Supervisor's Guide to the Ergonomics E-Tool

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This guide is for supervisors who have received findings from an employee who has completed the Computer Ergonomics E-Tool. Following the completion of the tool, corrective actionsare sent to you corresponding to the employee's ergonomic findings. The following information addresss goals, common concerns and solutions to these concerns.

First and foremost, it's recommend to discuss the concerns with employees to get further clarity to them. The issue could be as simple as not being able to locate the toggle on their chair or a new employee not knowing where certain equipment is kept.

If you have received a finding, you will find a code attached (for example, ERGO-21). You can easily find the information related to this code in this guide by either pressing 'CTRL + F' or by using the Table of Contents and holding CTRL and clicking on the corresponding title.

As well, as the solutions here are independent of one another, consider that if a chair or other piece of equipment needs a variety of small fixes, it may be a more efficient approach to buy a new chair or piece of equipment entirely. A basic guide to purchasing chairs and what features to look for is available on the Careers & MyHR Ergonomics page.

As outlined in the Telework Agreement, supporting a telework agreement should not generate any additional costs for the employer. For further details, please refer to Question 27 in the Flexible Work FAQ.

Resources

Corporate Supply Agreement - Furniture

Ergonomics on Careers & MyHR

Telework Agreement

The employee does not have a 5-caster chair with adjustability (ERGO-0)

Goal:

- An employee should be using a chair with a 5-wheel base and the ability to adjust components like the seat pan and backrest as required.

Common issues:

- An employee working from home or on the road may not have access to an appropriate chair
- An employee is using an older chair without all the features of a modern office chair

Common aolutions:

- Whenever possible, employees should be using an office style chair with adjustability and a 5-wheel base. However, it is not the employer's responsibility to purchase the chair for remote based work
- A guide for purchasing chairs is available on the Careers & MyHR Ergonomics page

The employee's chair does not move smoothly across the floor or the user has wires where their legs are under the desk (ERGO-1)

Goal:

- An employee should be able to move their chair without forcefully pushing off the floor with their feet
- Wires should not be running through the front of the desk or in an area where feet are resting to eliminate the risk of getting tangled

Common issues:

- Something is blocking the casters from moving smoothly such as debris or wires
- The computer wires are running through the front of the desk and at risk of tangling with the user's legs or feet
- Wires for mouse and keyboard are being run through the front of the desk and not the back, which may occur with employees who regularly move equipment between home and office
- Casters are not made for the surface the chair is on

Common solutions:

- Check the casters to ensure debris is not stuck in the wheels
- Consider a chair mat for the chair that is more appropriate for the type of casters on the chair. Some casters are better suited for carpet than others
- Check the supplier to determine if the casters can be replaced with ones more appropriate for your floor material

- If there are wires near the user's legs, consider either:
    - Running these wires behind the desk
    - Using an external mouse and keyboard so wires are no longer a concern
    - If the above are not possible, using zip ties to attach the wires to table legs or similar so the wires are not freely hanging

The employee is unable to rest their feet on the floor/footrest while ensuring the underside of their leg is mostly in contact with the seat pan (ERGO-2, ERGO-3)

Goal:

- To have the employee's feet rested comfortably on the ground or footrest while most of the legs and hips are supported by the seat pan. Typically, the hips will be at a similar level to the knees.

Common issues

- The employee is not able to reach the floor while keeping their workstation desk at an appropriate height. To keep the chair higher, they may compensate by resting their feet on the casters of their chair, which may result in the front of the seat pan pushing on the back of the knee
- The employee cannot locate the seat height adjustment toggle
- Most of the underside of the worker's leg is not making contact with the chair (for example, knees significantly higher than the hips)
- The chair is not an appropriate size for the employee

Common solutions:

- The seat height toggle is typically found underneath the seat pan with an up and down arrow
- If the employee's legs are not making contact with the floor or are rested on the casters, a footrest may be appropriate. You can try a preliminary test with an old textbook, recycle bin or similar object to see if this is an appropriate long-term solution and to determine the height of footrest you may require. Once a footrest is being used, the seat pan will likely need to be adjusted again.

