Question: When is a height-adjustable desk most useful and what type of ergonomic stressor are they designed to prevent?

Height-adjustable desks should be used to help employees avoid spending prolonged periods of time sitting in a chair to perform required work (usually computer-based work).

The static posture of sitting is associated with many disease conditions and may cause injury or discomfort for some employees with underlying health conditions such as arthritis or edema.

If purchase or installation of a height-adjustable desk is not feasible or immediately achievable, other changes to the work place or employee work habits can provide similar (if not better) results in combatting the effects of prolonged seated work.

Before considering purchase of a height-adjustable desk, the following reasonable and effective practices should be employed whenever possible:

- Use shared printers and FAX machines to minimize equipment at individual workstations and to provide more incentives for employees to stand up and walk around during the workday.
- Take a 5-10 minute mini-breaks from seated computer work at least once per hour to stand up and move around within one's workspace.
- Stand up and walk away from seated computer work at least once per hour.
- Breaks from seated computer work can be accomplished by alternating seated computer work with other jobs tasks that require walking or can be performed while standing (printing and collating documents, scanning documents, sorting mail).
- More frequent breaks from seated desk work can also be accomplished by supporting employee
 wellness programs aimed at increasing movement and promoting hydration with healthy fluids (drinking
 water) throughout the day

The bottom line: The most important priority is forming a regular habit of standing up or changing one's seated position at least once per hour. That can be accomplished with or without a height-adjustable desk.

There are cases where standing up or stepping away from one's desk are not feasible or would be extremely counterproductive to work objectives. In these cases, a height-adjustable desk may be useful in helping employees to carry on with required computer-based job tasks while avoiding prolonged seated postures.

- Front desk receptionist employee is required to be available at desk as needed and might not have enough opportunities to take breaks to step away from seated work.
- Computer/Information technology/remote support help desk staff employee is required to be available
 at computer terminal and might not have enough opportunities to take breaks to step away from seated
 work.
- Highly focused or specialized work performed on computers (writers, editors, scientists, computer
 programmers, intensive data entry) employee's work requires computer terminal and is adversely
 affected by breaks in attention or physical interruptions.

Are all height-adjustable desk the same? What are the differences?

Type of Unit	Strengths	Drawbacks
Hydraulic or Manual (hand crank) riser desk (\$800 -\$3000)	 Adjustable to any height within certain ranges Employees with pre-existing back conditions Available in manual lift or powered units 	 Relatively expensive Heavy furniture may require professional installation Requires power source Hand crank models can be awkward/strenuous to operate
	Best uses:	Not advised for:
	• The best option – if funding and space are available	 Locations with limited funding or space resources
Mobile Sit-Stand	Adjustable to any height within certain ranges	Limited desktop work space
workstation (\$700-\$2000)	Mobile for use at multiple locations within an officeAvailable in manual lift or powered units	 Some units can be bulky or require power source for operation
	Best uses:	Not advised for:
	Shared use within an office	 Long term full time (8 hours daily) use
	Data entry tasks	Replacing full size desk
Sit-on-top unit	Relatively low cost	Can be unstable when raised
(\$300-\$500)	Easy installation	Limited adjustment settings and height ranges
		Can be awkward/strenuous to operate for some
VariDesk Proplus Evodesk XE		Not compatible with all desk types
	Best uses:	Not advised for:
	Adding standing option to existing desk	 Employees with low back injury or instability (Varidesk) Employees over 6 ft tall (Varidesk)
Arm/pedestal	Relatively low cost	Not compatible with all types of desks
units	Easy installation	Typing can cause monitor to shake
(\$400-\$800)	Monitors mounted to unit (more seismically stable)	Keyboard tray is minimal and not highly adjustable
Ergotron work-fit	Best uses:	
	 Adding standing option to standard desk 	
	 For keyboard height lower than desktop surface 	Not advised for:
	Earthquake-prone areas	Incompatible desks

What if an employee has a medical condition and has a doctor's written note requiring a height-adjustable desk?

Employees may be referred to UC Davis Occupational Health Clinic to discuss their condition with a physical therapist who can determine if the condition would be helped or possibly made worse by use of a height-adjustable desk. Some health conditions such as low back strain can be worsened by improper use of height-adjustable desk units.

Employees seeking height-adjustable desk as a disability accommodation should contact John Fox, UC ANR Disability services coordinator.

What types of cautions and Limitations are common to all height-adjustable desks?

Height limitations – height adjustable desks are designed to serve 95% of working adult populations. Very tall or very short employees may find that height-adjustable desks do not allow for then to have proper keyboard or monitor height

Weight limitations – all models of height adjustable desk have weight capacity limits. These limits should not be exceeded. Hydraulic units will fail pre maturely under excessive load. Hand-raised units pose hazards for back injury and structural collapse. The total weight of materials stored and used atop height adjustable desks should be kept to a minimum and must not exceed the capacity.

Pinch point hazards – height-adjustable desk have hazards similar to all rising platforms in that objects or human body parts can become trapped in or by the riser desk mechanism.

Seismic stability – all users of riser desks should perform a brief risk assessment to determine if sudden movements such as earthquakes or shifts in flooring, may cause objects to fall from elevated desk platforms. Height-adjustable sit-on-top desk units which are not attached to the desk should be lowered to seated height when not in use.

Limited application - use of a height-adjustable desk will not address every type of discomfort that arises from prolonged desk work.

- Height-adjustable or standing desks do not compensate for lack of supportive comfortable seating.
- Height-adjustable desk is not a substitute for a tilt-adjustable keyboard tray.
- Edema (swelling or pain in feet and ankles) can be worsened by standing work. This effect is worsened by lack of supportive footwear.

Can Be Smart About Safety (BSAS) funding be used for height-adjustable desks?

Yes, up to \$250 in matching funds may be applied to purchase of a height-adjustable desk if it is expected to provide ergonomic benefits and are not expected to cause (or worsen) any injury for an employee. An ergonomic evaluation is required for employees requesting funding for a height-adjustable desk. This evaluation is to assess whether use of the desk would be helpful or injurious to the employee, and to provide guidance in which type of equipment would serve best for the specific desk and employee needs.