

Equity and Ergonomics

Converging equity and ergonomics to catalyze business objectives

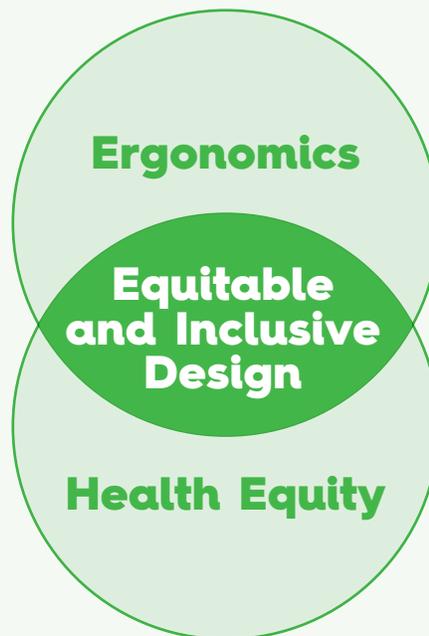
Ergonomics is a human-centered practice, modifying work environments and job tasks to meet the needs of the workforce and empower healthier, safer and more efficient work. As part of achieving these goals for a diverse workforce, equity and inclusion are embedded into the principles and are at the core of the practice of ergonomics.

Ergonomics:

An applied science that considers people's abilities, limitations and characteristics in the design and evaluation of work systems, including job tasks, job stations, workstations, tools, equipment and the work environment.

Health Equity:

The state in which everyone has a fair and just opportunity to attain their highest level of health. Achieving this requires focused and ongoing societal efforts to address historical and contemporary injustices; overcome economic, social and other obstacles to health and health care; and eliminate preventable health disparities. (CDC, 2023)



Equitable and Inclusive Design:

- Share focus on holistic wellbeing
- Aim to change environments and systems to create better conditions for people
- Promote accessibility and inclusivity by considering a broad range of needs
- Account for cultural and psychosocial factors that influence MSD risks
- Include worker voices to identify solutions
- Empower and support workers' ability to achieve their best potential
- Reduce and prevent health disparities by addressing risk on and off the job

The Intersections of Equity, Ergonomics and Business Success:



Bolster safety with belonging.

When people are acknowledged and respected for their identities, they are more likely to engage, commit and champion safety initiatives.



Enhance performance and innovation.

A safe, equitable work environment that fosters psychological and physical safety allows workers to perform at their best, share ideas and offer creative solutions to job problems.



Broaden talent pools.

Crafting spaces that are inclusive of different worker needs and abilities opens job opportunities to individuals who might otherwise be excluded, providing businesses a competitive advantage to acquire and retain diverse worker talent.

Conveyor Height

Designed for the “Average” Worker?

A fixed, standard counter height can introduce MSD risks for workers who may have to reach or bend to conduct work.



The short worker must use extended reaches and perform the work at higher heights, increasing MSD risks to the shoulders, neck and back.

The average worker is able to work safely at waist height.

A tall worker needs to bend awkwardly to fulfill the task, increasing MSD risks to the back.

An Equitable and Inclusive Design

A flexible, varied work station accommodates a wide range of worker heights, sizes and abilities, allowing workers to work at stations suited to their needs.



Option 1:

Create a multi-tiered conveyor with chutes between levels so workers can work at stations optimal for their height.

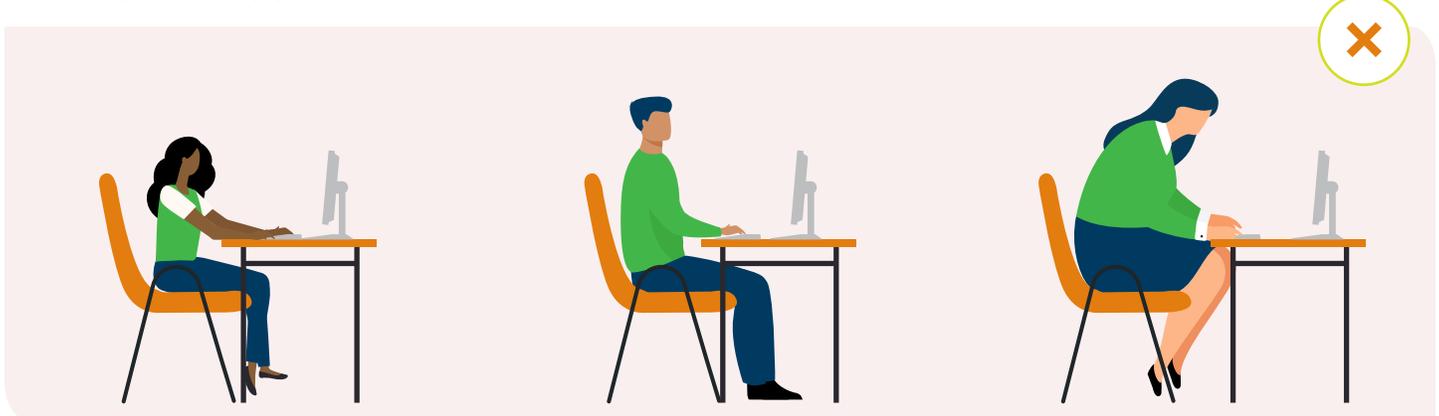
Option 2:

Adjust conveyor height to the tallest worker and provide platforms of varying size to accommodate worker heights.

Desk Stations

Designed for the "Average" Worker?

Fixed desk tables and standard chairs that do not accommodate varied sizes and body types can pose risks to workers through poor posture, awkward reaching and inadequate support.



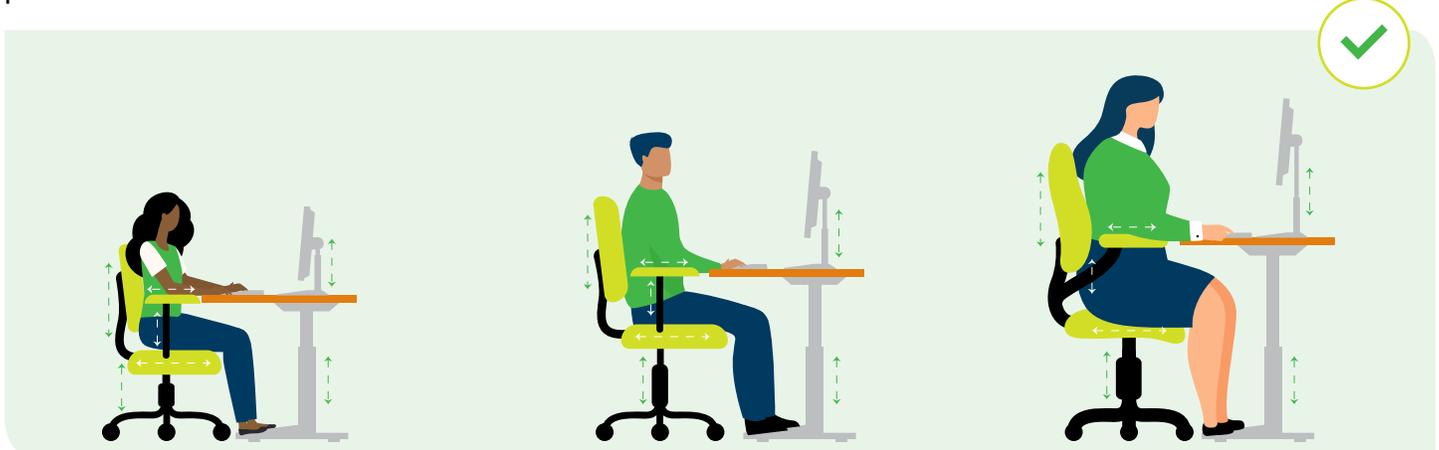
A smaller-bodied worker risks MSD from dangling legs or reaching awkwardly to conduct work.

Only the "average-sized" worker can achieve safe, proper posture with feet grounded and elbows at a comfortable height.

A larger-bodied worker risks injury if elbows are tucked in, legs are cramped, the body is hunched over and the chair lacks functional support.

