



Medical and Medication Issues involving Minors

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Common Emergencies Affecting Children and Youth with Special Health Care Needs

All children and youth with special health care needs (CYSHCN) are likely to experience a medical emergency because of their health status or disability.

Most common (not inclusive):

Asthma attacks, dehydration, medication reactions or overdose, allergic reactions (food, insect bites or bee stings), hypoglycemic reactions for IDDM, sanitation

Swallowing or choking; head injuries, falls, high fevers and seizures, burns or cuts, respiratory, heart, physical or other disabilities.

Asthma

- Asthma attack
 - **Triggers** – pollen, changes in weather, exercise, irritants, pollution
 - **What to observe** – coughing, wheezing, shortness of breath, drop in activities
- Exercise induced asthma
 - **Triggers** – seasonal allergies, physical activity, sports
 - **What to observe** - coughing, wheezing, shortness of breath, and chest tightness, not keeping up with other kids



Asthma Management

- Managing asthma symptoms
 - Understand child's symptoms so as to help with asthma management
 - Follow the child's asthma action plan, e.g. triggers, list of medications, asthma symptoms for watch for, emergency numbers
 - Have rescue inhalers readily accessible
- When to be concerned and take action
 - Wheezing or coughing that continues after taking asthma quick-relief medication
 - Difficulty taking part in usual daily activities
 - Very fast or difficult breathing
 - Breathlessness and unable to speak a full sentence
 - Peak flow meter readings that register in the yellow or red zone

Drug Allergies

Hypersensitive reaction of the immune system to **medications**

- **Triggers** – PCN, Cephalosporins, Sulfa, Dilantin, Insulin
- **What to Observe** – eczema, hives, asthma, anaphylactic shock – medical emergency

Common Food Allergies in Children

- Peanuts, cow's milk (most common); eggs, tree nuts, soy, fish, shellfish and wheat.
- **What to Observe** – occurs within 1 – 60 minutes;
 - **Skin** - hives, itching, rash, swelling of the lips, tongue, face
 - **Digestive tract:** nausea, vomiting, diarrhea, abdominal pain
 - **Respiratory:** wheezing, congestion, shortness of breath, difficulty breathing due to swelling of the throat

Heat Related Emergencies

- Heat Rash
 - results from inflamed sweat ducts – ducts are obstructed and sweat can't get out
- Heat Edema
 - swelling in hands, feet, ankles
- Heat Cramps
 - usually in hamstrings/calf muscles. Dehydration is the culprit. Consider electrolyte replacement with water



Heat-Related Emergencies

Occurs after exposure to high temperatures for several days and subsequently become dehydrated

- Two types of heat exhaustion:
 - Water depletion - excessive thirst, weakness, headache, and loss of consciousness
 - Salt depletion – nausea and vomiting, frequent muscle cramps and dizziness
 - Not as serious as heat stroke
- **Triggers** – high heat index (90+ degrees), decrease sweat evaporation, higher when standing in full sunshine. infants and children \leq than 4 and adults \geq 65 more vulnerable (adjust to heat more slowly), certain health conditions lung, obesity or underweight, HBP, diabetes, mental illness, etc., certain medications, e.g., BP, stimulants.
- **What to observe** – confusion, dehydration, dizziness, fainting, fatigue, headache, muscle cramps, nausea, pale skin, profuse sweating, rapid heartbeat

Heat Exhaustion Management

- Limit outdoor activities when the heat index is high.
- Encourage child / parent to wear lightweight, light-colored, loose-fitting clothing and a wide-brimmed hat.
- Use a sunscreen with an SPF of 30 or more.
- Substitute an electrolyte-rich sport drink for water during periods of extreme heat and humidity to prevent salt depletion.
- Encourage fluids!!
 - When exercising or working outdoors
 - recommendation – drink 24 ounces of fluid two hours before exercise, e.g., water or sport drink and consume
 - 8 oz of water every 20 minutes even if you don't feel thirsty.
- Avoid caffeine.

Heat Exhaustion First Aid

- Remove from the sun
- Elevate the legs and feet slightly.
- Loosen or remove clothing.
- Provide cool water or other nonalcoholic beverage without caffeine to drink.
- Cool by spraying or sponging with cool water and fanning.
- Monitor carefully. Heat exhaustion can quickly become heat stroke.





