

## Nervous system: from damage to symptoms

## Brain and spinal cord = central nervous system (CNS)





When you pick up something like this information sheet and start to read, your central nervous system, or CNS, performs several functions. For instance, the CNS sends out command signals to control how your arms hold the sheet, and interprets information from your eyes as you read.



The CNS consists of the brain and spinal cord. Different parts of the CNS relate to different parts of the body.

If the CNS is damaged, by disease or injury for example, the location of the damage determines the nature of any resulting symptoms. Symptoms occur because of disruption to nerve impulses as they travel between the CNS and the rest of the body.

Damage to the spinal cord, for example, may result in both numbness and weakness in the limbs and bladder disturbance. Damage to the optic nerve, which connects the eyes to the brain, often causes blurred vision and loss of colour perception.

Other common symptoms resulting from damage to the CNS include difficulties with movement, such as weakness, spasticity, stiffness and a feeling of heavy limbs, and abnormal sensations, such as numbness, pain and itching.

In many cases, damage to the CNS, even to large areas, does not produce symptoms. Nevertheless, the greater the amount of damage, the more likely symptoms become.

