

Other Health Impairment

Fact Sheet

DEFINITION

Other Health Impairment means having limited strength, vitality, or alertness including a heightened alertness to environmental stimuli, that results in limited alertness with respect to the educational environment, that is due to chronic or acute health problems such as asthma, attention deficit disorder or attention deficit hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, sickle cell anemia, and Tourette syndrome; and adversely affects a child's educational performance. 34 CFR 300.8(c)(9)

ASTHMA

Symptoms: Wheezing, coughing, shortness of breath, tightness in chest, asthma is an inflammatory disease of the airways.

Allergens: Cockroaches, mold, pet dander, pollen, dust

Irritants: Cigarette smoke, wood fires, strong odor/perfumes, paint, strenuous exercise, weather, food allergies, emotional stress. Triggers cause the following airway changes, which in turn cause asthma symptoms:

- The lining of the airways swell and become more inflamed
- Mucus clogs the airways
- Muscles tighten (bronchospasm) airway becomes narrow, breathing is difficult.

Severe asthma symptoms indicating respiratory distress: Severe coughing, wheezing, shortness of breath or tightness in the chest, difficulty talking or concentrating, walking causes shortness of breath, breathing may be shallow and fast or slower than usual, hunched shoulders, nostril size increases with breathing, neck area and between or below the ribs moves inward with breathing, gray or bluish tint to skin around the mouth.

EMERGENCY RESPONSE

1. As the school health manager, the certified school nurse RN will have developed a written emergency plan for students with a documented medical diagnosis of asthma based on an order from the student's physician/medical provider in conjunction with student, parent/guardian and principal. The school nurse may also provide an *Intervention Guide* which outlines the care needed during an asthma attack along with identifying the trained emergency responders who have been delegated care under the school nurses' licenses to practice nursing.
2. Do not leave the student alone. Stay with the student and stay calm.
3. Call for the emergency responder who has been trained by the school nurse to administer the asthma medication, usually a quick-relief inhaler, as ordered for the student.

The trained emergency responder will:

- Administer medication as ordered by a physician and trained by the school nurse
- Have the student sit quietly, breathe deeply and slowly in through the nose and out through the mouth
- Offer sips of cool water
- Observe student closely to determine if medication is relieving symptoms
- If no relief of symptoms within 15 minutes-Call parent/guardian and school nurse
- If emergency symptoms develop CALL 9-1-1; and
- Document properly.

4. REMEMBER to plan field trips including out-of-state field trips several months in advance as school nurses are only licensed to practice nursing in West Virginia and must obtain advance approval by the Registered Nurse (RN) Licensing Board of the designated state for schools to care for children with specialized health care needs such as asthma during the field trip. If approval is not obtained

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the classroom teacher will have to find another destination which all children may attend in order to allow children with special health care needs equal opportunity to participate in curricular/co-curricular events.

5. Please visit the ***TakeAction!: Addressing Asthma and Diabetes in West Virginia Schools*** website developed for school personnel serving students with asthma and diabetes at <http://wvde.state.wv.us/takeaction/>.

1. As the school health manager, the certified school nurse RN will have developed a written emergency plan for students with a documented medical diagnosis of epilepsy based on an order from the student's physician/medical provider in conjunction with student, parent/guardian and principal. The school nurse may also provide an *Intervention Guide* which outlines the care needed for the specific non-convulsive or convulsive epileptic seizure activity along with the identifying the trained emergency responders who has been delegated care under the school nurses' licenses to practice nursing.

2. Do not leave the student alone. Stay with the student and stay calm.

3. Call for the emergency responder who has been trained by the school nurse to administer care and possibly prescribed medication as ordered for the student.

4. Help student to floor, remove objects to prevent injury and protect the head. **(DO NOT RESTRAIN HEAD)**

5. Place student on side to allow secretions to drain from mouth.

6. The trained emergency responder will:

NON-CONVULSIVE

- No first aid required;
- Note seizure length and activity;
- Notify parent and school nurse immediately; and
- CALL 9-1-1 and notify parent if seizure lasts more than 5 minutes.