- A good footrest has a non-slip surface, a slight slope or angle and won't slide or move easily when your feet are resting on it
  - If the user's knees are significantly higher than the hips, the seat pan needs to be raised higher until they are closer to being level
  - The employee may need a chair more appropriate to their size. Review the Corporate Supply Agreement - Furniture for stores or showrooms in your area. Many stores offer chairs that are smaller and larger than your typical office chair. If requiring this kind of chair, it may be worth having the employee visit a showroom to try the chair first.

The employee does not have appropriate clearance between their knee and the back of their chair (ERGO-4)

Goal

- The employee should have space between the back of their knee and chair, this prevents pressure of the nerves or vessels that pass through the back of the knee.

Common issues:

- Make sure the employee is assessing this when their knees are at least 90-degree angle and that they are not resting their feet on the legs/casters of the chair or underneath the chair
- The seat pan is too far forward, forcing them to push back to reach the backrest

Common solutions:

- Review the chair for a seat pan depth toggle. This allows the user to move the seat forward or backward. If the seat is pushed towards the backrest, it will create the necessary space. Lumbar support may need to be reviewed following this change
- If the individual is smaller in stature, the size of the seat pan may be too large for them and a chair with a smaller seat pan length may need to be considered. Review the Corporate Supply Agreement - Furniture for stores or showrooms in your area. Many stores offer chairs that are smaller and larger than your typical office

The lumbar support is not supporting the employee's back (ERGO-5)

Goal: The lumbar support should curve inwards towards the employee's lower back, the area just above the hips.

- The backrest should be long enough to support up towards the middle to upper back of the employee

Common issues

- The backrest is too high or too low, so it does not align with the lumbar curve.
- There is no lumbar curve in the chair
- If the chair has a lumbar firmness option, confirm it is as not at the lowest setting
- The backrest is too short
- The employee is perched forward and unable to sit back far enough to have the backrest supporting them

Common solutions

- Adjust the backrest height to make sure curve lines up with the low back curve. If it is difficult to tell if the lumbar is in the right position, start at the bottom and slowly adjust the lumbar support upwards until the employee notes
- If the employee is unable to sit back far enough to reach the backrest, they may need to have the seat depth adjusted. Have the seat pan pushed back towards the backrest
- If there is no lumbar backrest on the chair, consider [an external lumbar support](#) for the chair
- If the backrest is too short, they need a different chair

The employee is not able to adjust their backrest angle (ERGO-6)

Goal:

- The backrest angle should typically be in the range of 90 to 120 degrees and have a locked position but still allow for adjustment if the body pushes against it.

Common issues:

- The chair has a rigid backrest
- The employee is unable to locate the adjustment mechanisms for the backrest

Common solutions:

- Unless the chair is not capable of adjustments, the employee is likely having issues with the multiple adjustment mechanisms of the backrest. There are typically two adjustment toggles for the backrest, one to determine the "home" position, and one to adjust the force required to push the backrest back. The home position should be close to or above 90 degrees
- If you are unable to resolve it with the employee, we recommend looking at the instruction manual for the chair online for detailed instructions

The employee's armrests are interfering with their workstation or don't allow a comfortable neck/arm position for the user (ERGO-7)

Goal:

- The armrests should provide support by allowing the forearms to rest on them. If the armrests are too high, the shoulders will shrug up towards the ears
- The armrests should not be at a height that prevents the user from using their keyboard and mouse with bent elbows. For example, they should not be hitting the desk and preventing the user from moving closer to the desk, forcing the user has to reach with extended elbows to use the keyboard and mouse

Common Issues:

- The user was unable to locate the armrest toggles. These are typically under or near the armrests unlike other toggles
- The armrests are at a height that that hits the desk and limits how close the user is to the desk
- The chair is old, and the armrests are not adjustable

Common solutions:

