



# District School Board of Pasco County

20430 Gator Lane • Land O' Lakes, Florida 34638 • 813/ 794-2221

Heather Fiorentino, Superintendent

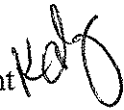
[www.pasco.k12.fl.us](http://www.pasco.k12.fl.us)

Department of Purchasing  
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August 16, 2011

## MEMORANDUM

TO: Honorable School Board Members

FROM: Kendra Goodman, CPPO, CPPB, Purchasing Agent 

RE: Pasco County Health Department  
Consulting Agreement

The attached consulting agreement between the Pasco County Health Department and the District's Student Services Department is being forwarded to the Board for approval. The Pasco County Health Department will provide physician oversight for the Healthy Student Program and the Automated External Defibrillation (AED) Program.

At this time, we respectfully request your approval to enter into the one-year contract with the above-referenced facility. This agreement will commence on August 16, 2011 and continue through August 15, 2012. This agreement has been reviewed and approved by Elliott Dunn, School Board Attorney. There will be no charge to the District for these services.

If you should have any questions regarding this matter, please contact me at your earliest convenience.

KDG/sb  
Attachments

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District Wide Accreditation • Southern Association of Colleges and Schools

Date/Time: August 10, 2011 09:40:00



# District School Board of Pasco County

7227 Land O' Lakes Boulevard • Land O' Lakes, Florida 34638 • 813/ 794-2000

Heather Fiorentino, Superintendent

[www.pasco.k12.fl.us](http://www.pasco.k12.fl.us)

Student Services Department

Lisa Kern, Supervisor

813/ 794-2360 Fax: 813/ 794-2120



727/ 774-2360

352/ 524-2360

## MEMORANDUM

**Date:** July 20, 2011

**To:** Kendra Goodman, CPPB, Purchasing Agent

**From:** Lisa Kern, Supervisor of Student Services (Health)   
Lizette Alexander, Director of Student Services 

**Subject:** Consulting Agreement between The District School Board of Pasco County and the Pasco County Health Department

Please find the following consulting agreement that provides medical oversight for the School Health Program:

### **Pasco County Health Department, Consulting Agreement**

Medical consultation and physician oversight is required in order for the district to implement the Healthy Student Program (Attachment I) and Automated External Defibrillation (AED) Program. This agreement with the Pasco County Health Department does not involve any funds. At this time, we respectfully request that The Board approve the above-referenced agreements.

Thank you

LK/lg



**CONSULTING AGREEMENT**

THIS AGREEMENT, entered into as of the 16<sup>th</sup> day of August, 2011 between the **District School Board of Pasco County**, Florida, hereinafter referred to as the **Board**, and **Pasco County Health Department**, hereinafter referred to as the **Department**.

**WITNESSETH THAT:**

The Board and the Department do mutually agree as follows:

1. This Agreement is for professional, technical, or personnel services. The Department is and shall remain an independent consultant and not an employee or agent of the Board for the purpose of providing services not otherwise available to the Board.
2. The Department shall perform the following:
  - A. Provide Health protocols for the Healthy Student Program. A copy of the Healthy Student Program Standing Orders is attached hereto as Exhibit "A".
  - B. Provide physician oversight for ARNPs employed by the District, in compliance with the rules required by the Nurse Practice Act of Florida.
  - C. Provide medical consultation for Health Services staff as needed for students of the District and shall:
    - 1) Provide medical consultation and expertise regarding AED (Automatic Electronic Defibrillator) use.
    - 2) Review all incidents involving the use of an AED.
    - 3) Assist with developing and reviewing plans for AED response protocols and training procedures.
3. The Department's Director and School Health ARNPs may be contacted by the School Health nursing staff for telephonic consultations as needed.
4. The parties shall comply with all applicable laws, ordinances, codes, and statutes of any and all local, state, or national governing bodies included within this section. The parties shall comply with the regulations of the Civil Rights Act of 1964, in which no person in the United States shall on the grounds of race, creed, color, or national origin be excluded from participation in or be denied the proceeds of, or be subject to discrimination in the performance of this Agreement. Also, all the funds, services, materials, property, etc. inclusive in this Agreement shall not be used in the performance of any partisan political activity or to further the election or defeat of any candidate for public office.
5. Should the Department be unable to comply with the provisions of this contract, it may propose an amendment to the Board.
6. The parties may, from time to time, request changes in the scope of the services of the Consultant to be performed hereunder. Such changes must be incorporated in a written amendment to this Agreement.
7. This Agreement, any and all parts thereof, can be terminated without giving cause with 10 days prior written notice by either party.
8. A copy of the School Nurse Assignments for 2011/2012 is attached hereto as Exhibit "B".
9. A listing of all Pasco County Schools is attached hereto as Exhibit "C".