CONVULSIVE

- Help student to floor, remove objects to prevent injury and protect the head

(DO NOT RESTRAIN HEAD);

- Place student on side to allow secretions to drain from mouth;
- NO OBJECTS SHOULD BE PLACED IN MOUTH;
- LOOSEN ANY TIGHT CLOTHING;
- DO NOT ATTEMPT TO RESTRAIN

THE STUDENT

- Administer medication or activate vagal nerve stimulator, if ordered;
- Notify parent and school nurse immediately.

7. **IF EMERGENCY SYMPTOMS** (airway, breathing and circulation) occur, or student does not return to full consciousness, **CALL 9-1-1 IMMEDIATELY.**

WV ASTHMA STATISTICS

In 2010, approximately 153,300 (10.7%) of West Virginia adults reported being diagnosed with asthma at some point in their life.

- In 2010, about 40,000 (10.6%) children aged 17 and younger in West Virginia had ever been diagnosed with asthma.
- Nearly 19% (10,000) of middle and more than 14% (10,500) of high school students reported having current asthma on the YTS administered in 2011.
- The prevalence of asthma is highest in boys age 17 and younger.
- The prevalence of children of "other" races (Asian, American Indian, Alaska Native, Other) was highest at 17.2% with whites and blacks showing no significant difference at around 9%.
- Since 2000, a total of 288 West Virginia residents have died because of asthma, an average of about 29 deaths per year including the 25 that occurred in 2010.

The burden of asthma is unequally distributed among West Virginians. Adult females, adults who have an annual household income below \$25,000, and are not high school graduates (low socioeconomic status (SES), as well as public middle school students have a higher prevalence of current asthma in the state.

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Although the overall burden of asthma has improved; demographic, socioeconomic, and regional differences in asthma prevalence persist.

RESOURCES

- West Virginia Bureau for Public Health Statistics Center (2012)
<http://www.wvasthma.org/StatisticsandSurveillance/AsthmaBurdenReport/tabid/217/Default.aspx>
- West Virginia Department of Education, Office of Special Programs-School Health Services
<http://wvde.state.wv.us/osp/>
- West Virginia Department of Health and Human Services-Asthma Education and Prevention Program
<http://www.wvasthma.org/>
- WV American Lung Association
<http://www.lung.org/associations/states/west-virginia/local-offices/>

ATTENTION DEFICIT DISORDER (ADD) OR ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD)

Symptoms: Trouble paying attention, talking nonstop, having trouble staying still, hard time controlling behavior, distracted easily, forgetful, switch quickly from activities, have trouble with directions, daydream, trouble finishing tasks, loses things, fidget and squirm, disruptive, run around, touch and play with everything, impatient, blurt out inappropriate comments, trouble controlling emotions.

Definition: ADHD is a common childhood disorder, and it may affect children differently. It makes it hard for a child to focus and pay attention. Some kids may be hyperactive or have trouble being patient. ADHD can make it hard for a child to do well in school or behave at home.

Causes of ADHD: No known cause. ADHD probably comes from a combination of things such as: genetics, lead, smoking, and drinking during pregnancy, brain injuries, and food additives.

Parent Roles: Give your child guidance and understanding. Provide support. Set clear rules to be

followed. Punishment is not required every time rules are broken. Let your child know you can help.

WEST VIRGINIA STATISTICS

- In 2011, 8.8% of US children and 9.9% of children in West Virginia had current ADHD, by parent report
- In 2011, 6.1% of US children and 7.3% of children in West Virginia were taking medication for ADHD. This is among 16 states with the highest rates in the U.S.
- -In 2011, the percent of youth ages 4-17 Ever Diagnosed with Attention-Deficit/Hyperactivity in West Virginia was 11.9%.
- -In 2011, the percent of youth Aged 4-17 currently with ADHD receiving medication treatment based on actual diagnosis of ADHD is 73.6%. This is among the top 21 states with the highest rates in the U.S.

RESOURCES

- National Survey of Children's Health (2012)
<http://www.cdc.gov/ncbddd/adhd/prevalence.htm>
- National Institute for Children's Health Quality, Attention Deficit Hyperactivity Disorder (ADHD)
<http://www.nichq.org/childrens-health/adhd>

NATIONWIDE STATISTICS

ADHD Prevalence:

- 2007-2009 boys 12.3%, girls 5.5%
- 2007-2009 non-Hispanic black 9.5%
- 2007-2009 children with family income less than 100% of poverty level 10.3%
- 2007-2009 children with family income 200% or more of poverty level 7.9%
- ADHD Brochure/National Institutes of Mental Health
www.nimh.nih.gov/health/publications/attention-deficit-hyperactivity-disorder-easy-to-read/complete.pdf
- Children and Adults with Attention Deficit/Hyper-Activity Disorder
www.chadd.org/
- Social Express Computer Software
www.thesocialexpress.com

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DIABETES

Symptoms: Frequent urination, unusual thirst, extreme hunger, unusual weight loss, extreme fatigue and irritability, frequent infections, blurred vision, cuts/bruises that are slow to heal, tingling/numbness in the hands/feet, recurring skin, gum, or bladder infections.

