

Physical and Mental Challenges

Does your school have ramps and special bathroom facilities to accommodate people in wheelchairs? Are there telephones for the hearing or vision impaired? Such aids for people with physical and mental challenges began to appear in recent decades.

HEALTH TERMS

disability
profound deafness
mental retardation
Americans with Disabilities Act

HEALTH CONCEPTS

- Depending on its nature and severity, a disability can interfere with an individual's performance of tasks that nondisabled people may take for granted.
- Understanding the realities of physical and mental challenges is important for all people.



Disabilities

A *disability is any physical or mental impairment that limits normal activities, including seeing, hearing, walking, or speaking.* It is estimated that between 9 and 10 percent of the population in this country has a disability.

People with a disability sometimes have difficulty doing things other people take for granted. They may have difficulty riding buses and subways, climbing stairs, or even using certain household appliances. However, the greatest challenge facing people with a disability is the misguided view society has long held. Historically, people with disabilities have been seen as a "breed apart." They have been pitied, ignored, and even placed in institutions that offered mere custodial care.

Physical Challenges

The most common types of physical challenges affect a primary sense or ability to move and get around easily. These include sight impairment, hearing impairment, and motor impairment.



Sight Impairment

As with other disabilities, sight impairment can be moderate, as is the case with the more than 5 million Americans who are vision-impaired, or it can be severe, as with the 1 million who are blind. About 10 percent of people fitting this description are under 20 years old.

The leading cause of blindness today is from complications due to diabetes. Whereas everyone must take care of their vision and have regular eye examinations, those with diabetes must take special care to have more frequent exams in addition to maintaining a special diet and taking medication. Other causes of blindness are macular degeneration, **glaucoma**, and **cataracts**. Early diagnosis means that treatment can begin sooner to prevent blindness.

Hearing Impairment

Hearing impairment affects 20 million Americans. Like blindness, hearing impairment can range from minor to severe. **Profound deafness** is *a hearing loss so severe that a person affected cannot benefit from mechanical amplification such as a hearing aid.*

Deafness can be inherited or caused by injury or disease. Most hearing impairments are caused by infections, obstructions, or nerve damage. Obstructions may block sound waves traveling to the inner ear. If obstruction is the cause of hearing impairment, the hearing loss may involve only one ear. Obstructions may be due to a buildup of wax, bone blockage, or something stuck in the ear.

A person born with abnormal bone growth in the inner ear may have inherited an obstruction that results in impaired hearing or deafness. Surgery can cure many of these cases.

Nerve damage usually distorts hearing in both ears. Exposure to loud noise can cause nerve damage. It may also occur with aging. Hearing impairments from nerve damage and obstruction may be gradual. If your hearing has changed, it may be time for a visit to your doctor or to an *audiologist*, a specialist in hearing problems.



HEALTH
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glaucoma For more information on glaucoma, a disease that damages the optic nerve of the eye, see Chapter 7, page 174.

cataracts For more information on cataracts, a clouding of the lens of the eye, see Chapter 7, page 174.

◀ **Learning sign language can give you the ability to communicate with the hearing impaired.**

ACTIVITY List organizations in your area that offer special classes for sign language or for Braille, a system that allows blind people to read through the sense of touch.

Motor Impairment

An injury to the brain or a disorder of the nervous system can affect the body's range of movement and coordination, including that of the hand and eye. Sometimes, especially when there is trauma to the brain, motor impairment of this sort may be accompanied by mental impairment.

Advances have been made to assist people with motor impairments. For example, people with limb amputations are fitted with *prosthetic*, or artificial, limbs. Motorized wheelchairs also allow many people with motor impairment to get around without assistance.

Mental Challenges

Some challenges affect a person's ability to live independently in society. This is the case with some of the physical challenges mentioned above. It is also true of the mental challenge called *mental retardation*. **Mental retardation** is *below-average intellectual ability present from birth or early childhood and associated with difficulties in learning and social adaptation*. Mental retardation affects about 3 percent of the population. The four levels of mental retardation are mild, moderate, severe, and profound. Mildly affected individuals make up about 75 percent of the mentally retarded population and often cannot be outwardly distinguished from nonretarded people.

Several factors have been isolated as causes of mental retardation. One is heredity. Symptoms of **genetic disorders** such as Down syndrome, PKU, or Tay-Sachs disease include mental retardation. Lifestyle of the mother-to-be during pregnancy is another factor. Women who use alcohol or other addictive drugs greatly increase the risk that

their babies will be born with retardation. Yet another preventable risk factor is infection with rubella, or German measles, during pregnancy. Immunization against this disease either during a female's childhood or within three months of her becoming pregnant reduces this risk.

Eliminating Barriers

People with physical and mental challenges have the same needs and interests as the rest of the population. They also have many of the same abilities. In recent decades, strides have been made toward eliminating barriers of stereotyping and prejudices. These trends have been the result in part of lobbying efforts by people with physical and mental challenges themselves. In securing their rights, these individuals have worked to establish several important principles:

- that society make certain changes—such as wheelchair access to public transportation and building entrances—that allow people with physical or mental challenges to take part more readily in business and social activities;
- that people be evaluated on the basis of individual merit, not on stereotyped assumptions about disabilities; and
- that, to the extent each is able, these people be integrated among persons who do not have physical or mental challenges.

A major action toward achieving these goals was the passage by Congress in 1990 of the **Americans with Disabilities Act**. This is *a law prohibiting discrimination against people with physical or mental disabilities in the workplace, transportation, public accommodations, and telecommunications.*