Common Chronic Conditions Training: Asthma, Allergies, Diabetes and Seizures

Presentation Guide
HOW TO USE THIS GUIDE

This guide has been created for school nurses to present the Common Chronic Conditions Training: Asthma, Allergies, Diabetes and Seizures to school staff.

Throughout the guide there is information that is essential and some which is for your information. These are labeled:

Script
This is the narrative to use for each PPT slide. You must say this information during your training.

Tailored Information
This is where you will change / add the school / district / regional specific information to the PPT slides. This information is included in [brackets] and in bold text

For Your Information
This is information for you to increase your knowledge about the content. This information is not to be included during the training to school staff.

IMPORTANT INFORMATION

1. Please copy the slide deck, so you don’t alter the template. Simply go to “file” and then “make a copy”.
2. Add your information to the slides.
3. Many slides include animation. The [CLICK] indicates that you should advance the slide to have the next text appear on the slide.
4. Practice.
5. If you need to present from a PPT, go to “file” and then “download as”. Select “Microsoft PowerPoint.” Once you export to PowerPoint, you should make no further edits to the slide set, since fonts may not transfer over.
6. It is a good idea to go over converted slide set in case fonts have changed and items moved.
Welcome! Today we are going to spend the next [amount of time] delivering the Common Chronic Conditions Training. This training will cover asthma, allergies, diabetes and seizures. These are the most common chronic conditions students have and you will need to know how to recognize and respond when a student may be having a health issue related to any of these conditions.

Knowing the health conditions of the students in your school is very important. How do you know about your students health conditions?

Here at [school / district] student health conditions are found [EXPLAIN].

Welcome! And thank you for your time and attention today during today’s training about the common chronic condition of asthma.

This slide is used only if you are only doing the Asthma training and not doing the complete training.

We are now going to learn about asthma and how to support students with asthma.

As a result of this training, you will be able to:
1. Recognize a student who is having an asthma attack
2. Know where to find the student’s asthma care plan and how to use it to treat the student and
3. Identify the correct technique for using an inhaler
Managing asthma when children are at school helps students learn.

Asthma is very prevalent. One out of every 12 school aged child has asthma.

Asthma affects school attendance and is a leading cause of health-related absences.

When students are able to manage their asthma, they are able to fully participate in all school activities.

For Your Information
Source: Asthma facts from AAFA.org

Each student’s asthma can look different. However, there are some common symptoms that are important to look for.

These are the common symptoms seen in children and teens who are having a mild asthma attack:

- Trouble breathing
- Wheezing
- Frequent cough
- The student may complain of tightness in their chest and
- They are not able to do activities, but are still talking in complete sentences.

These symptoms require immediate attention because they can change or worsen.
SLIDE 9 – Asthma Care Plan

Script
To know your students, it is important to read their Asthma Care Plan.

Let’s go through the Colorado Asthma Action Plan and Medication Order that is used in schools and child care setting.

[CLICK]
The first section of the Asthma Care Plan includes information about the student.

[CLICK]
This section also includes what is known to trigger the student’s asthma attack.

[CLICK]
The next section has the asthma medication prescribed for the student. There are two different types of medication given for asthma. The controller medication is usually given at home. The quick relief medication is typically given at school to prevent asthma symptoms caused by physical activity during recess or PE. Quick relief medication is also used when students are having signs and symptoms of an asthma attack.

The next two sections are divided by zones - green, yellow and red. We will go through the symptoms and treatment for each zone in a little while.

[CLICK]
The next section includes what to look for, or the symptoms of an asthma attack.

[CLICK]
The last section includes how to respond when a student has specific symptoms.

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SLIDE 10 – Common Asthma Triggers

Script
Common asthma triggers include:

- Physical activity, usually during recess or PE
- Colds or illness can be a trigger for students with asthma
- Allergies
- Strong smells and
- Emotions such as a laughing fit, crying, or anxiety

Additionally, each student may have unique triggers specific to them. You would find this information on their asthma care plan.
SLIDE 11 – When An Asthma Attack Happens

Script
The steps to take when a student has an asthma attack are to:

[CLICK]
1. Remove the trigger, for example if they are playing at recess have them sit down next to you

[CLICK]
2. Stay with the student, and

[CLICK]
3. Follow the student’s asthma health care plan based on their symptoms and the indicated response.

If the student needs to go to the health office be sure to have a responsible person accompany them.

SLIDE 12 – Asthma Care Plan – Green Zone

Script
Let’s now look at each of the three zones on the asthma care plan.

When children with asthma are in the green zone. They are not having any asthma symptoms. The green zone tells you how to anticipate the needs of your students.

This zone includes steps to take to allow them to participate fully in activities.

SLIDE 13 – Asthma Care Plan – Yellow Zone

Script
When children with asthma are in the yellow zone. They are having mild asthma symptoms. The yellow zone tells you how to respond to their symptoms.

As a reminder, these symptoms are: trouble breathing, wheezing, frequent cough, tight chest, and change in activity level.
SLIDE 14 – Asthma Care Plan – Red Zone
Script
When children with asthma are in the red zone. They are having severe asthma symptoms and this is a medical emergency. The red zone tells you how to respond to their severe symptoms.

Have someone initiate your school’s emergency response plan.

Stay with the student and remain calm, encouraging them to take slower, deeper breaths.

SLIDE 15 – Steps for Using An Inhaler
Script
These are the steps for when the student’s asthma care plan indicates that they need to use their inhaler. We will go into each step separately next.

[CLICK]
First, the medication needs to be prepared.

[CLICK]
Second, the student needs to be ready to use the inhaler. They need to be either standing or sitting up straight.

[CLICK]
Third, the medication from the inhaler is dispensed. The student exhales, inhales the medication, holds the medication in their lungs, then exhales, and breaths normally.

[CLICK]
Last, you want to follow the Asthma Care Plan for what to do next.

SLIDE 16 – Prepare the Medication
Script
There are three types of inhalers a student may use.

[CLICK]
The first is a metered dose inhaler, or MDI.

[CLICK]
The second is an MDI with a valved holding chamber, sometimes called a spacer.

