

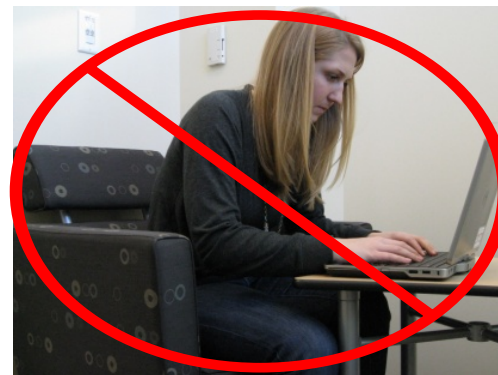
# Ergonomics Guidance for Mobile Devices

## LAPTOPS

Laptops provide a convenient, portable platform for users, but are not ergonomically-ideal for long-term use unless properly set up. The joined keyboard and monitor compromise relaxed, neutral postures and often result in positions that increase musculoskeletal stress.

### Laptop Setup

- To avoid the “turtle” posture (hunched back, protruding neck/head), make the laptop like a desktop:
  - Use an office chair;
  - Use separate input devices to allow the shoulders to relax and the hands to be at elbow level; and
  - Place laptop on a riser (or use a separate monitor) to allow the screen top to be at/slightly below eye level.
- Avoid using the laptop on your lap for extended periods of time.
- Do not lie down when using the laptop - seated/standing postures are recommended.
- To avoid glare, position the laptop screen perpendicular to windows; close shades and blinds to avoid bright outside light; and avoid working under bright sources of light.



“Turtle” posture.

### Work Practices

- Interrupt continuous laptop use by taking microbreaks (at least every 30 min for 1-2 min) and alternating tasks.
- Maintain neutral wrists while typing.
- Reduce contact stress by floating the hands above the keyboard.

### Handling

- When choosing a laptop bag, consider the weight of laptop, power cord, external devices, folders, etc.
  - Rolling carrying cases are recommended for loads over 10 lbs.
  - Laptop backpacks should have wide, padded shoulder straps and a waist belt to distribute some of the load to the hips.



Recommended laptop setup using a laptop riser, external keyboard and mouse.

Complete the web-based computer workstation ergonomics training (**EHS 3400** – available through STARS) to learn about proper ergonomic setup and work practices.



# Ergonomics Guidance for Mobile Devices

## MOBILE PHONES/TABLETS

Mobile phone and tablet technology, like desktop computer and laptops, can pose musculoskeletal stress if ergonomic practices are not kept.

**SMARTPHONES AND TABLETS SHOULD NOT BE USED FOR EXTENDED COMPUTER WORK - USE A DESKTOP/LAPTOP COMPUTER AND ENSURE A PROPER ERGONOMIC SETUP.**

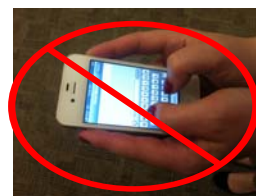
### Phone Use

- Use hands free devices to eliminate awkward, static postures - especially during long phone calls.
- Limit duration and frequency of calls, texts, and emails.
- Maintain neutral wrist posture and alternate hands when holding devices.
- Reduce keystrokes with text shortcuts (search “text shortcuts” on your web browser or app store), or where feasible, use speech-recognition applications.
- **GENERAL SAFETY REMINDER:** Avoid distracted mobile phone use when walking, driving, or biking.

Awkward neck postures



Avoid



Preferred



### Tablet Use

- For extensive text entry, use a separate keyboard and prop the tablet on a stand to improve the viewing angle.
- Limit duration of tablet use - take frequent microbreaks.
- Focus on neck posture - avoid excessive looking down when reading emails or texts.
  - For prolonged reading while seated, prop the tablet on a backpack, pillow, etc. to bring the screen closer.
- Alternate hands and fingers when using buttons/touchscreens.
- Reduce keystrokes with text shortcuts (search “text shortcuts” on your web browser or app store), or where feasible, use speech-recognition applications.
  - Search application stores for products that reduce keyboard use.
- Maintain neutral wrist posture and alternate hands when holding devices. For tablets, consider cases with hand straps to reduce gripping.



Tablet stand with keyboard