CONTRACT REVIEWED  
AND APPROVED:  
*Wahy* 7/26/11

10. The Department shall commence performance of this Agreement upon signing of this Agreement by the last of the parties and shall complete performance no later than the 30th day of June, 2012.

IN WITNESS WHEREOF, the Board and the Department have executed this Agreement as of this date.

ATTEST:

**DISTRICT SCHOOL BOARD OF PASCO COUNTY**

**PASCO COUNTY HEALTH DEPARTMENT**

By: \_\_\_\_\_  
Superintendent

By : \_\_\_\_\_  
DAVID R. JOHNSON, MD, MS, MHA  
Director, County Health Officer

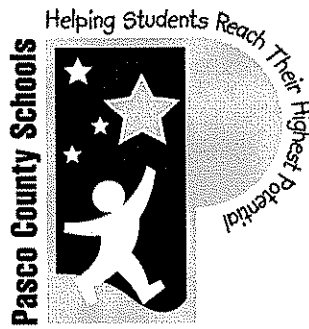
By: \_\_\_\_\_  
Board Chair

\_\_\_\_\_  
Date

Recorded in Board Minutes:

\_\_\_\_\_  
Date

CONTRACT REVIEWED  
AND APPROVED:  
*Kaly 7/26/11*



**DISTRICT SCHOOL BOARD OF PASCO  
COUNTY**

**HEALTHY STUDENT PROGRAM  
STANDING ORDERS  
FOR  
ELEMENTARY, MIDDLE, HIGH SCHOOLS  
AND  
EXCEPTIONAL STUDENT EDUCATIONAL PROGRAMS  
REVISION III  
Summer 2009**


SUPERINTENDENT OF SCHOOLS  
Heather Fiorentino

CONTRACT REVIEWED  
AND APPROVED:  
*Kathy* 7/26/11

**HEALTHY STUDENT PROGRAM  
STANDING ORDERS  
ELEMENTARY, MIDDLE, HIGH SCHOOLS AND EXCEPTIONAL STUDENT PROGRAMS**

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CONTRACT REVIEWED  
AND APPROVED:  


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CONTRACT REVIEWED  
AND APPROVED:  
*Kdy 7/26/11*

**HEALTHY STUDENT PROGRAM  
STANDING ORDERS**  
**Elementary, Middle, High Schools and Exceptional Student Programs**

**Healthy Student Program**

The main purpose of the Healthy Student Program is to improve school attendance and to reduce health problems that occur during the school day. Healthy Student Program services are offered at no direct cost to you and all students are eligible. The program is the commitment of the District, which believes a child who feels well learns better. A student may be withdrawn from the Healthy Student Program at any time by the parent or the School Health Services staff with written notice.

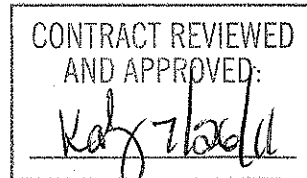
These standing orders are to be used by the registered nurse, licensed practical nurse and clinic assistant in Pasco County Schools as guidelines for providing care for illness and injury.

**REFERENCES TO ASSESSMENTS IN THE PROTOCOLS RELATE TO TRAINED OBSERVATIONS AND DO NOT CONSTITUTE A MEDICAL DIAGNOSIS.**

Any medication listed in these sections can only be provided with specific orders for a specific student or a student who is properly enrolled in the Healthy Student Program. The registered nurse, licensed practical nurse and clinic assistant should always inquire as to the medication allergies or contraindications before giving any medications.