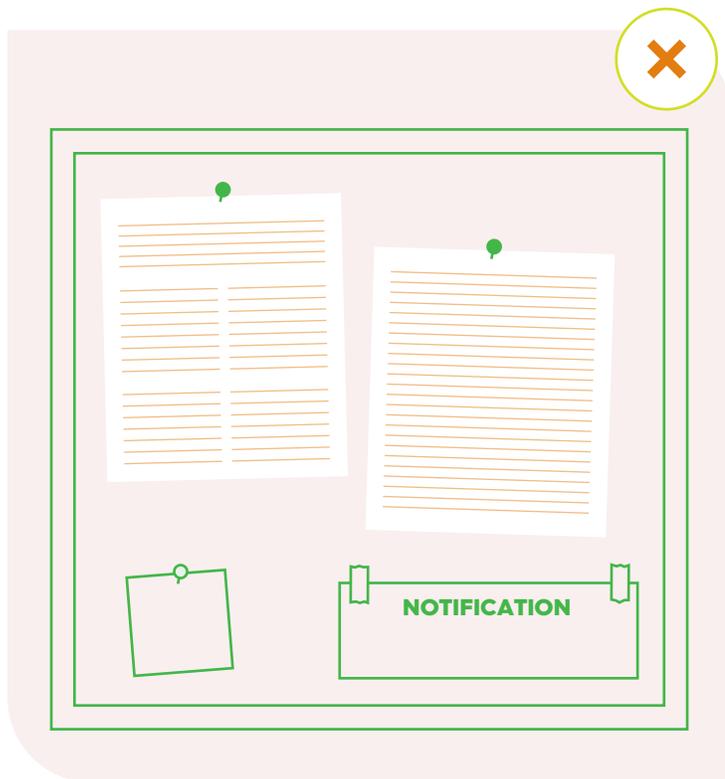
An Equitable and Inclusive Design

A diverse selection of desk furniture with adjustable features allows workers to create work stations that best suit their unique needs for safety, comfort and performance.



All workers are able to sit with their feet planted flat on the floor or on a footrest, with their knees in line with their hips and screens are at eye level. Work is close and accessible at elbow height.

Instructional Material

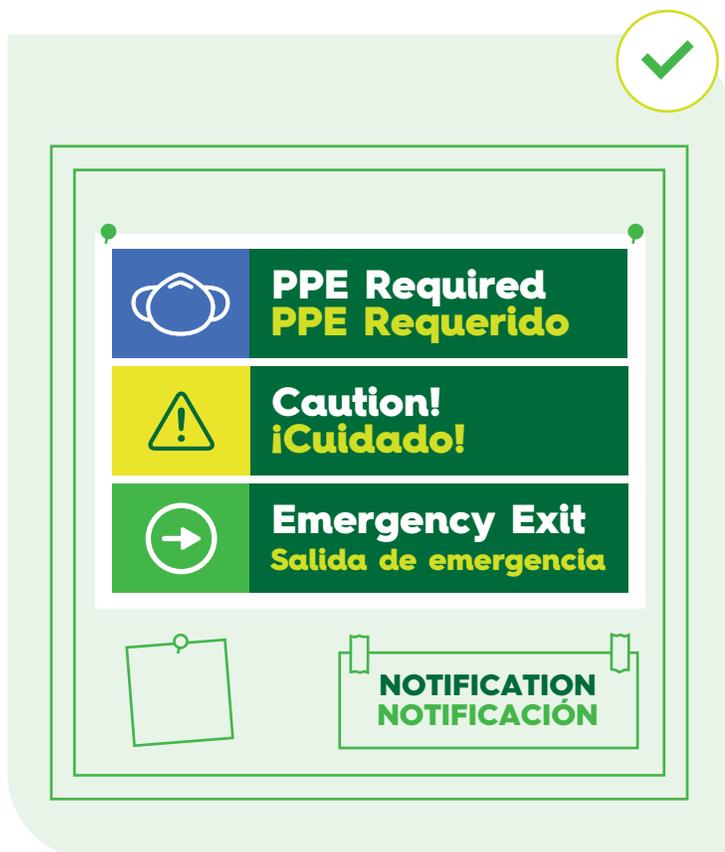


Designed for the “Average” Worker?

Non-inclusive instructional material both marginalizes workers and increases the likelihood of safety-related errors when instructions are not understood.

A non-inclusive instructional poster:

- Is written exclusively in English
- Uses technical language
- Includes only text
- Is written in a small font size
- Is incompatible with assistive reading devices
- Uses colors that do not follow universally-recognized patterns



An Equitable and Inclusive Design

Inclusive materials that are easily accessible and understandable for a wide-range of workers reduce the likelihood of safety-related errors.

An inclusive instructional poster:

- Is available in the languages spoken by your workforce
- Uses plain, clear language
- Includes pictures, icons and other visual aids
- Is written in a large font size
- Is designed to be compatible with assistive reading devices
- Uses universally-recognized safety colors