

Understanding Ergonomics at Work (Part 3 of 5)

What kind of workplace problems can ergonomics solve?

Ergonomics is typically known for solving physical problems. For example, ensuring that work surfaces are high enough to allow adequate clearance for a worker's legs. However, ergonomics also deals with psychological and social aspects of the person and their work. For example, a workload that is too high or too low, unclear tasks, time pressures, inadequate training, and poor social support can all have negative effects on the person and the work they do.

The following examples highlight some 'typical' ergonomic problems found in the workplace:

- Display screen equipment
 - the screen is poorly positioned - it is too high/low/close/far from the worker, or is offset to one side
 - the mouse is placed too far away and requires stretching to use
 - chairs are not properly adjusted to fit the person, forcing awkward and uncomfortable postures
 - there is glare on the screen from overhead lights or windows, increasing the risk of eyestrain
 - hardware and/or software are not suitable for the task or the person using it, causing frustration and distress
 - not enough breaks or changes of activity

These problems may result in mistakes and poor productivity, stress, eyestrain, headaches and other aches or pains.

- Manual handling
 - the load is too heavy and/or bulky, placing unreasonable demands on the person
 - the load has to be lifted from the floor and/or above the shoulders
 - the task involves frequent repetitive lifting
 - the task requires awkward postures, such as bending or twisting
 - the load cannot be gripped properly
 - the task is performed on uneven, wet, or sloping floor surfaces
 - the task is performed under time pressures and incorporates too few rest breaks

These problems may result in physical injuries such as low back pain or injury to the arms, hands, or fingers. The problems may also contribute to the risk of slips, trips, and falls.

- Work-related stress
 - work demands are too high or too low.
 - the employee has little say in how they organise their work
 - poor support from management and/or colleagues
 - conflicting demands, eg high productivity and quality

Poor control of the risks causing work-related stress could lead to ill health and reduced performance and productivity.

- Managing the working day
 - insufficient recovery time between shifts
 - poor scheduling of shifts
 - juggling shifts with domestic responsibilities
 - employees working excessive overtime

These problems may lead to tiredness or exhaustion, which can increase the likelihood of accidents and ill health.