- More modern chairs have toggles for armrest width, height and angle. These are all typically located underneath the armrests. Older chairs will typically only have a height adjustment, which is often suitable for the average user
- If the armrests are at a height that hits the desk and they are reaching as a result, look to see if the armrests can be lowered to just below the desk and still provide support. As well, look to see if the keyboard and mouse can be moved closer to the edge of the desk if the user is reaching

- Older chairs with non-adjustable armrests can either have the armrests removed entirely or should be considered being replaced entirely

The employee is unable to remain centred to their keyboard and mouse setup (ERGO-8)

Goal:

- The employee should be centred to their keyboard tray and mouse set-up so as not to have to excessively reach for the keyboard and mouse. The elbows should be able to remain bent and close to the body

Common issues:

- The employee has limited workspace on their desk or keyboard tray forcing them to keep the mouse and keyboard on different heights or areas of the desks

Common solutions:

- The location of the mouse and keyboard should be considered a priority when designing the workspace as they are likely the two most frequently used pieces of equipment
- If a keyboard tray is limiting the worker's ability to keep the mouse and keyboard side by side, consider removing the tray and using the desk space

The employee is unable to move their mouse without excessive wrist motion (ERGO-9)

Goal:

- The employee should be able to move their mouse from their shoulder and elbows, and not from their wrists

Common issues:

- The employee has limited workspace on their desk or keyboard tray forcing them to use quick, jerky movements from their wrist to get their cursor across the screen. They may also repetitively lift the mouse and re-centre the mouse to move the cursor

Common Solutions:

- Improve mouse cursor sensitivity as this will reduce the amount you need to move the mouse to get the cursor across the screen. This can be done by:
    - Right click your desktop and select 'Personalize'
    - Type 'mouse' in the search box and select 'Mouse Settings'
    - Pull the 'Cursor Speed' toggle to the right to increase mouse sensitivity
    - Depending on what is limiting workspace, a smaller keyboard can create space for employees when using a shortened space like a keyboard tray

The employee is unable to keep their wrist in line with their forearms while working (ERGO-10)

Goal:

- When typing or mousing, the employee should be able to keep their hands relatively in line with their forearms; they should not have to bend their wrists excessively in any direction for prolonged periods of time

Common Issues:

- The desk may not be an appropriate height for the employee. When situated at their workstation, the elbows should line up with the keyboard height or be slightly higher
- For some users, the keyboard stands may elevate the keyboard in a way that forces the user to bend their wrist upwards

Common solutions:

- If the desk is adjustable in height, lower or raise it so that the keyboard is in line with the elbow. This should have the desk and keyboard at an appropriate height if employee is standing or sitting
- If the desk is not adjustable in height, raising the seat height and introducing a footrest may be required
- If the keyboard stands are causing the wrist to bend upwards, push the keyboard stands down

The employee's mouse is not an appropriate size for their hand (ERGO-11)

Goal:

- While grasping your mouse, the tip of your fingers should be close to the edge of the buttons with your hand supported at the base
  - A hand that measures 17.5cm or smaller would benefit from a mouse 11cm or smaller in length
  - A hand that measures between 17.5cm to 19.5cm would benefit from a mouse 11cm to 12.5cm in length
  - A hand that measures 19.5cm or larger would benefit from a mouse 12.5cm or larger in length

Common issues:

- With mouse, there are many that are part of keyboard and mouse kits where the mouse is usually on the smaller end

Common solutions:

- Review the mouse size and employee's hand size to determine an appropriate mouse size to order
- Try other mouses in the office and see what feels comfortable for the employee and order a similar size mouse

The employee's monitor is not at the correct height (ERGO-22)

Goal:

- While situated at their desk, the employee's eyeline should be in line with the top one-third of their screen. If they wear progressive lenses, lower the monitor an additional 3 to 5 cm for a more comfortable viewing

Common issues:

- The monitor doesn't have the height adjustability needed to be high enough for the user
- A difficult or rigid monitor arm that may have locking mechanisms

Common solutions:

