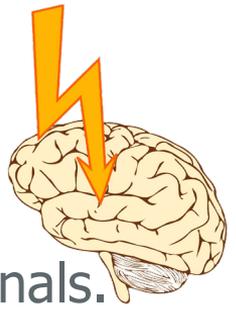




**Annual  
Staff  
Education**

# Seizure Disorders



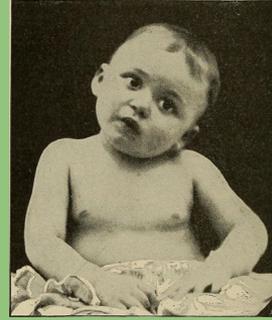
- A seizure occurs when the brain incorrectly fires electrical signals.
- It is estimated that approximately 5 out of every 1000 elementary-age school children have a chronic health condition known as epilepsy, which causes repetitive seizures.
- Epilepsy is diagnosed by an electroencephalogram (EEG).
- A seizure disorder can look different for every child and affects his physical, emotional, and social health.
- The student and his family will require support from the school nurse, the counselor, his teacher, and even his peers.



# Types of Seizures

- Generalized, include absence seizures and tonic-clonic seizures, often known grand mal
- Partial, also known as focal seizures, involve only part of the brain

Seizures look different in each child.



During an absent seizure, a child may appear to be “zoned out.”



In this video, Raelynn has a tonic-clonic seizure. Click the link to see other videos of Raelynn’s seizures.

<https://sunshinebaby.tv/>

# First Aid For First Clonic Seizures

Convulsive seizures where the body stiffens (tonic phase) followed by general muscle jerking (clonic phase)



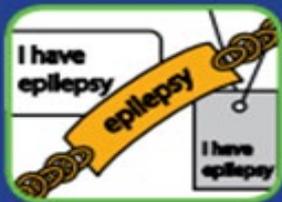
1. DO time the seizure



2. DO remove any harmful objects



3. DO cushion the head



4. DO look for Epilepsy I.D.



5. DON'T put anything in the person's mouth



6. DON'T restrain the person or move unless in danger



7. DO turn the person on side (into recovery position) when seizure stops



8. DO stay with the person until the seizure ends and offer assistance



## When to call an ambulance

- If the seizure is longer than 5 minutes
- If one seizure follows another without stopping
- If you know it is the person's first seizure

### Complex Partial Seizures

(Non-convulsive seizures with

- Stay with the person
- Time the seizure
- Guide away from any danger
- Speak gently and calmly to

# Asthma



- Asthma is a common long-term lung disease in children. It's characterized by wheezing, breathlessness, chest tightness and coughing.
- Asthma is a chronic disease someone has all the time with periods of relief and other periods of exacerbation.
- These moments of exacerbation are called asthma attacks. During an asthma attack, air flow to your lungs is restricted by swelling which causes coughing, chest tightness, wheezing and trouble breathing.
- We don't know everything about asthma yet, but we know it has a genetic component and is triggered by environmental and occupational factors.



Pets



Exercise



Pollen



Bugs in the home



Stress



Anger



Pollution



Chemical fumes



Strong odors



Smoke



Dust



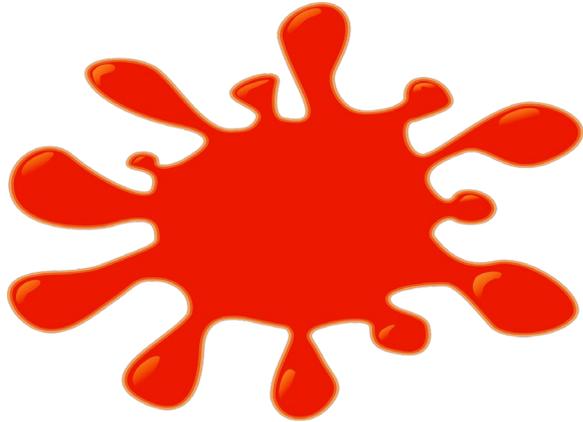
Fungus spores



Cold air

# Asthma Triggers

# Bloodborne Pathogens



(Flickr, 2010; Flickr, 2020; Needpix, n.d.; Rafti, W., 2003)



# What Are Bloodborne Pathogens?

- Bloodborne pathogens are tiny organisms living in blood and other body fluid that can cause disease in humans.
  