[CLICK]
The third is an MDI with a valved holding chamber and mask.
SLIDE 17 – Prepare the Student
Script
To prepare the student to use their inhaler, they need to either stand or sit up straight. Stay with the student while they use their inhaler.

The student uses their inhaler by:
1. Exhaling their breath, you can tell them to "blow out candles" to help them know what to do.
2. Inhale the medication from the inhaler
3. The student holds the medication in their lungs, and then
4. Exhales their breath. And continues to breath normally

SLIDE 18 – Exhale / Inhale / Hold / Exhale
Script
These are the steps to use a metered dose inhaler, or MDI:
1. The student exhales their breath
2. The mouthpiece is placed in the student’s mouth with their lips tightly sealed around it.
3. The inhaler is pressed
4. The student slowly inhales the medication
5. Help the student hold their breath by counting to 10
6. The student exhales
7. Encourage the student to resume normal breathing.
8. Wait one minute and repeat the above steps for each puff prescribed by the medical provider as indicated on the Asthma Care Plan.

SLIDE 19 – Exhale / Inhale / Hold / Exhale
Script
These are the steps to use an MDI with valved holding chamber, sometimes called a spacer
1. The student exhales their breath
2. The mouthpiece is placed in the student’s mouth with their lips tightly sealed around it.
3. The inhaler is pressed
4. The student slowly inhales the medication. The valved holding chamber should not make any noise. If the student is inhaling too quickly the valved holding chamber will make a whistling noise. If this happens, encourage the student to inhale more slowly.
5. Help the student hold their breath by counting to 10. Some students are not able to hold their breath for 10 seconds after inhaling slowly.
6. The student exhales and resumes normal breathing.
7. Wait one minute and repeat the above steps for each puff prescribed by the medical provider as indicated on the Asthma Care Plan.
**SLIDE 20 – Exhale / Inhale / Hold / Exhale**

*Script*

These are the steps to use an MDI with valved holding chamber and mask:

1. The student exhales their breath
2. The mask is placed in the student’s nose and mouth forming a tight seal.
3. The inhaler is pressed
4. The student inhales and exhales for 10 seconds.
5. Remove the mask and have the student resume normal breathing.
6. Wait one minute and repeat the above steps for each puff prescribed by the medical provider as indicated on the Asthma Care Plan.

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**SLIDE 21 – Follow Asthma Care Plan**

*Script*

After the student uses their inhaler, review their asthma care plan to know if the student needs additional medication and further care.

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**SLIDE 22 – What’s The Deal With Self Carry?**

*Script*

Students are permitted to self carry their inhaler if a self-care contract is completed. This includes a signed order from their health care provider, the parents and student have agreed to the contract, and the school nurse has verified that the student is able to correctly self administer their medication.

School staff need to be aware of their students that self carry and observe for any behaviors outside of the contract, such as sharing this medication with other students, or using the inhaler in a way that is not indicated on the care plan.

Students should notify their teacher and/or the health clinic at school if they did not bring their inhaler to school that day, or if their symptoms continue or worsen using their inhaler.

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**SLIDE 23 – What is included in the Asthma Care Plan?**

*Script*

Let’s take a few minutes and review what we’ve learned and talked about. What is included in the Asthma Care Plan?

[CLICK]

The correct answer is F. All of the above
SLIDE 24 – A student with asthma is having trouble breathing.  
Script  
A student with asthma is having trouble breathing. What should you do next?  

[CLICK]  
The correct answer B. Review the Asthma Care Plan.  

SLIDE 25 – What is the correct order for using an inhaler?  
Script  
What is the correct order for using an inhaler?  

[CLICK]  
Correct answer is C Exhale / Inhale / Hold / Exhale  

SLIDE 26 – What do you do if a student has an Inhaler in your classroom?  
Script  
What do you do if a student has an inhaler in your classroom?  

[CLICK]  
Correct answer is A Ask your school nurse if the student has a self-carry contract.  

(HIDE) SLIDE 27 – Thank you!  
Script  
Thank you for your time and attention today. If you have additional questions, please talk to your school nurse.  

Tailored Information  
This slide is used only if you are only doing the Asthma training and not doing the complete training  

(HIDE) SLIDE 28 – Welcome!  
Script  
Welcome! And thank you for your time and attention today during today’s training about the common chronic condition of allergies.  

Tailored Information  
This slide is used only if you are only doing the Allergies training and not doing the complete training.
SLIDE 29 – Allergies
Script
We are now going to learn about allergies and how to support students with allergies.

SLIDE 30 – Training Objectives
Script
The training objectives are for you to be able:
1. Identify which students have severe allergies
2. Know where to find a copy of the allergy care plan and how to use it
3. Explain correct epi pen technique, and
4. Manage, using ACT and REAct, severe allergic reactions

For Your Information
ACT and REAct Source: https://www.allergyhome.org/act-and-react/

SLIDE 31 – Allergy Management in Schools
Script
Allergic reactions occur frequently in the school setting and

[CLICK]  
32% of reactions go unrecognized.

[CLICK]  
24% of students with allergies report being bullied.

[CLICK]  
As we know, bullying decreases significantly when all school staff are involved.
The acronyms used to help remember allergic reactions are ACT and REAct. Use ACT to prevent accidental exposures to allergens. There are three components to ACT.

[CLICK] Avoid the allergen,
[CLICK] Communicate with the student and staff about the allergy, and
[CLICK] Teach students and staff about appropriate response to allergies.

When exposure to an allergen occurs you need to be prepared to REAct.

[CLICK] Recognize anaphylaxis,
[CLICK] Administer Epinephrine, and
[CLICK] Activate the school’s emergency response plan.

ACT and REAct guide an appropriate allergy management plan in the school setting.

Avoiding an allergen is the single most effective management for a student with allergies. Understanding which students in the classroom have allergies, what they are allergic to, and the different ways a student can encounter an allergen are all fundamental to avoiding an allergic response.

Common food allergens are peanuts, nuts, wheat, soy, milk, eggs, fish and shellfish.

Other common allergens are insect stings from bees, wasps, hornets, fire ants, latex and medication.
SLIDE 36 – Causes of Unintentional Allergen Exposure

Script

There are four common routes where children will typically experience an allergic reaction.