**Medications**

- No medications are to be given to pregnant students unless prescribed by their primary physician.
- The nurse and/or clinic assistant should inform parents via telephone and/or in writing if follow-up is needed.
- **PARENTS SHOULD BE CALLED PRIOR TO ADMINISTERING STANDING ORDER MEDICATIONS ON ALL STUDENTS WHO ARE NON-VERBAL, MEDICALLY COMPLEX, SEVERELY MENTALLY HANDICAPPED OR WHO TAKE NUMEROUS DAILY RX MEDICATIONS.**
- **NO PRESCRIPTION NARCOTIC ANALGESICS SHOULD BE DISPENSED AT SCHOOL.**





**HEALTHY STUDENT PROGRAM  
STANDING ORDERS**  
**Elementary, Middle, High Schools and Exceptional Student Programs**

**Emergency Medical Procedures**

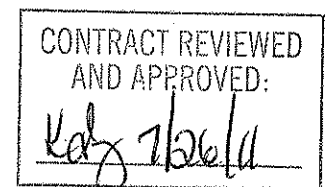
For conditions requiring a 911 call review with your school administration as to specific logistics to facilitate the swiftest arrival of emergency medical services to your school site. School health services 911 procedures include:

- Administer first aid according to standard procedures.
- Notify school administrative office that an emergency situation has occurred requiring 911 to be called.
- Notify parent/guardian of student's condition.
- Provide a copy of the student's emergency card to EMS for transport.
- Every accident or sudden illness resulting in a 911 call must be documented on a student record such as a health activity log, clinic pass, accident report, or nurse referral form.
- An AED should be brought to any emergency, if available.

**Examples of Emergency Medical Situations**

The following should always be considered a medical emergency, which may require immediate evaluation/treatment and EMS system activation/referral to treatment facility.

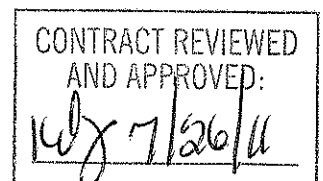
- Acute airway obstruction/choking
- Cardiac or respiratory arrest
- Drowning
- Massive hemorrhage, uncontrolled bleeding
- Poisoning, drug overdose
- Anaphylaxis (life threatening allergic reactions to inserts, drugs, etc.)
- Neck or possible spinal cord injury
- Heat-related emergencies
- Chemical burns of the eye, penetrating eye injuries
- Penetrating/crushing chest/abdominal wounds
- Dislocations and fractures
- Head injury with loss of consciousness, extended periods of unconsciousness
- Major burns-chemical, heat or electrical
- Electrical Shock
- Seizures-prolonged or unknown etiology



**HEALTHY STUDENT PROGRAM  
STANDING ORDERS  
Elementary, Middle, High Schools and Exceptional Student Programs**

**COMMUNICABLE DISEASES AND SPECIAL CASE  
INSTRUCTIONS**

The Pasco County Health Department is charged with managing communicable disease and is the only authority in determining if letters are to be sent home with students. Contact your registered nurse or Supervisor of Student Services (Health) at ext. 42360 if a communicable disease is suspected.



## DISORDERS OF HEAD, EYES, EARS, NOSE, MOUTH AND THROAT

### HEADACHE

**Definition:** Diffuse pain in various parts of the head. May be accompanied by a variety of other symptoms. Most common symptoms are pain and sensitivity to light; rare symptoms are nausea and vomiting. Headaches are classified as: 1) Primary which includes tension, muscle contractions, dilated blood vessels, response to noxious odors, and inflammation (meningitis) and 2) Secondary which are due to underlying organic causes (2-20%).

The most common causes of headaches in older children and adolescents are muscle contractions, tension, and inflammatory (sinus).

**Migraine headaches** affect children of all ages and are vascular in nature. The headache is usually unilateral (commonly around the eye or temple but often extends to the occiput or neck). The pain is moderate to severe, "pulsating" or "throbbing", and aggravated by activity. Sensitivity to light (photophobia) and nausea and vomiting are common symptoms and may vary in severity.

**Presentation:** Complaint of headache. Symptoms may vary from mild discomfort to moderate pain, may have fever, and/or nausea and/or vomiting. Most students appear in the clinic with mild headaches while some are diagnosed Migraines.

#### Clinic Assistant/LPN Tasks:

1. Take vital signs--T, P, R, and BP
2. Obtain history
  - a. Determine onset
  - b. History of previous head injury
  - c. Ask about allergies
  - d. Ask about time of last meal

#### Registered Nurse Assessment:

1. Onset, frequency, duration, location, intensity, and possible precipitating factors.
2. Ask about recent injury (accidents, head trauma), infections (URI), and allergies.
3. Describe quality and characteristics of previous headaches.
4. Usual treatment and results.
5. Any medication taken recently, time of last dose.

