



a place of mind

THE UNIVERSITY OF BRITISH COLUMBIA

# Ergonomics:

Optimizing human well-being & system performance

## Sit-Stand Purchasing Guidelines





## **Sitting & Standing**

Both sitting and standing for prolonged periods have the potential to negatively impact our bodies.

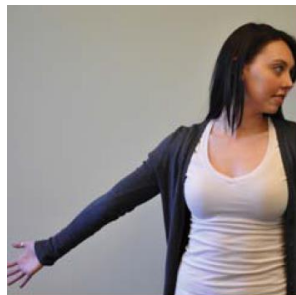
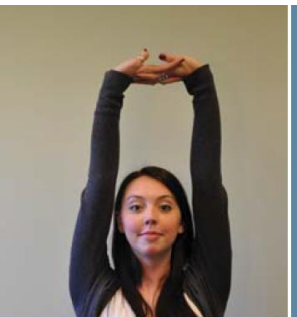
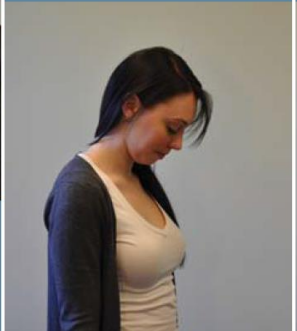

The best thing you can do is make positional changes regularly throughout the day.

Stand up at least once, preferably twice, an hour.

# Sit-Stand Desks

The purpose of this training is Sit-Stand desk options & set-up but for those who do not have a sit-stand desk, there are other opportunities to get up and move:

- Get up to talk to your colleague
- Take micro-breaks: use [prompter](#)
- Take [stretch](#) breaks
- Plan walking or standing meetings

	<p>NECK: Tilt head forward and bring chin to chest. Hold for ten seconds and relax.</p>	<p>SHOULDERS: Raise shoulders to ears. Hold for ten seconds and relax down.</p>		<p>upper body</p>
<p>NECK: Reach right arm out to the side, palm facing forward. Look to left shoulder and hold for ten seconds. Repeat on opposite side.</p>			<p>UPPER BODY: Interlace fingers and reach above with palms facing ceiling. Hold for ten seconds and relax arms down.</p>	



## Sit-Stand Desks

Height adjustable sit-stand desks provide one way to make positional changes throughout the day.

### Today you will learn:

- How to set up your sit-stand workstation
- How to choose a sit-stand option (platform vs. desk)

## Setting up a Sit-Stand Desk

The **same principles** apply for sit-stand desks as for traditional (seated) desks.

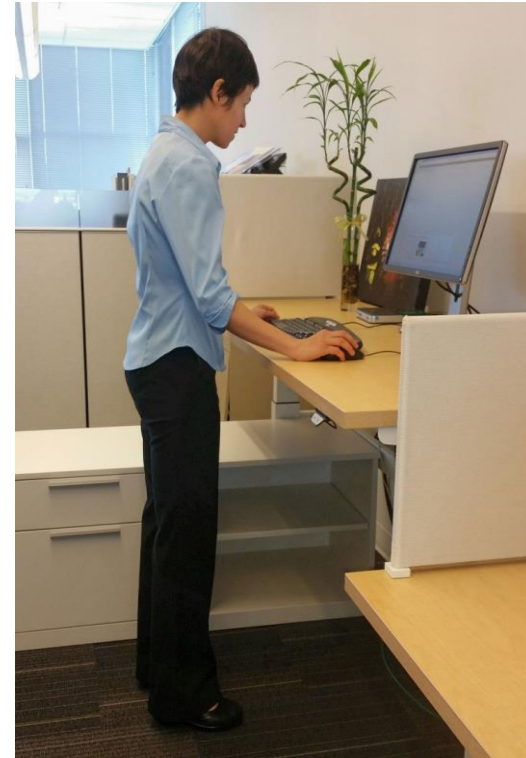
- Keyboard & mouse below elbow level
- Monitor, top line of text at  $\sim$  eye level