Definition: A group of diseases characterized by high blood glucose levels that result from a defect in the body's ability to produce and/or use insulin.

WEST VIRGINIA STATISTICS

- In 2010, Centers for Disease Control ranked West Virginia 3rd in the nation with the leading number of diagnosed adults with diabetes.
- In 2011, diabetes rates also vary by race and ethnicity, as 15.2 percent of the non-Hispanic black population is diabetic, compared to 11.8 percent of the white population and 11.7 percent of the Hispanic population.
- In 2010, the prevalence was not significantly different between genders.
- Insulin Dependent/Type 1 diabetes continues to be on the rise among children in West Virginia.
- In 2013, approximately 859 students in WV public schools were receiving daily care ordered by a medical provider for Type 1 diabetes.
- In 2013, approximately 220 students in WV public schools were receiving daily care ordered by a medical provider for Type 2 diabetes/Non-insulin Dependent Diabetes.

Resources

- Centers for Disease Control-Diabetes Report Card (2012)
<http://www.cdc.gov/diabetes/pubs/pdf/diabetesreportcard.pdf>
- West Virginia Department of Education, Office of Special Programs-School Health Services
<http://wvde.state.wv.us/osp/>
- West Virginia Department of Health and Human Resources, Diabetes Prevention and Control Program
<http://www.wvdiabetes.org/>
- JDRF, West Virginia Branch
<http://www.nichq.org/childrens-health/adhd>

National Statistics: In 2010 Diabetes affected 25.8 million people, 8.3% of the U.S. Population. 7.9% of children < 20 years were diagnosed with diabetes.

- American Diabetes Association
www.diabetesassociation.org/
- West Virginia State Department of Health 2012 State Health Profile
<http://www.dhhr.wv.gov/publichealthquality/statepublichealthassessment/Documents/2012%20State%20Health%20Profile%20Final%20May%202013.pdf>

EPILEPSY

Definition: Epilepsy is a brain disorder in which clusters of nerve cells, or neurons, in the brain sometimes signal abnormally. In epilepsy, the normal pattern of neuronal activity becomes disturbed, causing strange sensations, emotions, and behavior, or sometimes convulsions, muscle spasms, and loss of consciousness.

Causes: Epilepsy is a disorder with many possible causes such as: illness, brain damage, abnormal brain development, exposure to lead.

Triggers: Lack of sleep or sleep deprivation, alcohol consumption, stress, or hormonal changes associated with the menstrual cycle, light flashing at a certain speed or the flicker of a computer monitor. Seizure triggers do not cause epilepsy but can provoke seizures.

Symptoms: Symptoms can vary from a momentary disruption of the senses, to short periods of unconsciousness or staring spells, to convulsions.

Types of Seizures: Seizures are divided into two major categories – focal seizures and generalized seizures. However, there are many different types of seizures in each of these categories. Focal seizures, also called partial seizures, occur in just one part of the brain. About 60 percent of people with epilepsy have focal seizures. Generalized seizures are a result of abnormal neuronal activity on both sides of the brain.

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SEIZURE EMERGENCY RESPONSE

1. Roll the person on his or her side to prevent choking on any fluids or vomit.
2. Cushion the person's head.
3. Loosen any tight clothing around the neck.
4. Keep the person's airway open. If necessary, grip the person's jaw gently and tilt his or her head back.
5. Do NOT put anything into the person's mouth, not even medicine or liquid. These can cause choking or damage to the person's jaw, tongue, or teeth. Contrary to widespread belief, people cannot swallow their tongues during a seizure or any other time.
6. Remove any sharp or solid objects that the person might hit during the seizure.
7. Note how long the seizure lasts and what symptoms occurred so you can tell a doctor or emergency personnel if necessary.
8. Stay with the person until the seizure ends.