Dehydration

- **Triggers** - diarrhea and vomiting (losing fluids) in children, heat exhaustion, high blood sugar, exercise.
- **What to observe** – dry mouth and tongue, no tears when crying, sunken abdomen, eyes, or cheeks, high fever, listlessness or irritability, skin that does not flatten when pinched and released, increased thirst.

Monitoring Children with Diabetes

Seek authorization for care of children with Insulin-Dependent Diabetes - Parent should complete action plan that identifies:

- Child's target range of blood glucose, e.g. 70 – 150 or 70 – 180
- Glucose meter (supplied by parent) and when testing is usually done
- Signs of symptoms of hypoglycemia to watch for
- Parameters to treat LBG and which fast acting carbohydrates, e.g., OJ, apple, soda w/sugar, glucose tablets to give
- Other complex carbohydrates, if lunch or snack is greater than 1 hr., graham cracker squares; saltines; pieces of bread or toast
When to repeat BG and fast- acting carbohydrates.
- Losing consciousness or having a seizure, **call "911"** or other emergency medical personnel, parent(s) or guardian(s), and child's doctor's office.
- What range to notify parents or guardian, e.g., high (200) or low
- **Recreational Activities:**
 - Know if child may participate in recreational activities or any activity restrictions
 - Know recreational activities that should be delayed if blood glucose is higher than e.g., **300** or lower than **70**.
- **Staff should:**
 - Have fast-acting carbohydrate readily available at all times
 - Should administer fast-acting carbohydrates even if suspicious of LBG and glucose meter is not readily available
 - Follow the child's **Diet Restrictions, e.g., no sugar or sweets to lunch or routine snacks**

High and Low Blood Glucose (hyperglycemia & hypoglycemia) Symptoms and Causes

High Blood Glucose Symptoms (Hyperglycemia)	High Blood Glucose Causes	Low Blood Glucose Symptoms (Hypoglycemia)	Low Blood Glucose Causes
Thirst Hunger Frequent urination Fatigue Nausea Blurred vision Headache Nervousness Confusion	Too much food Too little exercise Too little medicine Stress Illness Injury Short time between meals and snacks	Shakiness Sweaty Hunger Anxiety Nervousness Confusion Acting angry or irritable Slurred speech Headache	Too little food Too much medicine More activity than usual Too long between meals or snacks Alcohol





Sanitation for Good Health

- Cleanliness
- Food Preparation
- Pool Sanitation



Medication, Medical and Behavioral: What you should know!

Don't

- Provide routine medication or care to treat temporary illnesses with the exception of first aid/CPR.
- Accept or administer Over The Counter (OTC) medications. Medications must be labeled by a pharmacist.
- Assume minors are capable of self-administering medication.
- Allow minor to attend if contagious or feverish (temperature greater than or equal to 101).
- Prepare food yourself. Get a 3rd party vendor or permanent location vendor to prepare the food.



Medication, Medical and Behavioral: What you should know!

Do

- Ensure that more than 1 person has received CPR, First Aid or medication administration training (director or program leader).
- Ensure a nut free or latex free zone.
- Have a plan to deal with behavioral issues.
- Ensure proper forms and guidelines are developed that address all medical, behavioral and medication administration procedures.
- Require health related forms to be completed by parents and physicians.
- Inform parents about your medication, medical and behavioral guidelines and procedures.
- Wash your hands and ensure the children wash their hands.
- Wear gloves when serving food.
- Use bleach and water to clean tables.
- Remind minors not to relieve themselves in the pool.



References

Common Emergencies Affecting Children and Youth with Special Health Care Needs (2013). Retrieved from <http://www.childrensnational.org/files/PDF/EMSC/PubRes/CommonEmergenciesforCSHCN.pdf>

Americans with Disabilities Act: How it affects you (2013) Retrieved from <http://www.aafa.org/display.cfm?id=9&sub=19&cont=255>
<http://www.ada.gov/kinder1.htm>



Documents

Refer to Resources on the Protection of Minors on Campus website www.uncfsu.edu/PMOC for copies of

- AUTHORIZATION FOR SELF-CARRY BY CAMPERS EMERGENCY MEDICATIONS
- CAMPER HEALTH FORM
- MEDICAL AUTHORIZATION