# **MOBILITY IMPAIRMENTS**

### **OVERVIEW and DEFINITIONS**

Generally, there are two types of physical disabilities which affect mobility: orthopaedic and neurological. Orthopaedic disabilities involve a deformity of the skeletal system. The impairment can be the result of a congenital anomaly (i.e. clubfoot, spina bifida), the result of disease (i.e. muscular dystrophy, arthritis), or the result of trauma or accident (i.e. Poliomyelitis), or the result of an accident (i.e. spinal cord injury, head trauma).

Neurological disabilities involve the nervous system affecting the ability to move, use or control certain parts of the body. Such impairments can be result of a congenital anomaly (i.e. cerebral palsy), the result of disease (i.e. Poliomyelitis), or the result of an accident (i.e. spinal cord injury, head trauma).

**Multiple Sclerosis** is the most common neurological disease. It is not a contagious or hereditary disease but one thought to be caused by a virus or an immune reaction, or a combination of both. Symptoms vary, but may include visual disturbances, slurred speech, fatigue, paralysis, muscle tremors, impaired gait, personality changes, respiratory infections, loss of coordination, loss of balance, numbness or prickling feelings in extremities and general malaise.

**Cerebral Palsy** is a condition caused by damage to the brain before, during or after birth. It is chiefly characterized by motor disorder. It is not progressive nor is it considered curable, although physical therapy can be helpful in improving comfort and mobility.

**Spina Bifida** is one of the most prevalent birth defects causing physical disability. It occurs in the spinal column when one or more vertebrae do not close during prenatal development. The condition varies, displaying few to many consequences, ranging from mild to serious in nature.

**Spinal Cord Injury** are most commonly the result of trauma from sports related injuries and accidents. The spinal cord can be partially severed or permanently damaged by severe scarring. The degree of impairment depends on the extent and the level of the damaged vertebra(e) in the spinal cord. Terms used to describe the amount of physical functioning that an individual may retain include, paraplegia, paralysis of both legs, and quadriplegia, or partial or complete of all four limbs.

### **EDUCATIONAL IMPLICATIONS and INSTRUCTIONAL STRATEGIES**

Some specific, medically oriented knowledge can be very helpful in understanding a student's needs and learning patterns. It is important, however, that faculty approach medical information about a student from an educational, and not from a diagnostic point of view.

A common problem to students with mobility impairments is fatigue and pain. They may have to expend more energy for the routines of daily living and so consideration should be given to their expenditure of energy in the classroom and surrounding environment. Pain and the adverse side effects of medication can be significant detractors to learning.

College staff can assist in ensuring that the physical environment is barrier-free. This means that a person can move around an environment without assistance. An example of a barrier free door opener would be one that opens with an electronic sensor, not a push-plate. Removing environmental barriers, clearing aisles, lowering work surfaces and providing convenient locations can be very helpful to the student with a mobility impairment.

There are no instructional strategies that are specific to persons with mobility impairments. The following suggestions will enhance the learning experience for the student:

- locate equipment and supplies in close proximity to the student
- if the classroom is inaccessible or in a remote location request a change
- choose field trips and activities that are accessible to the student with a mobility impairment
- be aware of the fire evacuations procedures for students with mobility impairments
- students who are mobility impaired may use adaptive equipment

## **POINTS of ETIQUETTE**

- always ask a wheelchair user if he or she would like assistance before you help
- check desk height to make sure the wheelchair fits comfortably underneath
- if conversation lasts more than a few minutes, consider sitting down or kneeling to get yourself on the same level as the wheelchair user
- don't hang or lean on a person's wheelchair because it is part of the wheelchair user's personal body space
- do not move the wheelchair without the user's consent

## SUGGESTED ACADEMIC ACCOMMODATIONS

- access to adaptive technology, assistive devices and/or scribe or note-taker
- allowance of break periods as needed for rest, taking medication and toileting
- preferential seating and ergonomically designed seating/furnishings
- advance book/reading lists
  - provision of extended time for tests and exams.
- reduced course load
- punctuality should not be penalized where mobility is a factor