- Minimize trip hazards (cords, toys, tools, laundry, other hazards)
- Reasonably free of distractions
- Smoke detector / fire extinguisher available



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Best Practices – ERGO CHAMP ©

- **E**RGO BREAK. Take a short (3-5 minute break) for every hour of sitting
- **R**EMOVE or lower armrests from chair – especially if they block arm motions or prevent from being close enough to keyboard, pad, or mouse
- **G**O gentle on yourself – ergonomics is not a perfect science
- **O**UTSIDE the box thinking – it's ok use common sense. For example, rotate between your right and left hand for mouse use
- **C**OMFORT. Find your place of comfort. Is it sitting with back support; unsupported sitting more forward, or is it a combination of both
- **H**ANG the arms straight down at your side for 60 seconds every hour
- **A**CTIVITY. Use ergo techniques for away-from-work activities
- **M**IX it up. Your base position of comfort is your go-to place... but it's ok to occasionally hunch, or bend, or tilt throughout the day
- **P**OSTURE. Integrate GREAT POSTURE! Head sitting upright on your shoulders, and shoulders over your hips



Arms hanging straight at side

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Beginning your journey

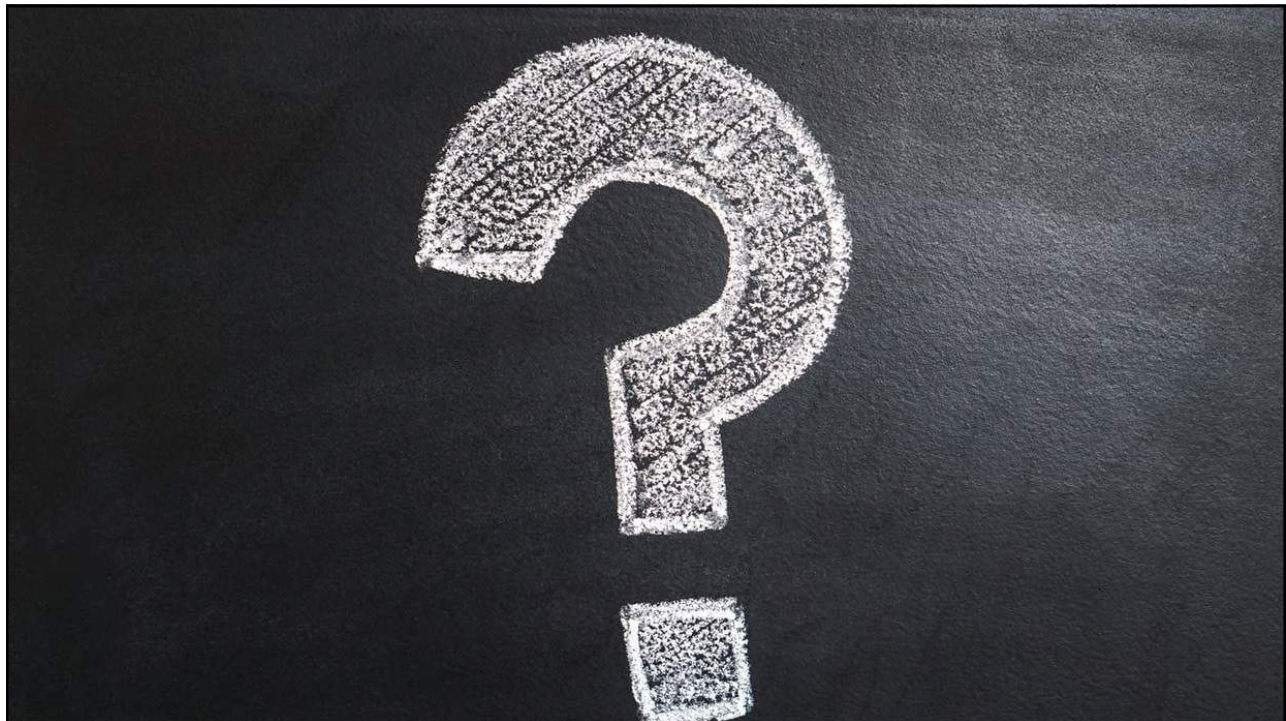
Ergonomics is not a perfect science – rules are flexible

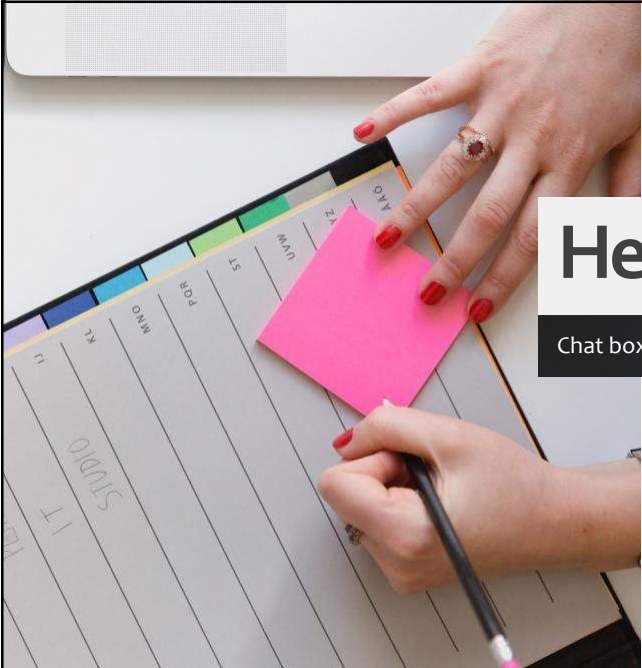
Work from home - ergonomic basics

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- Everyone is unique - we're each made differently
- "Ergonomic" positions may not work for everyone
- Move, fidget, and re-adjust
- Posture, posture, posture
- Stay well-hydrated
- About every 20-30 minutes take a posture break and stand and move for a couple of minutes
- Alternate mouse



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Help us improve

Chat box or question

Tell us one thing you learned today

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References and resources

- General Ergonomics Solutions - ERGOhealthy ©
- Stretch and Flex – Marines
- ERGOhealthy 12 Steps of Self Care by Kate Montgomery ©
- Copy of this presentation
- Ergonomic Webinars: <http://aspenrmg.com/aspenwebinars/>
- Remote assessments: <https://aspenrmg.com/remote-assessments/>
- Break reminder apps
 - StandApp (iOS)
 - Stand Up! The Work Break Timer (iOS)
 - Move - Daily Activity to Stay Healthy (iOS)
 - Randomly RemindMe (Android)