[CLICK]
Most commonly ingestion of the allergen results in an allergic reaction. Therefore, preventing ingestion is key. Do not encourage food sharing among students. Be aware of young children who receive prepared trays or meals from the food service, double check to make sure young children are not being given foods they cannot have.

[CLICK]
An unintentional method of allergen exposure is through contact with a surface or another person. Contact contamination occurs when a student with an allergy, such as to peanuts, has contact with the allergen by touching a surface that may have had peanut butter on it, or touching someone who has been eating a peanut butter sandwich and has not washed their hands. To prevent contact contamination appropriate cleaning of food surfaces in between student use is important. Similarly, thorough handwashing before and after eating helps to avoid contact contamination.

[CLICK]
Some other less obvious ways of being exposed to an allergen include cooking during a classroom activity. or

[CLICK]
Through doing craft projects. Students with allergies may be exposed to eggs in finger-paints or to wheat flour in fidget toys.

SLIDE 37 – ACT: Communicate

Script

Communication is another key component in managing allergies in the school environment. Communication between the student, the student’s family, school staff and the school nurse is a key way to identify and avoid allergen exposure. Good communication includes not only knowing which students in your classroom have allergies, but also having a plan to communicate this information when there is a substitute teacher.
SLIDE 38 – ACT: Teach
Script
Teaching is the third component to avoid exposure to allergens in schools. Teach children about allergies and to understand the severity of an allergic reaction. Do not allow bullying of individuals with allergies. Help students with allergies be aware of their surroundings and areas of potential exposure. And, teach all students that being a good friend means not sharing food.

SLIDE 39 – Hand Washing
Script
Teach appropriate handwashing before and after eating. Encourage students to wash their hands for at least 20 seconds.

[CLICK]
Soap and water or commercial hand wipes are the best way to get rid of the allergen.

[CLICK]
Hand sanitizer does not work to eliminate the allergen.

SLIDE 40 – Surface Washing
Script
Teach appropriate surface washing before and after eating and after handling potential allergens. All surfaces must be cleaned.

[CLICK]
Soap and water or commercial cleaners and wipes are the best way to get rid of the allergen.

[CLICK]
Avoid re-dipping the cleaning cloth or sponge in the bucket. Do not ask food allergic children to clean tables or desks.

SLIDE 41 – Bullying of Students with Food Allergies
Script
Bullying occurs frequently for students with allergies. Examples of bullying include:

• Teasing because they eat at special tables
• Not being included in class treats
• Being threatened with foods

Beyond the social and emotional impact bullying can have, it can also post a severe physical threat to the student.
**SLIDE 42 – Need to REAct**

**Script**
REAct is the next step in allergy management at schools. REAct is what should happen if avoidance, communication, and teaching fails to avoid an allergen exposure.

React relies on three important steps:

[CLICK]
1. Recognize the emergency and obtain the allergy action plan and the student’s medication,

[CLICK]
2. Obtain epinephrine and follow the student’s allergy action plan,

[CLICK]
3. Activate the school’s emergency response plan.

When a student has been exposed to an allergen this is a medical emergency.

**SLIDE 43 – Recognize the Emergency**

**Script**
The first step is to recognize the emergency. Utilize the allergy action plan to help you know symptoms of an allergic reaction.

**SLIDE 44 – Symptoms of Mild Allergic Reaction**

**Script**
These are the main symptoms to look for when a student is having a mild allergic reaction.

[CLICK]
1. An itchy, runny nose, or sneezing

[CLICK]
2. Their skin may have a few hives and mild itch

[CLICK]
3. They may have mild nausea or discomfort in their stomach.

It is important to always listen to the student if they say they are having an allergic reaction. Their symptoms may be different from these listed.
SLIDE 45 – Symptoms of Severe Allergic Reaction
Script

Symptoms of a severe allergic reaction are any of the following. The student may be:
• Short of breath, wheezing, with a repetitive cough
• Complain of a tightness, hoarse throat with trouble breathing or swallowing
• Have swelling of the tongue and/or lips
• Pale, blue, faint, have a weak pulse, or dizzy
• Hives over body, widespread redness
• Vomiting or diarrhea
• Feeling like something bad it about to happen, confused agitated

SLIDE 46 – REAct Epinephrine
Script

When an allergic response is categorized as severe, administering epinephrine is the next step.

Keep the student lying on their back. If the student vomits or has trouble breathing, place them on their side.

Follow the students allergy action plan to administer the epinephrine. This information can be found on the back side of the student’s allergy action plan or on the epi-pen.

SLIDE 47 – REAct
Script

Once epinephrine has been given it is required to activate the school’s emergency response plan and have emergency medical services respond. The child may need monitoring and additional treatment.

Tailored Information
[include specific information about school’s emergency response plan].

If you are the only person with the student, always administer the epinephrine before activating the school’s emergency response plan.
SLIDE 48 – What is the best way to prevent an allergic reaction?
Script
Let’s review. What is the best way to prevent an allergic reaction?

[CLICK]
The correct answer is C, Avoid exposure to the allergen

SLIDE 49 – A student with no documented allergies . . . ?
Script
A student with no documented allergies is having difficulty breathing, complaining of nausea and has hives all over their body. What should you do first?

[CLICK]
The correct answer is B, Activate the school’s emergency response plan.

(HIDE) SLIDE 50 – Thank You
Script
Thank you for your time and attention today. If you have additional questions, please talk to your school nurse.

Tailored Information
This slide is used only if you are only doing the Allergies training and not doing the complete training

(HIDE) SLIDE 51 – Welcome
Script
Welcome! And thank you for your time and attention today during today’s training about the common chronic condition of diabetes.

Tailored Information
This slide is used only if you are only doing the Diabetes training and not doing the complete training
We are now going to talk and learn about diabetes and how to care for students with diabetes. In Colorado there are about 4,000 K-12 students with diabetes and in our Tailored Information [school/district] there are Tailored Information [insert number] students with diabetes.

For Your Information
www.coloradokidswithdiabetes.org

600 Diabetes Tier Training Instructor Guide March 2017 (1): Provides recommended and approved training content, activities, and materials for each tier level.

