

Professional Development

Childhood Diseases

The following descriptions of various childhood diseases and disorders are provided for your reference.

Noncommunicable Diseases and Disorders

Asthma

What it is: A chronic respiratory disease. The bronchial tubes narrow, reducing the amount of air that reaches the lungs. Dust, pollen, cold air, and exercise can all trigger asthma attacks.

Signs and Symptoms: Shortness of breath, wheezing, a hacking cough, tightness in the chest

In the Classroom: Identify students with asthma. Make prescription medicine available in an emergency. Learn what to do during an acute asthma attack.

Bronchitis

What it is: A secondary infection of the bronchial tubes that sometimes results from an upper respiratory infection.

Signs and Symptoms: A deep, rumbling cough that sometimes produces mucus; pain; chills; sore throat; slight fever

In the Classroom: The disease is self-limiting and usually heals within a few weeks.

Cerebral Palsy (CP)

What it is: A nervous system disorder caused by brain damage. It can occur during pregnancy, during the birthing process, or within the first two to three years of life. The causes, if known, vary. It can result from infection, accidental injury, or developmental issues.

Signs and Symptoms: Limb deformities, speech disorders, vision and hearing problems, coordination problems, involuntary movements, seizures

In the Classroom: Students with mild cases of CP are often mainstreamed. Discuss the disorder with students to help them become sensitive to peers they may encounter with this disorder.

Cystic Fibrosis (CF)

What it is: An inherited disorder that affects the body's ability to produce sweat and mucus. People with the disorder lose more salt than normal in their sweat and develop very thick, sticky mucus.

Signs and Symptoms: Thick mucus tends to accumulate in the intestines and lungs, causing respiratory and digestive problems.

In the Classroom: Students with CF may cough more frequently than other students and may need medication to help with digestion. They may miss school because of respiratory infections.

Diabetes

What it is: A chronic disease caused when the body does not produce or cannot use the hormone insulin. This impairs the body's ability to get energy from sugar.

Signs and Symptoms: Frequent urination, hunger, excessive thirst, weight loss

In the Classroom: Monitor any sudden changes in bathroom or drinking habits. Notify family members if you suspect a problem. If there is a diabetic student in your class, you may wish to keep juice or another source of sugar handy for emergencies.

Down Syndrome

What it is: A genetic disorder usually associated with an extra chromosome.

Signs and Symptoms: Slanted eyes, poor muscle tone, flattened nose bridge, enlarged tongue, placidity, small head, varying levels of mental retardation

In the Classroom: Students with mild cases are often mainstreamed. Others may be placed in special classes but interact with the broader school community as well. Discuss disabilities with the class to ensure that students are sensitive to their fellow students' needs.

Epilepsy

What it is: A disorder of the nerve cells in the brain that causes seizures. There are three common types of seizures: petit mal, grand mal, and psychomotor.

Signs and Symptoms: During a petit mal seizure, the person will briefly stop moving. During a grand mal seizure, the person may experience uncontrollable jerking movements and then sleep deeply. During a psychomotor seizure, the person experiences strange but coordinated whole-body movements.

In the Classroom: If there is a student with epilepsy in your class, speak with the student's family. Learn about the nature of your student's seizures and what to do should the student have a seizure. Also be aware that flashing lights and some video games can induce seizures in people with epilepsy.

Hearing Loss

What it is: Any condition that reduces a person's ability to hear. Some hearing loss is temporary, caused by wax or fluid buildup. Other hearing loss, such as damage to the auditory nerve, can be permanent.

Signs and Symptoms: Frequent requests to repeat information, misunderstanding of verbal directions

In the Classroom: If a student shows signs of having trouble hearing, suggest to the family that the student's hearing be tested. If you have a student with hearing loss in your classroom, you may need to provide additional amplification and explain to students why a classmate is wearing a hearing aid.

Muscular Dystrophy

What it is: A group of inherited progressive diseases that cause a breakdown in muscle fibers. The most common form of muscular dystrophy in children is Duchenne muscular dystrophy, which affects boys ages 3–7.

Signs and Symptoms: Muscle weakness, difficulty standing and climbing stairs, and a waddling walk. Most children with this disorder use a wheelchair by the time they reach ages 10–12.

In the Classroom: Students with milder forms of this disorder are often mainstreamed. They may need special equipment. Explain the disorder to the class. Discuss what equipment may be used and why it is necessary.

Reye's Syndrome

What it is: A rare brain disorder that can follow a viral infection, such as influenza or chicken pox. It has been associated with the use of aspirin to reduce fever during those illnesses. The cause is unknown.

Signs and Symptoms: Lethargy, nausea, and vomiting, starting on the sixth day after a viral infection, followed by agitation, change in mental function (including disorientation and mild amnesia), coma, and seizures

In the Classroom: Parents and guardians should be made aware of the possible link between the use of aspirin to treat fever and Reye's syndrome.

Sickle Cell Anemia

What it is: An inherited disease that causes abnormally shaped red blood cells. The disease affects primarily African Americans. It reduces the body's ability to carry oxygen to cells.

Signs and Symptoms: Abnormal cells can inhibit blood flow in the joints, causing severe pain. Other symptoms can include fatigue, poor body development, an enlarged spleen, and some degree of jaundice.

In the Classroom: Students with this disease may miss school and require hospitalization.

