



Orthopedic Impairment

What is an Orthopedic Impairment?

"Orthopedic impairment" means a severe orthopedic impairment that adversely affects a child's educational performance and includes impairments caused by any of the following: 1) congenital anomaly, such as clubfoot or absence of a limb; 2) disease, such as poliomyelitis or bone tuberculosis; and 3) other causes, such as cerebral palsy, amputation, and fractures or burns that cause contractures (K.A.R. 91-40-1(tt)).

Types of Orthopedic Impairments

- Cerebral Palsy (CP) affects the largest group of students with Orthopedic Impairments in public schools. CP occurs when there is an injury to the brain before, during, or after birth and results in poor motor coordination and unusual motor patterns. There are four main types of cerebral palsy:
 - Spastic is the most common form of CP is when there is too much muscle tone or tightness. An individual with Spastic CP generally has stiff or jerky movements in one's legs, arms, and/or back.
 - Dykinetic affects the entire bodily movement of an individual (slow and uncontrollable body movements normally occur).
 - Ataxic results in poor coordination, balance, and perception.
 - Mixed involves a combination of symptoms from the three types above.
- Muscular Dystrophy occurs when voluntary muscles progressively weaken and degenerate until the muscles no longer function. The onset of Muscular Dystrophy can occur anytime between the ages of one to adulthood and is believed to be hereditary.
- Spinal Muscular Atrophy is a disease that affects the spinal cord and may result in progressive degeneration of the motor nerve cells. The severity runs from mild weakness to characteristics similar to muscular dystrophy. Spinal Muscular Atrophy is characterized in general by fatigue and clumsiness. The cause is hereditary and the age of onset is either in infancy or a later time or between the ages of 2 and 17.
- Spinal Cord Injuries occur when the spinal cord is severely damaged or severed, usually resulting in partial or extensive paralysis. Spinal cord injuries are most commonly a result of an automobile or other vehicle accident. The characteristics and needs of individuals with spinal cord injuries are often similar to those with cerebral palsy.
- Multiple Sclerosis is a progressive disorder where the nerve impulses to the muscles are short circuited by scar tissue. Initially mild problems may occur but as the attacks continue, a person may develop a multitude of problems. These include severe visual impairment, speech disorder, loss of bowel and bladder control, and paralysis.
- Rheumatoid Arthritis causes fatigue and stiffness and aching of joints. Students who are affected by this may have trouble being in one position for a length of time.
- Degenerative Diseases are comprised of a number of diseases which affect a person's motor development (ex. Musculoskeletal, Juvenile Rheumatoid Arthritis, Muscular Dystrophy).



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Causes of Orthopedic Impairments

- being born with or acquiring problems with bones, joints, and/or muscles; and
- problems stemming from deformities, diseases, injuries, or surgeries (loss of a limb, bone, or muscle tissue).

Characteristics of an Orthopedic Impairments

- paralysis, unsteady gait, poor muscle control, loss of a limb, etc. (causes limited mobility);
- difficulty with speech production and expressive language;
- limited ability to perform daily living activities; and
- difficulty with large motor skills and fine motor skills.

Resources

Kansas Special Education Process Handbook <http://www.ksde.org/Default.aspx?tabid=598>

KSDE Eligibility Indicators <https://www.ksde.org/Portals/0/SES/misc/iep/EligibilityIndicators.pdf>

KSDE SETS <http://www.ksde.org/Default.aspx?tabid=506>

Kansas Technical Assistance System Network (TASN) <https://ksdetasn.org/>

Center for Parent Information and Resources https://www.parentcenterhub.org/wp-content/uploads/repo_items/fs2.pdf

Muscular Dystrophy Association <http://www.mdausa.org>

For more information, contact:

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