Diabetes Care Tasks at School Training Modules- American Diabetes Association

SLIDE 53 – Training Objectives
Script

During our time together we have three training objectives. You will be able to:

1. Identify which students have diabetes
2. Recognize symptoms of high and low blood sugar, and
3. Know where to find the care plan and staff who can help with emergencies
For Your Information
Level 1. Diabetes Overview and How to Recognize and Respond to an Emergency Situation.  

• Overview of diabetes
• How to recognize and respond to hypoglycemia and hyperglycemia
• Whom to contact for help in an emergency.

SLIDE 54 – Diabetes is:

Script

Diabetes is a chronic disease in which the body does not make or properly use insulin.  
[CLICK]  
Type 1 diabetes, formerly called juvenile diabetes. People with type 1 diabetes must take insulin daily to live.  
[CLICK]  
Type 2 diabetes may be controlled with lifestyle changes, diet, or oral medications. People with type 2 diabetes might require insulin.

For Your Information
NDEP Guide Pg 9-10

Type 1 Diabetes

Type 1 diabetes, formerly called juvenile diabetes, is a disease of the immune system, the body’s system for fighting infection. In people with type 1 diabetes, the immune system attacks the beta cells (the insulin-producing cells of the pancreas) and destroys them. Because the pancreas can no longer produce insulin, people with type 1 diabetes must take insulin daily to live.  

Type 1 diabetes can occur at any age, but onset of the disease occurs most often in children and young adults. Most cases of diabetes in children under age 10 are type 1 diabetes. In adults, type 1 diabetes accounts for 5 to 10 percent of all cases of diagnosed diabetes.

Symptoms. The symptoms of type 1 diabetes are due to an increase in the level of glucose in the blood and include increased thirst and urination, unexplained weight loss, blurred vision, and feeling tired all the time. These symptoms may be mistaken for severe flu or another rapid-onset illness. If not diagnosed and treated with insulin, the student with type 1 diabetes can lapse into a life-threatening condition known as diabetic ketoacidosis or DKA. Signs of DKA include vomiting; sleepiness; fruity breath; difficulty breathing; and, if untreated, coma and death.
Risk factors. Although scientists have made much progress in predicting who is at risk for type 1 diabetes, they do not yet know what triggers the immune system’s attack on the pancreas’ beta cells. They believe that type 1 diabetes is due to a combination of genetic and environmental factors that are beyond the individual’s control. Researchers are working to identify these factors and to stop the autoimmune process that leads to type 1 diabetes.

Type 2 Diabetes See page NDEP page 10 for symptoms, risk factors

Diabetes Care Tasks at School Training Modules: Diabetes Basics Video & PPT
Standards of Care for Diabetes Management Aug 6 2019

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SLIDE 55 – Check Blood Glucose Levels
Script

Students with type 1 diabetes need to check their blood glucose levels regularly to manage their diabetes. There are two different ways that a student can check their blood glucose levels. One way is through a continuous glucose monitor, or CGM. Another way is to poke their finger. Both methods let the student know what their blood sugar levels are.

A student will also check their blood glucose levels if they are experiencing symptoms. These can be symptoms related to either high or low blood sugar.

For Your Information
NDEP Guide Pg 21-22 Typical Blood Glucose target range is 70-130
Check Blood Glucose Levels
One of the most important diabetes management tasks is to check (or monitor) blood glucose levels throughout the day using a blood glucose meter or a continuous glucose monitor (CGM). Students who use a CGM also use a blood glucose meter to verify CGM readings.

Blood Glucose Meter
A blood glucose meter is a small portable machine used to check blood glucose levels. Before using the blood glucose meter, wash and dry hands and the test site. Insert the test strip into the meter. Using a lancet (a small needle inserted in a spring-loaded device), perform a finger stick by pricking the side of the fingertip. Apply a drop of blood to the test strip. The meter then gives the blood glucose level as a number on its digital display.

Heat and humidity may affect blood glucose meters and test strips and may reduce the accuracy of blood glucose readings. This is especially important when blood glucose is checked outside (e.g., on the practice field). Consult the manufacturer’s instructions regarding the operation and storage environment for the student’s blood glucose meter.
Continuous Glucose Monitor
Some students use a continuous glucose monitor (CGM), a device that measures blood glucose levels and trends throughout the day. The CGM works through a sensor inserted under the skin that measures interstitial glucose levels (the glucose found in the fluid between cells) at regular intervals and sends the current equivalent glucose level wirelessly to a monitor. The monitor may be part of the insulin pump or a separate device, which may include a smartphone that is carried or worn by the student in a pocket, a backpack, or a purse.

The CGM sets off an alarm when blood glucose levels are too high or too low, or when they are increasing or decreasing at a rapid rate. Never ignore a CGM alarm. Appropriate action should be taken in accordance with the student’s Individualized Healthcare Plan (IHP).

Some CGMs can transmit data remotely to multiple devices at the same time via smartphone technology. The school nurse, trained diabetes personnel, the student’s health care providers as well as the parents/guardians can have access to the CGM data and alarms in real time at locations remote from the student. Before using CGM data to make treatment decisions, you should have specific school orders or a DMMP plan that states whether CGM data can be used to make treatment decisions or whether CGM data should be confirmed with a blood glucose meter.

Diabetes Care Tasks at School Training Modules: Blood Monitoring and CGM PPT and Video
Standards of Care for Diabetes Management Aug 6 2019

SLIDE 56 – 5 Common Symptoms of Mild to Moderate Low Blood Sugar
Script

Here are 5 common symptoms students may exhibit when they are experiencing mild to moderate low blood sugar, also known as hypoglycemia. They may be [CLICK] shaky, [CLICK] irritable, [CLICK] say they are hungry, or [CLICK] say they are “out of it or spacey” or seem confused, and [CLICK] they may be tired or drowsy.