# Setting it Up Incorrectly



Keyboard/mouse/too high-  
Shoulder flexion



Monitor too low-neck flexion  
Mouse too low-wrist extension

# Set it Up Correctly



Picture from ErgoTron

- Keyboard & mouse below elbow
- Monitor: top line of text at approximately eye level
- Alternate between sitting and standing:
- Sit 30 to 45 minutes at a time and stand 15 to 20 minutes at a time
- See [online resources](#) for more info



## Choosing the right model: Desks & Platforms

Height adjustable desks are preferred to platforms

Platforms impact placement of paper and other items-the degree to which this is problematic depends on how much you are referencing these items

A great advantage of a height adjustable desk is that they go lower. This significantly reduces the need for keyboard trays or footrests. Make sure you choose the one with the right height range for you.

The following slides will help you understand the differences between the different desks and platform options available.



## Choosing the right model: Desks & Platforms

### Sit-Stand Desks

#### Advantages

- ✓ Can be set lower than traditional desks thus reducing the need for keyboard trays & footrests
- ✓ Easy to access paper and telephone in seated and standing positions

#### Disadvantages:

- ✗ More expensive than platforms
- ✗ Need to remove existing desk

### Platforms

#### Advantages

- ✓ Less expensive than desks
- ✓ No need to remove existing desk

#### Disadvantages:

- ✗ Impact placement of paper and phone in both sitting and standing positions
- ✗ Some models position the monitor high when seated
- ✗ Some models position the monitor close
- ✗ Some models provide limited flexibility in how dual monitors are positioned

## Desks: Choosing the right height range

Choose the right height sit-stand desk. See below for options for tall and shorter users

**Standard height:**  $\geq 5'4$  to  $\leq 6'2$

- Lowest height:  $\leq 24.5''$
- Top height:  $\geq 48''$

**Lower Desks:** for those  $< 5'4$

- These desks should go down as low as  $22.6''$

**Taller Desks:** for  $\geq 6'4^*$

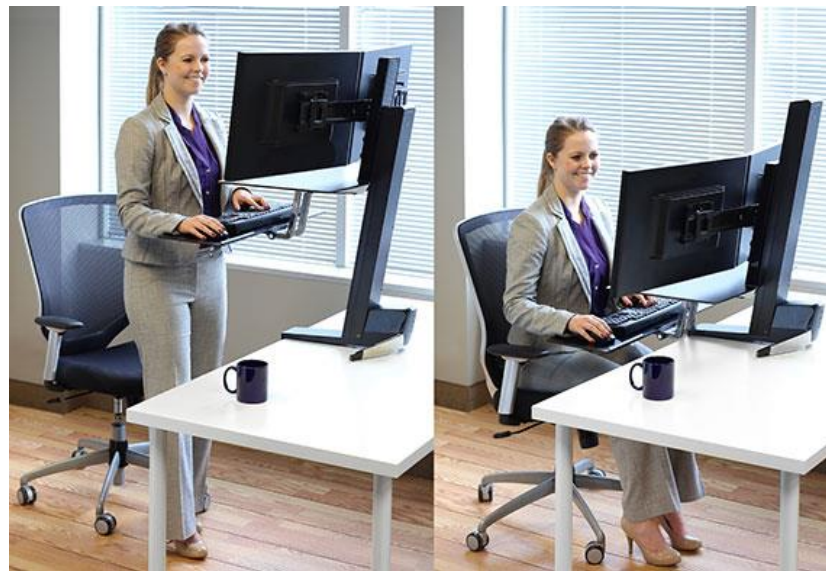
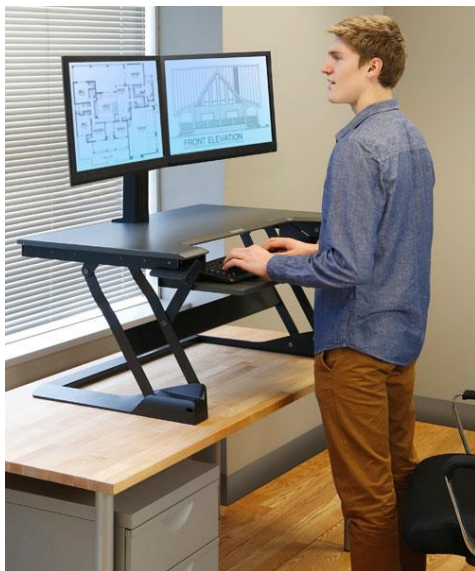
- These desks should go above  $48''$
- \*Required for users above  $6'4$  and may be beneficial for those above  $6'$  depending on their proportions.