#### Management – Only if enrolled in Healthy Student Program & Approved by School Nurse in Elementary/Middle settings

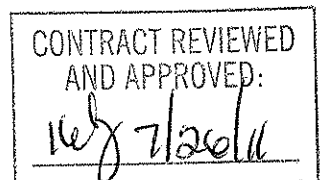
##### If mild or moderate:

1. Give regular Acetaminophen or Ibuprofen (refer to dosage chart in appendix)
2. If student has fever or presents symptoms more than 3 times in 1 month (same complaint), refer for medical evaluation.
3. Dosing for students under 12 years of age-follow recommended dosages on

##### Charts in Appendix.

##### If severe and/or sudden onset:

Refer immediately for medical evaluation



## DISORDERS OF HEAD, EYES, EARS, NOSE, MOUTH AND THROAT HEAD INJURY

**Presentation:** Presents with blow to head intended (fight) or unintended (sports, accident). Head injuries occur in both contact and individual sports. The highest incidences of brain injuries occur in football, baseball, horseback riding, and golf. Head injuries are classified as Minimal, Mild, Moderately or Potentially Severe.

**Minimal**—all of the following:

- a. No loss of consciousness or amnesia
- b. Glasgow Coma Scale of 15 (See Appendix)
- c. Normal alertness and memory
- d. No focal neurologic deficit
- e. No palpable depressed skull fracture

**Mild**—all of the following:

- a. Brief (<5 minute) loss of consciousness
- b. Amnesia for the event
- c. Glasgow Coma Scale score of 14 (See Appendix)
- d. Impaired alertness and memory

**Moderately or Potentially Severe**—all of the following:

- a. Prolonged (>5 minute) loss of consciousness
- b. Glasgow Coma Scale of <14 (See Appendix)
- c. Focal neurologic deficit
- d. Post-traumatic seizure
- e. Intracranial lesion detected on CT scan

### **Clinic Assistant/LPN Tasks:**

1. Do ABCs: airway, breathing, consciousness
2. Obtain vital signs
3. Ask about recent fall, back injury

### **Registered Nurse Assessment:**

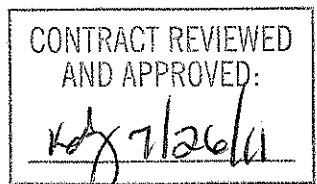
1. Assess airway patency, breathing, and circulation
2. Assess level of consciousness
3. Assess mental status—confusion, disorientation, speech (slurred or inappropriate)
4. Measure vital signs--P, R, BP
5. Obtain history of present injury (what, when, how, and mechanism of injury ( i.e.--type of object)
6. Assess for signs of increased intracranial pressure (e.g. elevated systolic pressure, wide pulse pressure, decreased pulse, slow respirations, N/V)
7. Carefully inspect and palpate head noting wounds and indentations
8. Examine the eyes to evaluate pupillary size, equality, and reaction to light
9. Examine the nasopharynx and ears for evidence of fresh blood or serous drainage
10. If ambulatory, evaluate gait and coordination



**DISORDERS OF HEAD, EYES, EARS, NOSE, MOUTH AND THROAT  
HEAD INJURY**

**Management:**

1. **REFER FOR IMMEDIATE EVALUATION BY MD IF ANY ABNORMALITY FOUND – CALL 911**
  - Severe headache
  - Nausea and vomiting
  - Indication of neck or back injury
  - Confusion
  - Unconsciousness
  - Speech slurred or inappropriate
2. **DO NOT GIVE Ibuprofen or Acetaminophen for analgesic**
3. Notify parent or guardian
4. Send home “Head Injury Letter” if unable to reach parent or guardian.



## DISORDERS OF HEAD, EYES, EARS, NOSE, MOUTH AND THROAT

### EYE DISORDERS

#### CONJUNCTIVITIS (Pink Eye) Common Signs/Symptoms

##### Bacterial conjunctivitis:

Itching, tearing  
Moderate amount of yellow-green  
Discharge.  
No pain or vision disturbance  
Cornea clear

Bilateral or unilateral  
Red, shiny appearance to lower lid  
More common in winter & spring  
R/O sinusitis

##### Allergic conjunctivitis:

Bilateral itching  
Watery discharge  
History of allergies  
Conjunctiva and lids red, swollen

Intense itching of both eyes  
Seasonal occurrence  
Sneezing, runny nose,  
throat "itching"

##### Viral conjunctivitis:

Burning, itching, tearing  
Watery, mucous discharge  
Unilateral initial presentation  
Followed by bilateral infection

Recent contact with another person  
with "pink eye"  
Associated with URI  
Transmission is from direct contact