Call 911 if:

- The person is pregnant or has diabetes, seizure happened in water, lasts longer than 5 minutes
- The person injures himself or herself during the seizure
- Epilepsy Association of West Virginia
- National Institutes of Neurological Disorders and Stroke
- Epilepsy Foundation.org

EPILEPSY FACTS

- www.ninds.nih.gov/disorders/epilepsy/detail_epilepsy.htm#219583109
- www.charliefoundation.org
- Cure Epilepsy.org
www.cureepilepsy.org

HEART CONDITION

Definition: Coronary heart disease-often simply called heart disease-is the main form of heart disease. It is a disorder of the blood vessels of the heart that can lead to heart attack. A heart attack happens when an artery becomes blocked, preventing oxygen and nutrients from getting to the heart. Heart disease is one of several

cardiovascular diseases, which are diseases of the heart and blood vessel system. Other cardiovascular diseases include stroke, high blood pressure, angina (chest pain), and rheumatic heart disease.

West Virginia Statistics:

- Burden of Heart Disease & Stroke in the Mountain State
<http://www.wvdhhr.org>
- National Institutes of Health
<http://www.nih.gov/>
- American Heart Association
<http://www.heart.org/HEARTORG/>

HEMOPHILIA

Definition: Hemophilia is a hereditary disorder in which the clotting ability of the blood is impaired and excessive bleeding results

Cause: The disease is passed down through the genes.

- West Virginia Hemophilia Foundation
<http://wvnhf.org/>
- National Hemophilia Foundation
<https://www.hemophilia.org/>

LEAD POISONING

Lead Poisoning is caused by swallowing or inhaling lead particles or dust. It is often found in paint, dust, and soil in older homes. Lead poisoning can damage the brain, kidneys, and the nervous system of small children.

- West Virginia Poison Control
<http://www.wvpoisoncenter.org/>
- West Virginia Childhood Lead Poisoning Prevention Program
<http://www.wvdhhr.org/mcfh/lead/>
- United States Environmental Protection Agency
<http://www.epa.gov/>

LEUKEMIA

Definition: Leukemia is a type of cancer that affects the blood and bone marrow, the spongy center of bones where our blood cells are formed. The disease develops when blood cells produced in the bone marrow grow out of control.

National Statistics: 2011 data revealed, approximately 31 percent more males are living with leukemia than females. Incidence is highest among whites.

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Cause: The cause of most cases of leukemia is not known. Extraordinary doses of radiation and certain cancer therapies are possible causes.

- Leukemia & Lymphoma Society of Oklahoma
www.lls.org/aboutlls/chapters/ok/
- United States Environmental Protection Agency
www.yosemite.epa.gov/ochp/ochpweb.nsf/content/fastfacts.htm

cases occur in developing countries, particularly Africa and Southeast Asia. Widespread use of antibiotics to treat strep throat has greatly lowered the number of new cases of rheumatic fever.

- Rheumatic Fever and Heart Problems General Information
www.mercy.net/elrennook/healthinfo/uf4498abc

NEPHRITIS

Definition: Inflammation of the kidney caused by a disease of the immune system.

Symptoms: Frequent or less often urination, fatigue, loss of appetite, nausea/vomiting, swelling in hands or feet, feel itchy or numb, trouble concentrating, darkened skin, muscle cramps.

Causes: The causes of SLE are unknown. Many factors may play a role, including:
Gender-SLE is more common in women than men,
Heredity-a gene passed down by a parent, infections, viruses, environmental causes.

- National Institutes of Health
www.kidney.niddk.nih.gov/kudiseases/pubs/lupusnephritis/LupusNephritis_508.pdf
- National Kidney Foundation
www.kidney.org
- National Kidney and Urologic Diseases Information Clearinghouse
www.kidney.niddk.nih.gov/KUDiseases/pubs/yourkidneys/index.aspx

RHEUMATIC FEVER

Definition: Rheumatic fever is a bacterial infection that can cause problems with the heart.

Cause: Rheumatic fever is caused by certain strains of streptococcal bacteria. A strep throat infection that isn't properly treated can trigger rheumatic fever.

Tendency: Rheumatic fever is rare in Canada, the United States, and Western Europe. But it was fairly common until the 1950s. Today, most rheumatic fever