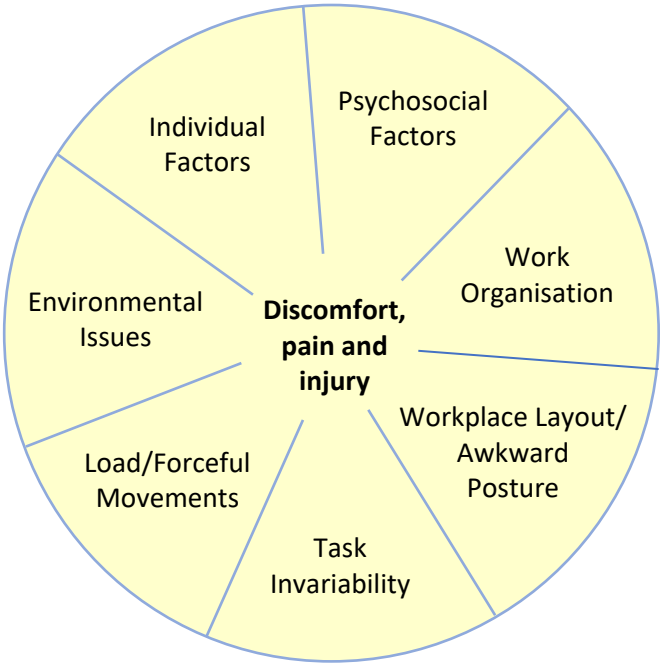
THE CONTRIBUTORY FACTORS – COMBINED EFFECT

There are many factors that work together – in varying proportions depending on each person and task – to cause discomfort, pain and injury. We call these the contributory factors.



We have grouped the contributory factors into seven categories.

IF Individual factors: Things a person can and can't change about the way they are.

PF Psychosocial factors: The way a person interacts with their social environment and the influences on their behaviour.

WO Work organisation: How work is arranged, delegated and carried out.

WL Workplace layout/awkward postures: The way the workplace is set up and the working positions workers adopt.

L Load/forceful movements: What objects a person handles and the forces they have to apply.

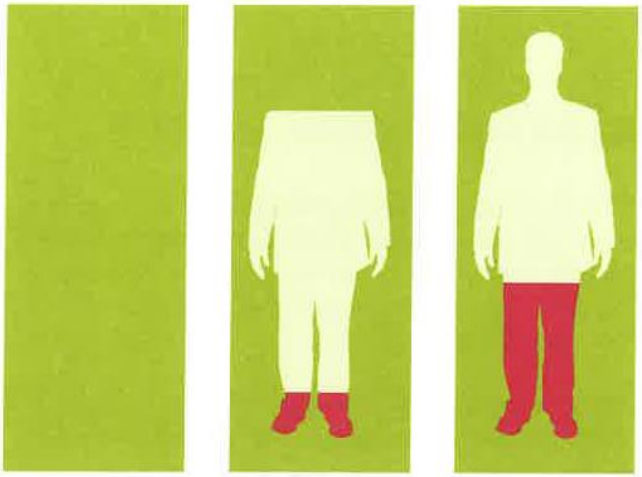
TI Task invariability: How much a task changes over time.

EI Environmental issues: Where the work takes place and the conditions a person works in.

We discuss each of these factors in the following pages. However, it's important you understand that it is the combination of the factors at work that are significant in the occurrence of discomfort, pain and injury, rather than any one particular factor in isolation.

COMBINED EFFECT

To explain the combined effect, imagine a container (shown here by the outline of a person). The white 'empty' area represents a person's capacity to tolerate discomfort, pain and injury. To determine the risk of discomfort, pain and injury occurring we need to 'pour in' the contributory factors. If the total of the contributory factors overflows the container (i.e. it reaches the person's 'critical mass') then discomfort, pain and injury may arise.



It's important to understand that each person's container holds a different amount or volume. This is because each of us has individual factors we can't control, such as age, gender and genetic make-up, which limit our capacity. To represent this, we need to put a block at the base of the container (shown here in red), effectively changing the remaining volume for the remainder of the contributory factors to go into. This block varies in size depending on the person, which explains why, given identical working conditions, some people get discomfort, pain and injury and others don't.

The remaining contributory factors – apart from some individual factors – can be represented as fluids in pouring jugs. The amount of fluid in each jug will depend on how much that contributory factor impacts the workplace.

Imagine that the factors all get poured into the container (remember, that being fluid, they will combine inside the container). If the container 'overflows' then the person's critical mass has been reached and they may experience discomfort, pain and injury.

As an employer your task is to try to reduce the amount of combined fluid so that it doesn't overflow and critical mass is avoided. As these illustrations show, to do this, you need to consider all the contributory factors, giving them the appropriate attention depending on how much they impact the person.