Check-out [ergotron's sit-stand height calculator](#)

# Sit-Stand Platforms

There are many different types of platforms-each platform has different trade-offs. When choosing a sit-stand platform, considering the following:

- Height of monitor & keyboard when sitting
- Flexibility to position monitors where you want them



Pictures from ErgoTron

# Sit-Stand Platforms



[Ergotron](#)  
Workfit TL  
\$598

## Comments:

- This option is not recommended for those wearing bifocals-the monitor will be too high when seated
- Users who normally use a keyboard tray will need to instead raise their chair and use a footrest
- Tall users may need to raise their desk height first in order for the platform to go high enough.

Refer to sit-stand pdf 'sit-stand desks and platforms. Specs & Comments' for more details

## Sit-Stand Platforms



[Ergotron](#)  
 Workfit-S  
 Single Monitor  
 Worksurface  
 \$638

### Comments:

- Some users will find the monitor too close
- The worksurface platform provides space for papers but this is smaller than a typical desk
- Tall users may need to raise their desk height first in order for the platform to go high enough.

Refer to sit-stand pdf 'sit-stand desks and platforms. Specs & Comments' for more details

## Sit-Stand Platforms



[Ergotron](#)  
Workfit-S  
Dual  
Monitors  
Worksurface  
\$731

### Comments:

- Some users will find the monitors too close
- Users will need to center with both monitors, they cannot work with one as their primary
- The worksurface platform provides space for papers but this is smaller than a typical desk
- Tall users may need to raise their desk height first in order for the platform to go high enough.

Refer to sit-stand pdf 'sit-stand desks and platforms. Specs & Comments' for more details

## Sit-Stand Platforms



[Humanscale](#)  
Quickstand  
QSWW30FN

\$1,000 to  
\$1,500

### Comments:

- The advantage of this brand is the wider crossbar which will make it easier for users to position one monitor as their primary monitor
- Users that normally use a keyboard tray will either need to lift their keyboard/mouse from the tray to platform each time they transition or they will need to raise their chair and use a footrest

Refer to sit-stand pdf 'sit-stand desks and platforms. Specs & Comments' for more details



## Positive Psychosocial Factors

Positive factors such as autonomy, rewards/recognition and co-worker/supervisory support have a protective effect against the risk for injury

Conversely, too much stress can result in increased muscle tension, higher mechanical load and an insufficient work-rest recovery ratio which can increase your risk of injury.

Check out resources available at UBC and consider what you can do to improve the positive factors within your work environment.





# Positive Psychosocial Factors

Available UBC Resources:

Staff & Faculty	Students
<a href="#">UBC EFAP Program</a> Employee & Family Assistance Program	<a href="#">UBC Counseling Services</a> (Brock Hall)
<a href="#">Responding with Respect</a> Free interactive training for departments	<a href="#">UBC Mental Health Network</a>
<a href="#">Thrive.ubc.ca</a> Building mental health at UBC	<a href="#">Thrive.ubc.ca</a> Building mental health at UBC
<a href="#">Healthy UBC Newsletter</a> Free Newsletter	<a href="#">Live Well to Learn Well</a> Student resources for healthy living



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## **For more information**

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