Vision Disorders

What it is: Common vision disorders include nearsightedness, farsightedness, and astigmatism (distorted vision).

Signs and Symptoms: Squinting, difficulty seeing the board, headaches, eye muscle fatigue, holding reading material close up or far away

In the Classroom: Undiagnosed vision disorders often cause difficulty for students. If necessary, refer parents or guardians to eye specialists.

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Childhood Diseases *continued*

Communicable Diseases and Disorders

Chicken Pox

What it is: A highly contagious disease caused by the herpes zoster virus. Vaccines for this disease are now available, making it much less common among children than previously.

Signs and Symptoms: Mild headache, moderate fever, a rash that progresses to clear blisters that later become scabs

In the Classroom: Children whose blisters have all turned to scabs are generally no longer contagious.

Cold

What it is: A group of very common, highly contagious viral diseases. Colds are caused by many different viruses, so having one cold does not provide immunity against others. Children may have four or five colds during a year.

Signs and Symptoms: Runny nose, sore throat, sneezing, body aches, slight fever, dulled senses of taste and smell, a tickling sensation in the throat

In the Classroom: Remind students to cover their mouths when they cough or sneeze and to wash their hands frequently. These measures help prevent colds from spreading.

Conjunctivitis (Pinkeye)

What it is: An inflammation of the membrane that covers the sclera, or white of the eye. It can be caused by either a bacterium or a virus.

Signs and Symptoms: Pink or red eyes, possible discharge, itching, pain

In the Classroom: Conjunctivitis is highly contagious. If one student develops the condition, you may wish to notify the families of other students to be aware of the symptoms and to seek treatment if they develop.

Hepatitis

What it is: A viral disease that attacks the liver. There are several hepatitis viruses. Hepatitis A is caused by fecal matter contaminating water and food. Hepatitis B is spread through blood, such as during a transfusion or in sharing hypodermic needles. It is a serious illness but usually resolves itself within six to twelve weeks.

Signs and Symptoms: Nausea, vomiting, fever, loss of appetite (in the early stages), jaundice (in the middle stages)

In the Classroom: If more than one child in a class contracts hepatitis A, suggest to family members that they may wish to investigate gamma globulin injections, which provide temporary protection against the virus. Remind students to practice good hygiene, which prevents the spread of the disease.

Influenza (Flu)

What it is: A highly contagious viral disease most often caused by the influenza A virus. It is spread by person-to-person contact through coughing, sneezing, and talking.

Signs and Symptoms: Fatigue, chills, aches, sore throat, cough, fever

In the Classroom: Influenza is very prevalent among school-age students. It is generally intense and acute for three to four days. Very young children are especially susceptible to complications associated with flu. Students may return to school after the flu still feeling fatigued and unable to concentrate. Each year in the fall, vaccines are offered to combat the strain or strains of flu believed to be most common that year.

Impetigo

What it is: A skin infection caused by either streptococcal or staphylococcal bacteria. It is most common in children and can be treated with antibiotics.

Signs and Symptoms: Yellow crust on skin, small pus-filled blisters, running sores, itching

In the Classroom: Any children with unexplained sores should get attention from the school nurse immediately.

Measles

What it is: A contagious viral disease that is spread through nose, throat, and mouth droplets. Even though almost all children receive the vaccine for this disease at around age 15 months, there are still a significant number of cases reported annually.

Signs and Symptoms: A rash that begins in the mouth, hacking cough, sneezing, fever, sensitivity to light, redness of the eyes, nasal discharge

In the Classroom: Students should be inoculated for measles before starting school.

Pediculosis (Lice)

What it is: Lice are parasitic insects that are transmitted by personal contact. Head lice are the most common among school children. The lice lay grayish-white eggs in the hair (possibly including the eyebrows and eyelashes).

Signs and Symptoms: Severe itching, lice eggs visible on hair shafts

In the Classroom: If one student develops head lice, all students should be checked carefully. The lice can be killed with medicated shampoo; their eggs need to be combed out with a fine-toothed comb. Remind students not to share combs and hats, because lice can be spread by contact with these items.

Ringworm

What it is: A skin infection caused by fungi that attack dead skin tissue. The most common types in school children are ringworm of the scalp and athlete's foot.

Signs and Symptoms: Ringworm of the scalp is characterized by small, scaly lesions and grayish patches of broken hairs. Athlete's foot is characterized by scaly lesions between the toes.

In the Classroom: Athlete's foot can be spread in locker rooms, showers, and swimming pools. Notify the appropriate health-care worker if either type of ringworm is suspected.

Scabies

What it is: A highly communicable skin infection caused by the itch mite. It is spread through skin-to-skin contact.

Signs and Symptoms: Skin lesions between the fingers, around the elbows, and on the insides of the wrists

In the Classroom: Scabies is highly contagious. Report any cases to health-care professionals immediately.

Strep Throat

What it is: A throat disease caused by streptococcal bacteria. If not treated quickly, it can sometimes lead to rheumatic heart disease. Doctors can use a throat culture to identify the bacteria.

Signs and Symptoms: Fever; a red, sore throat; swollen neck glands; generally not accompanied by a cough or stuffy nose

In the Classroom: Early diagnosis of this disease is important. If you suspect that a child has strep throat, notify family members and encourage them to seek medical care immediately.