##### **Clinic Assistant/LPN Tasks:**

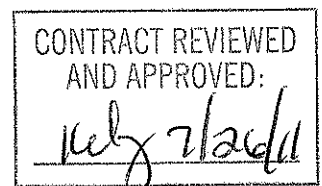
1. Ask about date of onset and allergies
2. Obtain vital signs
3. Note presence, consistency and color of discharge from eyes, if present

##### **Registered Nurse Assessment:**

1. Obtain history (onset, duration, intensity, anyone they know ill or have similar symptoms). History of URI in the past week(s), history of allergies, or have they had these symptoms before, and if so, how were they treated.
2. Assess vital signs--B/P, temperature

##### **Management:**

1. If yellow-green discharge noted, call RN to determine whether to **exclude** from school until he/she is under medical care or discharge has disappeared.
2. Instruct student:
  - a. To do frequent hand washing and avoiding rubbing eyes.
  - b. To avoid sharing of eye make-up and to discard any eye make-up used since eye symptoms developed.
  - c. To avoid wearing contact lenses until eyes cleared.
3. Refer to School Nurse Shared File



## DISORDERS OF THE HEAD, EYES, EARS, NOSE, MOUTH AND THROAT

### CORNEAL ABRASIONS (Suspected)

**Presentation:** Presents with pain, tearing, photophobia (sensitivity to light), and possible foreign body sensation. May have history of scratching eye, feeling something hit eye, and/or use of contact lens with sensation of “sand in eye”. Usually this is unilateral. Tearing of other eye may be sympathetic response.

**Clinical Assistant/LPN Tasks:**

1. Ask student about onset, history of complaint
2. Check for foreign body

**Registered Nurse Assessment:**

1. Obtain history of current event.
2. Assess for visual foreign body and condition of the cornea.

**Management:**

1. Rinse with saline eye wash solution to remove any irritant.
2. Have student remove contacts (if wearing) and re-rinse.
3. If pain persists, foreign body sensation, sensitivity to light, tearing or redness refer student to MD.

### FOREIGN BODY IN EYE (or Eye Trauma/direct blow)

**Presentation:** Pain and foreign body sensation, photophobia, tearing. Usually this is unilateral (only 1 eye affected).

**Clinical Assistant/LPN Tasks:**

1. History
2. Check for foreign body
3. Pain level

**Management:**

1. Flush eyes with water (prefer saline irrigation).
2. Caution student not to rub eyes.
3. **(RN only)** If object lies on surface and is readily visible, object may be removed with wet Q-tip. If foreign object cannot be removed easily or pain persists, apply a dry dressing to both eyes and notify parent for immediate care.
4. Notify Parent or Guardian
5. Medical referral if laceration, bleeding or change in vision
6. **Alert: If suspect Orbital Fracture- (i.e. trauma from blow) shield eye for transport. Discourage blowing nose to prevent increased pressure in the orbit. Call parent/guardian and EMS.**

## DISORDERS OF THE HEAD, EYES, EARS, NOSE, MOUTH AND THROAT

### EAR ACHE

**Presentation:** Students may present with ear pain, fever, drainage from ear, pain with chewing and swallowing, pain when ear lobe is touched, and/or face and jaw pain.

Ear diseases include the structures of the outer ear (otitis externa), the middle ear (acute otitis media), the mastoid bone (mastoiditis), and the inner ear (labrynthitis).

Ear pain can be inflammatory or non inflammatory (use of antibiotic therapy can leave fluid in the middle ear causing pressure and an ache however this will resolve without further treatment).

**Otitis Externa** is inflammation of the skin lining the ear canal and surrounding tissue.

Causes can be from improper ear cleaning, trauma to the outer ear, improper fitting earplugs or no earplugs when swimming, or a contact dermatitis from hairspray. Symptoms can include pain and itching in outer ear. Discomfort can be elicited by chewing, swallowing, or manipulation of the ear lobe. Hearing is usually not affected.

**Otitis Media** is an infection associated with middle ear effusion (a collection of fluid in the middle ear) or drainage if the TM is ruptured. Symptoms can be pain in the ear, fever, drainage from ear, or fullness in the ear with some diminished hearing.

**Mastoiditis** is an infection of the mastoid process usually caused by untreated otitis media. Symptoms may include severe pain and discomfort in the ear and the surrounding area of the face and boney prominence behind ear. Fever may be present and usually there is a history of URI.