[CLICK]
You will want to look at a student’s care plan to know specifically what they typically experience when their blood sugar is mild or moderately low.
For Your Information

**NDEP Guide Pg 23 Refer to student’s IHP for specific symptoms of hypoglycemia**

- Shakiness/jitteriness
- Sweating
- Hunger
- Pallor
- Headache
- Blurry vision
- Sleepiness
- Dizziness
- Lightheadedness
- Confusion

- Loss of coordination
- Irritability or nervousness
- Argumentativeness
- Combativeness
- Changed personality
- Changed behavior
- Inability to concentrate
- Weakness
- Lethargy
- Disorientation

**Hypoglycemia, also called “low blood glucose” or “low blood sugar,” is a serious condition** associated with diabetes that can happen very suddenly and requires immediate treatment. Hypoglycemia can impair a student’s cognitive abilities and adversely affect academic performance. Hypoglycemia can affect attention, mood, and ability to follow directions and therefore can be mistaken for misbehavior.

Hypoglycemia occurs when a student’s blood glucose level falls too low, usually as a result of too much insulin, missing or delaying meals or snacks, not eating enough food (carbohydrates), or participating in extra, intense, or unplanned physical activity. For most students, a blood glucose level of 70 mg/dL or less is considered hypoglycemia. Low blood glucose levels are more likely to occur before lunch, at the end of the school day, during or after physical education classes, or in the event of unanticipated physical activities. Hypoglycemia may occur due to illness, particularly gastrointestinal illness, or it may occur for no obvious reason.

**Hypoglycemia occurs when a student’s blood glucose level falls too low, usually as a result of:**

- Too much insulin
- Missing or delaying meals or snacks
- Not eating enough food (carbohydrates)
- Getting extra, intense, or unplanned physical activity
- Being ill, particularly with gastrointestinal illness

Hypoglycemia usually can be treated easily and effectively. If it is not treated promptly, however, hypoglycemia can lead to loss of consciousness and seizures and can be life threatening.

**Hypoglycemia, which is not always preventable, is the greatest immediate danger to students with diabetes.**

Usually, the first signs of hypoglycemia are due to the body releasing adrenaline and other hormones/compounds that cause sweating, shakiness, hunger, pallor, light-headedness, weakness, and headache. As hypoglycemia progresses and there is insufficient blood glucose
for the brain to function normally, it can lead to changes in behavior, lethargy, progressive weakness, confusion, unconsciousness, seizures, and, if prolonged, even death.

**Diabetes Care Tasks at School Training Modules:** *Hypoglycemia PPT and Video*
- #611 Diabetes Skills – Hypoglycemia
- Standards of Care for Diabetes Management Aug 6 2019
- #720 Low-High BS Hands
- #303 Hypo-Hyper Flowsheet Plan

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**SLIDE 57 – Mild / Moderate Low Blood Sugar Steps to Follow**

**Script**

These are the steps to follow if you think a student may have mild to moderate low blood sugar:

[CLICK]

1. Check blood sugar, if possible. Some students may be able to check their blood sugar by looking at their CGM or using their finger poke.

[CLICK]

2. If not possible to check in their current location, the student will need to go to the office to check their blood sugar. The student needs to have a responsible person go with them to the office.

[CLICK]

3. It is best practice to notify the office that you have sent the student to check their blood sugar level, and that a responsible person is with them.

**For Your Information**

*NDEP Guide Pg 24 Refer to student’s IHP for specific symptoms of hypoglycemia*

Some children and adolescents may have **hypoglycemia unawareness**. In other words, they do not experience early physical warning signs such as shaking, jitteriness, or sweating, and the only clue that their blood glucose levels are low is sudden behavior change. Even students who usually recognize when their blood glucose is low may sometimes have a sudden “low” without the initial symptoms. Although symptoms of hypoglycemia may vary from student to student, each student will tend to have the same symptoms each time hypoglycemia occurs.

**Therefore, all school personnel should know how to recognize hypoglycemia and know what to do if they observe its onset.**

**The student should never be left alone or sent anywhere alone or with another student when experiencing hypoglycemia.**

As soon as the student exhibits symptoms of low blood glucose, treat the situation as a hypoglycemic emergency as outlined in the student’s Emergency Care Plan for Hypoglycemia. Immediately contact the school nurse or trained diabetes personnel who will check the student’s blood glucose level and treat the student for hypoglycemia. If the school nurse or
trained diabetes personnel are not available, or if the blood glucose level cannot be checked, school personnel should treat the student for hypoglycemia as outlined in the Emergency Care Plan for Hypoglycemia. Symptoms will progress if not treated immediately. When in doubt, always treat for hypoglycemia.

**Diabetes Care Tasks at School Training Modules: Hypoglycemia Video and PPT**

- #611 Diabetes Skills – Hypoglycemia
- #720 Low-High BS Hands
- #303 Hypo-Hyper Flowsheet Plan

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**SLIDE 58 – Give quick acting sugar**

**Script**

If the student is experiencing mild low blood sugar, they need a quick acting sugar source to restore their levels to normal. Examples of quickly absorbed sugar sources are:

- Glucose tablets
- Juice box, or Capri pouch
- Regular soda pop of 4-6 ounces
- 2-3 smarties candy rolls

You should have access to a quick acting sugar source in your classroom, or the student will have their own source of quick absorbing sugar depending on their age and grade level.

[CLICK]

Refer to the student’s health care plan to know the next actions to take.

**For Your Information**

**NDEP Guide Pg 25 Refer to student’s IHP for specific symptoms of hypoglycemia**

- As soon as symptoms are observed, notify the school nurse or trained diabetes personnel. Check the student’s blood glucose level to determine if it is low.
- If the blood glucose level is below the level in the Emergency Care Plan for Hypoglycemia (usually 70–80 mg/dL), or if the student has symptoms, give the student a **quick-acting glucose** product equal to 15 grams of carbohydrate (or the amount specified in the emergency care plan) such as:
  - 4 glucose tablets or 1 tube of glucose gel or
  - 4 ounces of fruit juice (not low-calorie or reduced-sugar) or
  - 4–6 ounces (half a can) of soda (not low-calorie or reduced-sugar)
- Wait 15 minutes, then recheck the blood glucose level.
- Repeat the steps above if the blood glucose level is below the level indicated in the Emergency Care Plan for Hypoglycemia.
- Contact the student’s parents/guardians if indicated in the Emergency Care Plan for Hypoglycemia.
• Once blood glucose returns to normal, as designated in the student’s Emergency Care Plan for Hypoglycemia, check the blood glucose level 1 hour later. If needed, provide an additional source of carbohydrate (e.g., whole grain crackers, graham crackers, granola bar, yogurt, fruit) if a meal or snack is not planned.

