

Adrenal Insufficiency

A Tier 1 training for teachers and staff for supporting students with adrenal insufficiency

ADAPTED FROM OREGON HEALTH AUTHORITY

SCHOOL NURSE ADVISORY GROUP



Objectives

As a result of this training, participants will be able to:

- Identify the dangers associated with adrenal insufficiency.
- Recognize the symptoms of adrenal crisis and common factors that lead to adrenal crisis.
- Provide examples of the types of medications that are available for treating adrenal crisis.
- Demonstrate proper administration of injectable medications that treats adrenal crisis.
- Explain the importance of follow-up treatment.



Standard of Care

- Legal Considerations
 - Federal Law
 - FERPA
 - Michigan School Code
 - Michigan Public Health Code
- Student Health Care Plans
 - Adrenal Crisis Action Plan
 - Medication Administration Authorization
- Coordination of Care
 - Student specific needs
 - Communication plan
- Training School Personnel
 - Tier 1
 - General Awareness for all staff
 - Tier 2
 - Emergency Care for MERT Team and Daily Support Staff
 - Tier 3
 - Daily Support for staff designated by administrator
- Ongoing Management and Support
 - Social/emotional considerations
 - Culturally appropriate
 - Building on Student strengths



HEALTH CARE PROVIDER: Please Complete and Sign Medical Orders Below

Risk factors for acute adrenal crisis include physical stress such as infection, illness, dehydration, or trauma.

MILD SIGNS AND SYMPTOMS:

If student displays one or more of the following **mild** signs and symptoms (provider, please list): _____

Follow these steps:

1. Contact parent/guardian. If parent cannot be reached, contact emergency contact(s).
2. Administer hydrocortisone: _____ mg, by mouth.
3. If, after receiving oral hydrocortisone, the student begins to display one or more of the **severe** signs and symptoms below, follow steps below.

SEVERE SIGNS AND SYMPTOMS:

If student displays one or more of the following **severe** signs and symptoms (provider, please list): _____

Follow these steps:

1. Administer Solu-Cortef: _____ mg, intramuscularly into thigh muscle.
2. Activate EMS.
3. Contact parent/guardian. If parent cannot be reached, contact emergency contact(s).
4. Contact Healthcare Provider.

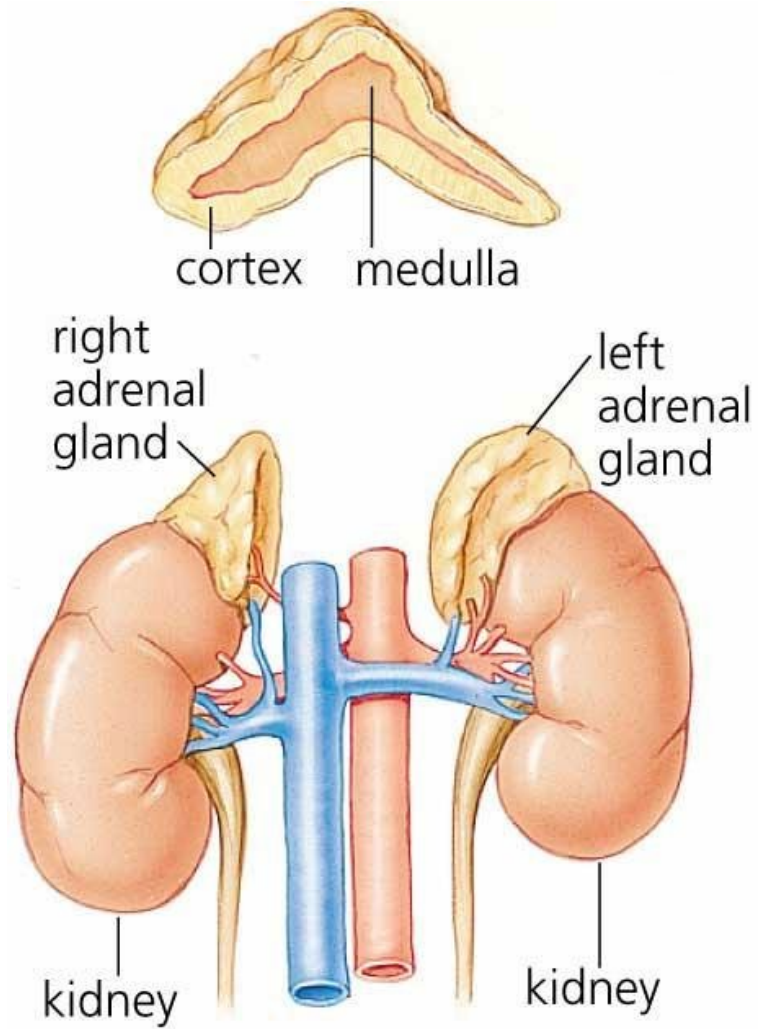
| | | |
|---------------------------------------|--------------------------------------|-------------|
| | | |
| Healthcare Provider Name/Title | Healthcare Provider Signature | Date |