- Bloodborne Diseases
  - Hepatitis B
  - Hepatitis C
  - HIV

(Bloodborne Pathogens and Standard Precautions, 2020)

# Bloodborne Precautions

## Standard/Universal Precautions:

- Proper handwashing
- Gloves/PPE-use in all situations when may be in contact with blood/body fluids
- Proper disposal of sharps
- Annual training
- Encourage Hep. B vaccine

**How to safely remove gloves:**

**GLOVES REMOVAL VIDEO**

## **If an exposure occurs:**

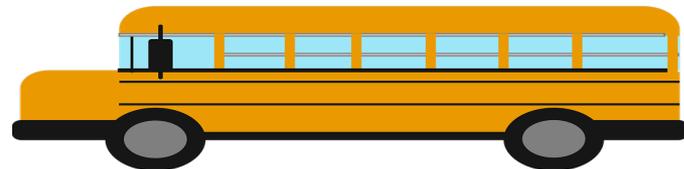
- Follow organization's exposure policy
- Immediately wash/flush area with soap and water or just water if exposure to eyes
- Report immediately

# Precautions

- \*Always wear PPE (gloves) when cleaning or disposing of blood borne pathogens. Blood borne pathogens can enter the body through any opening in the skin.
- \*Always wear disposable gloves and treat all body spills with caution. All staff should have a pair of non-latex gloves available to them. Please see the school nurse if you are in need of some in your classroom.
- \*Check the gloves for defects, tears, or rips, and do not reuse the gloves.
- \*Wash hands with soap and water immediately after contact with body fluids even if you wear gloves.
- \*Call the custodian in your school building to clean up any body fluid spill. The school district's approved disinfectant will be used for cleanup of the affected surface area.

# Bloodborne Pathogen Protection for School Bus Drivers

- \*Blood or any bodily fluids that are excreted from the body are capable of carrying a blood borne pathogen.
- \*Blood, urine, or vomit are capable of carrying a blood borne pathogen.
- \*School bus drivers must wear PPE when cleaning up or disposing of blood borne pathogens.
- \* School bus drivers and teachers should be aware that the parents of a child who is a carrier of a blood borne pathogen do not have to reveal this information to the school district.



# DIABETES

Is a chronic health condition in which the body cannot use glucose found in food for energy. There are two main types of diabetes.

Type 1: The pancreas does NOT produce insulin

Type 2: The pancreas does not produce ENOUGH insulin



# DIABETES TYPE ONE

Type 1 is the most common type in children and teenagers.

Insulin is a hormone that helps blood sugar enter the cells for energy.

Without Insulin, blood glucose cannot get into the cells and builds up in the bloodstream resulting in **Hyperglycemia** (high blood glucose).

Symptoms of **hyperglycemia**: Extreme thirst, frequent urination, drowsiness, lethargy, dry hot skin, lack of appetite, fruity sweet breath, labored breathing, abdominal pain.

# DIABETES TYPE ONE

**Hypoglycemia** (low blood sugar) can happen suddenly and is not always preventable.

May progress to unconsciousness, seizure, and convulsions.

Causes of hypoglycemia can be too much insulin, not enough food, extra physical activity, illness and certain medications.

Symptoms of **hypoglycemia**: Weak, hungry, shaky, pale, fatigue, anxious, dizzy, sweating, blurred vision, confusion

# HYPOGLYCEMIA

## SYMPTOMS



**SWEATING**



**PALLOR**



**IRRITABILITY**



**HUNGER**



**LACK OF  
COORDINATION**



**SLEEPINESS**

# HYPERGLYCEMIA

## SYMPTOMS



**DRY MOUTH**



**INCREASED  
THIRST**



**WEAKNESS**



**HEADACHE**



**BLURRED  
VISION**



**FREQUENT  
URINATION**

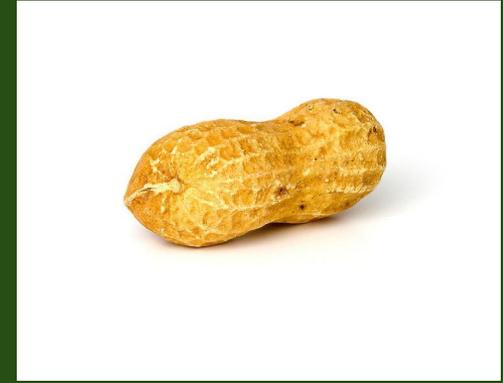
# DIABETES TYPE ONE

Effective management in school includes:

- Unrestricted access to snacks and bathrooms
- Adequate time to eat
- Access to Diabetes equipment
- Treat blood sugars at any time
- **Reach out to nurse with concerns**



# Life Threatening Allergies



An allergy occurs when the body has an immune response to a certain food or item. This causes a life threatening/severe immune response.



## Types of Allergies:

- Peanuts
- Milk
- Shellfish
- Wheat
- Tree Nuts
- Soy
- Eggs
- Bees



# Signs and Symptoms That can lead to Anaphylaxis



- Trouble Breathing/Shortness of Breath
- Tight Hoarse Throat
- Hives
- Pale sweaty skin
- Swollen Lips or Tongue
- Stomach discomfort, Vomiting or diarrhea
- Raking of Tongue
- Itchy nose or mouth
- Confusion/ altered mentation



# Treatment:



Evaluate patient if symptoms are mild vs. severe

For **mild** symptoms:

- Monitor student closely
- Give antihistamine if ordered
- Call parents or guardian

For **Severe** symptoms:

- Give Epinephrine and note time when given
- Call **911** and parents
- Stay with student
- Keep student lying on side if vomiting



**Epi-Pen Demonstration:**

**HOW TO ADMINISTER EPIPEN**

Thank you for reviewing this important information. This presentation is a part of annual, mandatory trainings for the Dennis-Yarmouth Regional School District. Please [click here](#) to fill out a Google form as proof that you read and understand information provided in this training. Once submitted, the form will electronically go the DY Human Resources Office. We strongly recommend that you make a copy of the emailed receipt for your own records.

Please contact your school nurse or Kristin Dwyer, nurse leader, with your questions.

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# References

American Diabetes Association. (2020, May). Helping the student with Diabetes Succeed: A Guide for School Personnel. Retrieved from <https://www.diabetes.org/sites/default/files/2020-06/SchoolguidepdfMay2020>.

Bloodborne Pathogens and Standard Precautions. (2020). *CNA Training Advisor: Lesson Plans for Busy Staff Trainers*, 18(3), 1–5.

Center for Disease Control and Prevention. (2019, September 6). *Asthma FAQs*. <https://www.cdc.gov/asthma/faqs.htm>

Flickr. (2010). *Biohazard danger symbol* [Photograph]. <http://www.futureatlas.com/>

Flickr. (2020). *Doctor or nurse wearing medical personal protective equipment (PPE) against the flag of the european union* [Photograph]. <https://www.flickr.com/photos/91261194@N06/49755974953>

*Food Allergy Anaphylaxis Emergency Care Plan* [Fact sheet]. (2019, January 20). FAREfoodallergy.org. Retrieved September 4, 2020, from <https://www.foodallergy.org/living-food-allergies/food-allergy-essentials/food-allergy-anaphylaxis-emergency-care-plan>

# References

- National Association of School Nurses (NASN). (2018). *School nursing evidence-based practice clinical guideline: Students with seizures and epilepsy*. Retrieved from <https://www.a2schools.org/cms/lib/MI01907933/Centricity/Domain/2291/SeizureandEpilepsyGuidelines.pdf>
- Needpix. (n.d.). *Blob splash blood*. [Clip art]. <https://www.needpix.com/photo/101207/blob-splash-blood-halloween-horror-mess-splatter-violence-violent>
- Rafti, W. (2003). *Sharps container* [Photograph]. [https://en.wikipedia.org/wiki/Sharps\\_waste#/media/File: Sharps\\_Container.jpg](https://en.wikipedia.org/wiki/Sharps_waste#/media/File:Sharps_Container.jpg)
- Wodrich, D. L. (2006). Children with epilepsy in school: Special service usage and assessment practices. *Psychology in the Schools*, 43(2), 169-181. doi: 10.1002/pits