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**SLIDE 59 – Give glucose gel**

**Script**

If the student is experiencing moderate low blood sugar, they need a quick acting sugar source to restore their levels to normal. The student may not be able to follow your instructions to suck on the candy or swallow the liquid. If this happens, the student needs a glucose gel. To administer the glucose gel:

1. Keep the student’s head elevated
2. Squeeze the gel between their cheeks and gums, and
3. Encourage the student to swallow

[CLICK]

Refer to the student’s health care plan to know the next actions to take.

**For Your Information**

*NDEP Guide Pg 25 Refer to student’s IHP for specific symptoms of hypoglycemia*

If student has increased irritability, confusion, dazed appearance – and is unable to coordinate efforts to drink juice or chew up glucose tabs – adult intervention is necessary.

Give Glucose gel

• With head elevated
• Squeeze gel between cheek and gums.
• Encourage child to swallow.

**Follow IHP**

#611 Diabetes Skills – Hypoglycemia  
#720 Low-High BS Hands  
#303 Hypo-Hyper Flowsheet Plan
**SLIDE 60 – Severe Low Blood Sugar**

**Script**

If a student is experiencing severe low blood sugar, or severe hypoglycemia, they will be:

- [CLICK] Unable / unwilling to swallow
- [CLICK] Unconscious, or
- [CLICK] Having a seizure

[CLICK] This is a medical emergency and requires immediate action.

---

**SLIDE 61 – Alert delegated staff to bring glucagon**

**Script**

A delegated staff member needs to be alerted immediately to bring glucagon.

Next, position the student on their side and remain with the student until the delegated staff member arrives.

The delegated staff member will initiate the school’s emergency response plan, most likely calling 911 for emergency services assistance.

**For Your Information**

*NDEP Guide Pg 25 Severe Hypoglycemia – Glucagon*

- Position the student on his or her side to prevent choking.
- Contact the school nurse or trained diabetes personnel immediately.
- Do not attempt to give anything by mouth.
- The school nurse or trained diabetes personnel should administer glucagon, as indicated in the student’s Emergency Care Plan for Hypoglycemia.*
- Call 911 (Emergency Medical Services).
- Call the student’s parents/guardians.
- Stay with the student until Emergency Medical Services arrive.
- Notify the student’s personal diabetes health care team.

*If administration of glucagon is not authorized by the student’s Diabetes Medical Management Plan or Emergency Care Plan for Hypoglycemia, or if it is not available, staff should call 911 immediately.

**Glucagon Emergency Kit**

The parents/guardians should supply the school with a glucagon emergency kit if prescribed. The kit usually contains a bottle (vial) of glucagon in powder form and a prefilled syringe with
special liquid; the two ingredients should only be mixed just before a glucagon injection is given. Also BAQSIMI™ (glucagon) - nasal powder  https://www.baqsimi.com and Xeris pharmaceuticals glucagon pre-filled syringe https://www.xerispharma.com/about/therapeutic-areas/severe-hypoglycemia available 2019

The glucagon emergency kit may be stored at room temperature. The school nurse and/or trained diabetes personnel should also be aware of the expiration date on the kit and notify the student’s parents/guardians when a new kit is needed.

#611 Diabetes Skills – Hypoglycemia  
#720 Low-High BS Hands  
#303 Hypo-Hyper Flowsheet Plan  
#613 Diabetes Skills – Glucagon

SLIDE 62 – 4 Common Symptoms of High Blood Sugar  
Script

Here are 4 common symptoms students may exhibit when they are experiencing high blood sugar, also known as hyperglycemia. They may be [CLICK] thirsty, [CLICK] using the restroom frequently, [CLICK] complain of a stomach ache or [CLICK] say they are nauseous, [CLICK]

You will want to look at a student’s care plan to know specifically what they typically experience when their blood sugar is high.

For Your Information  
NDEP Guide Pg 26 Hyperglycemia

- Thirst
- Dry mouth
- Frequent or increased urination
- Change in appetite
- Blurry vision
- Fatigue

Hyperglycemia means blood glucose levels are above the target range, as specified in the student’s DMMP. Almost all students with diabetes will experience blood glucose levels above their target range at times throughout the day. For many students, these elevations in blood glucose will be only minimally above the target range (less than 250 mg/dL) and are short in duration. Other students may experience daily spikes of blood glucose levels that are high (in excess of 250 mg/dL) and of longer duration.

Hyperglycemia does not usually result in a medical emergency. Hyperglycemia may be caused by too little insulin or other blood glucose-lowering medications, a malfunction in the insulin pump or infusion set, food intake that has not been covered adequately by insulin or other
blood glucose-lowering medications, or decreased physical activity. Other causes include: illness, infection, injury, or severe physical or emotional stress. Onset of hyperglycemia may occur over several hours or days.

Symptoms of hyperglycemia include: increased thirst, dry mouth, frequent or increased urination, change in appetite, blurry vision, and fatigue. In the short term, hyperglycemia can impair cognitive abilities and adversely affect academic performance. In the long term, moderately high blood glucose levels can increase risk for serious complications such as heart disease, stroke, blindness, kidney failure, nerve disease, gum disease, and amputations.

For Your Information

NDEP Guide Pg 24 Refer to student’s IHP for specific symptoms of hypoglycemia
Some children and adolescents may have hypoglycemia unawareness. In other words, they do not experience early physical warning signs such as shaking, jitteriness, or sweating, and the only clue that their blood glucose levels are low is sudden behavior change. Even students who usually recognize when their blood glucose is low may sometimes have a sudden “low” without the initial symptoms. Although symptoms of hypoglycemia may vary from student to student, each student will tend to have the same symptoms each time hypoglycemia occurs.

Therefore, all school personnel should know how to recognize hypoglycemia and know what to do if they observe its onset.
The student should never be left alone or sent anywhere alone or with another student when experiencing hypoglycemia.