| | | |
|---------------------|-------------------|--------------|
| | | |
| Phone Number | Fax Number | Email |

I give my permission to the school, school nurse, licensed/unlicensed assistive personnel, and other designated staff member(s) to perform and carry out the care tasks as outlined by this Acute Adrenal Crisis Action Plan for my child, and I acknowledge that I have received a copy of the signed plan. I also consent to the release of the information contained in this plan to all staff and other adults who have custodial care of my child and who may need to know this information to maintain my child's health and safety. I will notify extra-curricular staff about health plan and care to be given during after school activities. I give my permission for the school nurse to contact my child's healthcare provider(s) regarding the above condition.

| | | |
|----------------------------------|---------------------|-------------|
| | | |
| Parent/Guardian Signature | Printed Name | Date |

Adrenal Crisis Plan



Carlyn Iverson

Adrenal Glands



Adrenal Insufficiency

Definition: Adrenal glands do not produce enough of the necessary hormones (cortisol and aldosterone) to respond to stressors.

Cortisol and Aldosterone:
help to maintain and regulate key functions in the body:

- blood pressure
- metabolism (how the body uses food for energy)
- immune system
- response to stress



Adrenal Insufficiency

CAUSES:

- Congenital conditions
- Cancers
- Tumors
- Other conditions that affect:
 - pituitary gland
 - adrenal gland
 - endocrine organs

ADDISON'S DISEASE

- Common term for primary adrenal insufficiency
- Occurs when the adrenal glands are damaged/cannot produce enough cortisol

Missing a hormone vital to life and must take replacement medications on a daily basis!



Adrenal Insufficiency vs. Adrenal Crisis

Adrenal Insufficiency:

- Chronic condition
- Adrenal glands fail to produce specific stress hormones
- Take daily medications

Adrenal Crisis:

- Acute!
- Exacerbation of adrenal insufficiency which can be caused by:
 - Illness
 - Injury
 - Stress
 - Missing daily medications



Adrenal Crisis Triggers

Illnesses such as a cold or the flu

An injury, such as a twisted ankle or a broken bone

Exposure to stressful situations; i.e. a fire-drill

Missing or stopping daily steroid medications



Adrenal Crisis

SUDDEN, SEVERE WORSENING OF SYMPTOMS WHICH MAY INCLUDE:

Severe pain (lower back/abdomen/legs)

Muscle weakness or cramping

Trouble focusing

Lethargy

Stomachache

Nausea and/or vomiting

Diarrhea

Dehydration

Low blood pressure

Headache

Red cheeks (not attributed with recess/PE)

Dizziness

Loss of appetite

Dark rings under the eyes

Changes in emotional behaviors- student may seem upset, angry or more tearful than normal

Fainting or passing out

Fever (over 100°F)



Medications

Routine Daily Medications

Stress Dose



Significant physical or emotional stress

NO ADRENAL INSUFFICIENCY

Produce up to **10X** the normal amount of hormones needed in response to the event.

ADRENAL INSUFFICIENCY

Cannot produce these hormones

Must be given extra dose of medication (on top of their daily prescribed dose)

This is called a **“STRESS DOSE”**



Stress Dose

Depending on the severity of the event, a stress dose may be given:

- orally
- via injection

Stress Dose

Adrenal Crisis Plan **will have:**

- **instructions for oral stress dosing for minor illness or injury**
- **instructions for emergency injection for serious illness or injury**