- Placing a riser below the monitor to help raise it. While there is equipment that can be purchased to accomplish this, as long as the base can fit on a sturdy object like a textbook or ream of paper, these can be appropriate for raising the height of the monitor
- For workstations being shared by multiple users, a monitor arm may be more appropriate to create easy adjustability between users
- Review the monitor arm to determine how to adjust it. Some may just require more force than expected to have it move

The employee's laptop is not at the correct height (ERGO-12, ERGO-14)

Goal:

- While using a laptop as our primary monitor, the employee should be able to use the laptop at a height that allows the employee's eyeline to be on the top one-third of the screen while using an external mouse and keyboard
- While it shouldn't be considered problematic to use the laptop as is, it should not be a long-term workstation without something to elevate the screen and using an external mouse and keyboard

Common issues:

- The employee does not have access to equipment to either elevate the monitor or does not have an external mouse and keyboard. Both an external mouse and keyboard and something to raise the monitor is required to use the laptop comfortably for long periods of time

Common solutions:

- If the employee does not have an external monitor, mouse or keyboard these can all be valuable purchases to make a more comfortable workstation
- If the employee continues to use the laptop as the primary monitor, equipment such as laptop risers can be purchased. In-office supplies such as reams of paper can also be used to prop up the laptop

The employee is unable to organize their workspace (ERGO-13)

Goal:

- The employee's workspace should be set up in a way the minimizes awkward positions and excessive reaching, particularly for repetitive tasks. For example, side-bending over your armrests constantly throughout the day to reach a cabinet

Common Issues:

- Old pieces of equipment or furniture from a prior colleague limiting space
- Employee maintained arrangement of space similar to how a prior colleague arranged it

Common solutions:

- Reviewing the workspace with the employee and determine if anything needs to be removed. Commonly an employee will situate themselves at a workstation and use it in similar way their predecessor did
- Keeping heavier items closer to waist level instead of overhead or on the ground can reduce lifting needs

The employee is unable to place their monitor at an appropriate distance (ERGO-15)

Goal:

- The employee's monitor should be placed at a distance that allows them to view their monitor comfortably without constantly leaning in, squinting, or perching forward on their chair
- Typically, an arm's distance away from the user is a good guideline but can differ depending on the size and resolution of the monitor. As such, using this as a starting point and monitoring for behaviours like constantly leaning in should guide if the monitor is an appropriate distance away

Common issues:

- The monitor settings, such as brightness and contrast, are limiting visibility of the screen
- Employee is unable to physically move the screen closer or farther away

Commos Solutions:

- You can change screen resolution, magnification and brightness by doing the following:
- Right click on the desktop
- Select 'Display settings
- The pop-up will give options to adjust brightness, contrast and magnification
- When trying to determine an appropriate brightness and contrast level, try to mimic the lighting level in your environment. Monitors may also have brightness setting buttons externally which can be used
- If the desk space is limited in allowing the monitor to move, a monitor arm could be installed so desk space is no longer a limiting factor. Prior to looking at monitor arms, please look at your monitor specifications. They are typically designed with VESA 100mm x 100mm plates or VESA 75mm x 75mm plates which will correspond with the style of monitor arm

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The employee may benefit from a document holder as they refer to paper documents frequently (ERGO-16, ERGO-18)

Goal:

- For employees who have to refer to paper documents regularly, a document holder can help minimize repetitive neck movements from looking between the document and monitor
- Document holders typically come in two forms, a monitor clip-on attachment or a desk stand. Depending on the user's workspace, one might be more appropriate than the other

Common Issues:

- The employee does not have a document holder
- The employee does not have the desk space to utilize the desk stand document holder

Common solutions:

- For any employee that regularly refers to paper documents, a document holder can be beneficial. If the user uses more than two monitors side by side, a desk stand document holder may be appropriate to lessen the distance they have to look left and right
- For an employee who has limited desk space, a monitor clip-on document holder may be more appropriate
- Depending on the frequency they are used in the office environment, it may be beneficial to have an 'equipment bank' that workers can borrow a document holder from as needed

The employee has glare shining off their monitors (ERGO-17)

Goal:

- To reduce glare, which is light reflecting off your screens or shining into your eyes. This typically can come from sunlight, overhead lighting or other light sources. It is easiest to identify glare on your monitor when it is turned off and a black screen.