As soon as the student exhibits symptoms of low blood glucose, treat the situation as a hypoglycemic emergency as outlined in the student’s Emergency Care Plan for Hypoglycemia. Immediately contact the school nurse or trained diabetes personnel who will check the student’s blood glucose level and treat the student for hypoglycemia. If the school nurse or trained diabetes personnel are not available, or if the blood glucose level cannot be checked, school personnel should treat the student for hypoglycemia as outlined in the Emergency Care Plan for Hypoglycemia. Symptoms will progress if not treated immediately. When in doubt, always treat for hypoglycemia.

Diabetes Care Tasks at School Training Modules: Hypoglycemia Video and PPT

#611 Diabetes Skills – Hypoglycemia
#720 Low-High BS Hands
#303 Hypo-Hyper Flowsheet Plan

SLIDE 64 – A student with Type 1 diabetes must have insulin daily in order to survive

Script

Let’s review what we learned and discussed during this training. A student with type 1 diabetes must have insulin daily in order to survive. Is this true or false?

[CLICK]
The correct answer is True

SLIDE 65 – A student with mile to moderate low blood sugar (hypoglycemia) may be?

Script

A student with mild to moderate low blood sugar, or hypoglycemia, may have which of these symptoms?

A. Shaky
B. Irritable
C. Hungry
D. Confused
E. Tired
F. Drowsy
G. All of the above

[CLICK]
All of the above are common symptoms of mild to low blood sugar. A student’s care plan will include what they typically experience when their blood sugar is mild or moderately low.
SLIDE 66 – What is an example of a quick acting sugar?

Script

What is an example of a quick acting sugar?
  A. Granola bar
  B. Crackers
  C. Diet soda
  D. Juice box or a Capri pouch

[CLICK]
A juice box or a Capri pouch is the correct answer for a quickly absorbed sugar source. Additional examples are glucose tablets, regular soda pop of 4-6 ounces, or 2-3 Smarties candy rolls.

(HIDE) SLIDE 67 – Thank You

Script

Thank you for your time and attention today. If you have additional questions, please talk to your school nurse.

Tailored Information
This slide is used only if you are only doing the Diabetes training and not doing the complete training

(HIDE) SLIDE 68 – Welcome

Script

Welcome! And thank you for your time and attention today during today’s training about the common chronic condition of Seizures.

Tailored Information
This slide is used only if you are only doing the Seizures training and not doing the complete training
There are approximately 7,800 students in Colorado diagnosed with Epilepsy, a condition where a person has had more than one seizure. One in 26 people will develop epilepsy at some point in their lifetime. It is important to know how to recognize seizures and be able to provide first aid to a student, co-worker, family member or strangers.

There are two training objectives for our time together. After this training, you will be able to:

1. Recognize the different types of seizures
2. Provide first aid to someone who has a seizure

A seizure is a brief excessive discharge of electrical activity in the brain. Seizures can be classified as generalized or focal depending on where in the brain the excessive electrical activity occurs and how much of the brain is affected during the seizure.

In order to be able to respond and provide first aid when a student has a seizure you need to:
1. Know which students in your school have a documented history of having seizures
2. Their seizure action plan will tell you how to respond to each student
3. Know your school’s emergency response plan and how to call for emergency services
4. All seizures need to be documented on the student’s Seizure Observation Record
SLIDE 73 – Seizure Triggers
Script

There are many factors that may trigger seizures including missed medication, sleep deprivation, flashing lights, illness, stress, dehydration, sudden rise in temperature, overheating, and hormones.

[CLICK]

It is important to be aware of a student’s triggers, if known, and consider them when planning classroom activities as well as field trips. If possible, consider alternative activities that do not include factors that may trigger a student to have a seizure. The student’s parent or caregiver is a valuable resource regarding what may trigger their child’s seizure. Consider talking with them as you prepare and plan classroom activities and filed trips.

SLIDE 74 – 3 Types of Seizures
Script

There are three types of seizures we are going to learn about today. They are:

[CLICK]

1. Generalized

[CLICK]

2. Absence

[CLICK]

3. Focal

[CLICK]

We will also learn about a fourth condition, Non-Epileptic Spells which appear like seizures and need a different response plan.

We will now go through each type separately and learn how to recognize each type and how to provide first aid.

SLIDE 75 – Generalized Seizure
Script

A generalized seizure, previously were called a “grand mal” or "tonic-clonic" seizures and are what most people think of when they hear the word epilepsy. A generalized seizure is not the only kind of seizure and we will be talking about each one separately.

[CLICK]
When a student has a generalized seizure most often you may hear a sudden, hoarse cry; and the student may fall and lose consciousness,

[CLICK]
Followed by a stiffening of arms and/or legs with rhythmic jerking and shallow breathing.

[CLICK]
There may be drooling, loss of bowel or bladder control, and they may develop bluish skin, nails and lips

[CLICK]
These seizures generally last from a few seconds up to 3 minutes.

[CLICK]
After the seizure the student may be tired, confused and have a headache.

---

**SLIDE 76 – Generalized Seizure Response**

**Script**

[CLICK]
As we’ve already noted whenever a student has a seizure you want to refer to their seizure action plan if it is available.

[CLICK]
It is important to remain calm and time the seizure because if a seizure lasts longer than 5 minutes it will require emergency response.

[CLICK]
To protect the student’s privacy have a responsible person escort students escorted out of the area. It is important to provide reassurance to these students that their classmate is having a seizure and is getting first aid.

[CLICK]
Stay with the student and provide first aid responses
First aid for a generalized seizure is aimed at keeping the student safe until the seizure stops on its own.

1. Do not move the student, but clear objects from around them, including desks, tables, chairs, etc.

2. Do not restrain the student as this may result in injury

3. If a pillow/cushion is available, place it under the head, making sure it is not blocking the mouth or nose, hampering breathing. If a pillow or cushion not, available you may sit with your legs crossed and place your hands under the head on your lap to cushion (only if it is safe to do so!)

