Visual impairment is a general term that encompasses both partial sight and legal blindness. Partial sight or partial visual impairment is defined as a visual acuity between 20/70 and 20/200. The child can generally use normal-sized print, because near vision is almost always better than distance vision. Legal blindness or severe permanent visual impairment is defined as a visual acuity of 20/200 or lower or a visual field of 20 degrees or less in the better eye. It is important to keep in mind that legal blindness is not a medical diagnosis but a legal definition. Educational and governmental agencies in the United States use the legal definition of blindness to determine tax status, eligibility for entrance into special schools, eligibility for financial aid, and other benefits.

Etiology

Visual impairment can be caused by a number of genetic and prenatal or postnatal conditions. These include perinatal infections (herpes, chlamydia, gonococci, rubella, syphilis, toxoplasmosis); retinopathy of prematurity; trauma; postnatal infections (meningitis); and disorders, such as sickle cell disease, juvenile rheumatoid arthritis, Tay-Sachs disease, albinism, and retinoblastoma. In many instances, such as with refractive errors, the cause of the defect is unknown.

Refractive errors are the most common types of visual disorders in children. The term **refraction** means bending and refers to the bending of light rays as they pass through the lens of the eye.

Normally, light rays enter the lens and fall directly on the retina. However, in refractive disorders, the light rays either fall in front of the retina (**myopia**) or beyond it (**hyperopia**). Other eye problems, such as strabismus, may or may not include refractive errors, but they are important because, if untreated, they result in severe permanent visual impairment from amblyopia. These, along with other less frequent visual disorders, are summarized in Box 18-5. In addition to these disorders, other visual problems can be a result of infection or trauma.

Box 18-5

Types of Visual Impairment