Common issues:

- Natural light from outside is shining directly on the monitor or shining into the employee's eyes
- Overhead light is shining directly onto the screen

Common solutions:

- To prevent light from being able to shine on the monitor, having it perpendicular to the light source can minimize glare. In this position, the employee would neither be facing the light source or have their back to it
- Ensure blinds on windows are useable to be able to block outside light
- Depending on the type of overhead light, and where it is situated relative to the monitor, you may have to move the monitor to a different space to minimize glare. If the monitor can tilt, ensuring that it is at most a 90-degree angle with the desk can minimize glare
- If there are limits to how the monitor position can be adjusted, it can be worth reviewing if the environmental lights are too bright. By working with facilities, it may be worth reviewing if you can either remove some lights or dim them to lessen the amount of external light

The employee is unable to switch comfortably between sitting and standing (ERGO-20)

Goal:

- For employees who have a workspace that allows them to adjust between sitting and standing, they can do a quick review to ensure they hit these main points when changing postures
- The keyboard and mouse should be slightly below or at elbow height when standing. Your shoulders should remain in a relaxed position (not hunched towards your ears)
- The top one-third of the monitor should remain at eye level. Once standing, you may notice that you are closer to your monitor. Consider moving the monitor back slightly to accommodate your standing position if this is the case

Common issues:

- The employee is unaware of how to adjust their desk position

Common solutions:

- Review workstation/desk manual to review how to safely adjust the desk height position
- If you are regularly going back and forth between two positions, it may be worth making a simple marker to indicate your preferred desk position at sitting and standing

The employee requires assistance with understanding an appropriate sit and stand schedule (ERGO-21)

Goal:

- The employee may wish to create a routine for switching between sitting and standing. There is no correct time to spend in each position and should be decided based on comfort and tolerance for the different positions

Common issues:

- The employee is forgetting to follow a schedule without cues or reminders.

Common solutions:

- Review reminder systems, such as their phone or outlook calendar reminders, to help support a consistent posture change
- While changing positions to remain working can be a viable strategy, it should not replace microbreaks that are there to introduce walking or movement in your workday. Standing, like sitting, is simply another static posture and you should aim to reduce the time we remain in static postures throughout the workday

The employee requires assistance with an appropriate microbreak schedule (ERGO-19)

Goal:

- Microbreaks are shorter breaks you take to introduce movement into your workday and limit prolonged periods of time you spend in either sitting or standing positions.
- They should be taken on top of your regular break schedule and should be designed around introducing movement at least every 30 minutes spent in the same position
- Movement can look like stretching, walking, pacing or switching between sitting and standing. The employee's goal is to create a consistent and regular pattern of movement breaks they can follow throughout the day

Common issues:

- The employee is forgetting to follow a schedule without cues or reminders

Common solutions:

- Review reminder systems, such as their phone or outlook calendar reminders, to help support a consistent posture change
- If things like long virtual team meetings are common, look for ways to introduce movement breaks into the meeting

The employee requires an external mouse (ERGO-23)

Goal:

- Employees should use an external mouse for their laptop when possible. Without an external mouse, employees are unable to elevate their laptop screen to eye level without creating an uncomfortable height for the trackpad
- If done temporarily, it is not a concern to be using a laptop without an external mouse. However, it is not ideal on a day-to-day basis however

Common issues:

- The employee does not have an external mouse available
- The employee is using a wired USB mouse and does not have enough USB slots available

Common solutions:

- Purchase an external mouse, preferably wireless. Review (ERGO-11) for guidelines on mouse size relative to user hands
- If USB slots are unavailable, USB Adapters to allow for further USB slots are widely available from office supply stores