4. Turn the student on their side to allow saliva and blood, if they have bitten their tongue, to drain out the their mouth

5. Do not put anything in the student’s mouth

6. If the student’s Seizure Action Plan indicates, have delegated personnel deliver rescue medication to the area and give the medication to the student

7. After the seizure remain with the student until they are oriented. 8. Provide emotional support.

9. Last, as we’ve noted, document the seizure activity on the Seizure Observation Record
SLIDE 79 – Initiate School’s Emergency Response
Script

Initiate school’s emergency response if any of these situations occur:
• No reported seizure history with the student
• A generalized seizure lasting more than 5 minutes or per seizure action plan
• The student has repeated seizures without regaining consciousness
• Breathing may be interrupted for a short period of time, but if it does not resume, this would require an emergency response

SLIDE 80 – Initiate School’s Emergency Response
Script

• The student is inured, has diabetes, or is pregnant
• The seizure occurs in water
• To be prepared for an emergency situation, make sure you have read the student’s Seizure Action Plan and are able to tell when a student has an increased number of seizures or a different type of seizure

SLIDE 81 – Absence Seizure Video
Script

One of the most difficult types of seizures to recognize are the absence seizures. These seizures usually last less than 10 seconds and the child may appear to be daydreaming. One way to differentiate absence seizures from daydreaming is to tap the child on the shoulder and if they respond, this is not a seizure. The video demonstrates an absence seizure.

For Your Information
Play video (Click on picture) You may stop the video after “Could you recognize one?” (42 seconds). If you play the full video, at the end of the video says to contact the Canadian Epilepsy foundation. Give the resource of https://www.epilepsycolorado.org and there are many resources under the “learn” tab.
SLIDE 82 – Absence Seizure Response

Script

Generally no first aid is needed for absence seizures.

[CLICK]
One accommodation for these students is to repeat instructions when needed.

[CLICK]
If a student appears to have an absence seizure, and has no known seizure disorder, report these events to the school nurse. You can then both decide how to best talk with the student’s parents.

SLIDE 83 – Focal Seizure

Script

Focal seizures appear very differently than generalized seizures and the characteristic depending on what part of the brain is affected. A student may experience an aura, or a feeling that a seizure is about to happen, before they have a focal seizure

The student may have changes in sensation, emotions or thinking, They may be still and staring off OR
Have repetitive, purposeless or clumsy movements, such as picking at things, nonsensical speech or lip smacking.

A focal seizure can progress to a generalized seizure.

SLIDE 84 – Focal Seizure Image

Script

Focal seizures appear differently in each student. Here are examples of how a student having a focal seizure may look.
It is very important for all staff to know which students have a history of focal seizures because a student having a focal seizure may be misinterpreted as being under the influence of drugs or alcohol, exhibiting aggressive behavior, or resembling a mental health issue, such as a panic attack or hallucinations. A student having a focal seizure may be combative if you attempt to restrain them.

To respond when a student is having a focal seizure:

1. Refer to the student’s seizure action plan.
2. Stay calm and time the seizure.
3. Reassure other students who may be in the area.
4. Do not try to restrain the students. This may result in injury.
5. Gently direct the student away from any hazards in the area.
6. Don’t expect the student to follow verbal instructions.
7. If the student’s Seizure Action Plan indicates, have delegated personnel deliver rescue medication to the area and give the medication to the student.
8. Stay with the student until they are fully alert and aware.
Non-Epileptic Spells look very similar to seizures, but are not caused by abnormal electrical brain activity. Non-epileptic spells may also be called non epileptic events.

These spells are psychological in nature and therefore do not warrant medical attention. These spells are not clearly purposeful or intentional.

A student who has non-epileptic spells may also have epilepsy.

Non-epileptic spells are typically caused by difficulties coping with stress or anxiety.

The student’s body responds physically to these strong emotions. This response is similar to people who have stomach aches or headaches when nervous or stressed.

When a student has a non-epileptic spell it is important to follow their individualized care plan.

It is helpful for family members and school staff to respond consistently to the non-epileptic spells in order to minimize their impact on daily functioning.

Typical responses include;
- Monitor the student for safety and allow the spell to run its course
- Give a brief reassurance, then stop interacting with the student until the spell has stopped
- After the spell is over the student may be tired, have a headache or not be able to remember what occurred
SLIDE 91 – Non-Epileptic Spells Response

**Script**

- Provide a 5-10 minute break if needed. The student may return to classwork immediately.
- It is not appropriate to give medications to the student or initiate the school’s emergency response.

Response to non epileptic spells is aimed at helping these students develop coping skills. Removing the student from an activity sends the message that something is wrong with them or that they cannot participate. This student should be encouraged to engage in normal, daily activities.

If a non-epileptic spell episode is prolonged or severely disruptive to a classroom, the student may be removed per the care plan.

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SLIDE 92 – Which statement(s) are true?

**Script**

Let’s now review what we have learned. Which of these statements are true?

[CLICK]

The correct answers are A and B

Students may be, or may not be aware that they are having a seizure. And Epilepsy is not contagious. Helping other students understand Epilepsy helps reduce the stigma or bullying that these students may experience.

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SLIDE 93 – First aid for a generalized seizure include:

**Script**

First aid for a generalized seizure includes:

[CLICK]

The correct answer is D, all of the above

---

SLIDE 94 – Case Study:

**Script**
Let’s look at a case study. A student’s Seizure Action Plan states to give emergency medication and if the seizure lasts more than 5 minutes. The student’s seizure has lasted 1 minute and it has now stopped. What should you do?

[CLICK]
The correct answer is A. Follow the Seizure Action Plan. And stay with the student and provide reassurance until they are completely recovered.

---

SLIDE 95 – A student with a seizure disorder is going on a field trip.
Script
A student with a seizure disorder is going on a field trip. What may raise concerns?

[CLICK]
The correct answer is D. All of the above.

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(HIDE) SLIDE 96 – Thank You
Script
Thank you for your time and attention today. If you have additional questions, please talk to your school nurse.

Tailored Information
This slide is used only if you are only doing the Seizures training and not doing the complete training

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SLIDE 97 – Together We Can Keep Kids Healthy and Safe in School
Script
Working together we can keep kids healthy and safe while they are at school.

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SLIDE 98 – Thank You
Script
Thank you for your time and attention today. If you have additional questions, please talk to your school nurse.
We wish to thank the Colorado Cancer Cardiovascular and Pulmonary Disease Grants Program for funding this project.

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