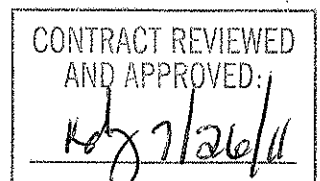
**Impacted Cerumen** is a condition where normal earwax has become hardened and is blocking the external ear canal. This is usually less painful and only complaint may be a feeling of "fullness" and diminished hearing in the affected ear. This can only be diagnosed by visualization of the ear canal.

#### Clinic Assistant/LPN Tasks:

1. Obtain vital signs-- T, P, R and BP.
2. Obtain history regarding the severity of pain, location, onset, what makes it better, and what makes it worse. Ask about recent sore throat, cold, and allergies.
3. For hearing impaired students, contact school nurse.

#### Management:

1. Notify parent or guardian about clinic visit
2. Refer for medical evaluation.
3. Caution students: DO NOT USE COTTON SWABS TO CLEAN EARS.
4. Caution against swimming until seen for medical evaluation.
5. Give Ibuprofen or Acetaminophen for ear pain (refer to dosage chart in Appendix) **Only if enrolled in Healthy Student Program & Approved by School Nurse in Elementary/Middle settings**





## DISORDERS OF THE HEAD, EYES, EARS, NOSE, MOUTH AND THROAT

### SINUSES (Sinusitis)

**Presentation:** Students may present with any combination of the following symptoms:

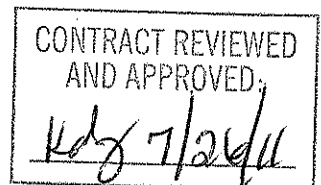
1. Nasal discharge clear, yellow, or green
2. Cough
3. Fever
4. History of prolonged URI (usually longer than 3 weeks)
5. Frequent clearing of throat
6. Halitosis (bad breath)
7. Post nasal drip and sore throat
8. Facial pain--pain in frontal region (above the eyes, behind the eyes) and maxillary region (below eyes and cheeks).

**Clinic Assistant, LPN and RN Tasks:**

1. Obtain history of present illness (onset, duration, intensity, treatment if any)
2. Ask about recent URI or allergies
3. Obtain vital signs—T, P, R, and BP
4. Ask if student is taking any OTC preparations and if so list.

**Management:**

1. Notify parent/guardian of clinic visit.
2. Refer for medical care and follow-up.
3. Give Ibuprofen 1-2 or Acetaminophen 1-2 (or use dosage chart if under 12)  
**Only if enrolled in Healthy Student Program & Approved by School Nurse in Elementary/Middle settings**



## DISORDERS OF THE HEAD, EYES, EARS, NOSE, MOUTH AND THROAT

### CANKER SORES (APHTHOUS STOMATITIS)

**Presentation:** One or more lesions in the mouth, on the tongue or in the throat

**Clinic Assistant, LPN and RN Tasks:**

1. Obtain history
  - a. Onset of current outbreak
  - b. Recent respiratory problem, fever, new food, or dental procedures
  - c. History of previous outbreaks and how treated
2. Do vital signs—temperature and BP

**Management:**

1. Rinse mouth (ulcer) with room temperature water
2. **RN:** Instruct student that if lesions(s) persistent for more than 14 days they should consult their PCP
3. If multiple lesions (more than 3-4) refer to family physician
4. Apply one drop of Ambesol on cotton applicator to lesion(s)  
**Only if enrolled in Healthy Student Program & Approved by School Nurse in Elementary/Middle settings**
5. Do not use dropper from bottle directly on lesion

### CHAPPED LIPS

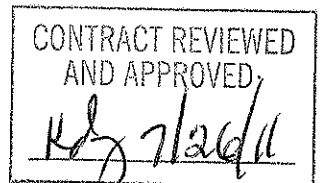
**Presentation:** Dry, cracked lips which may be a response to environmental or physical changes (cold, URI, antihistamine use, or sun)

**Clinic Assistant, LPN and RN Tasks:**

1. Obtain history of current episode, recent fever, cold or respiratory infection
2. Take temperature if student complains of illness

**Management:**

1. May use A & D Ointment, chap stick or vaseline  
**Only if enrolled in Healthy Student Program & Approved by School Nurse in Elementary/Middle settings**
2. If condition persists or worsens refer to PCP



## DISORDERS OF THE HEAD, EYES, EARS, NOSE, MOUTH AND THROAT

### TOOTHACHE

**Definition:** Tooth decay (caries) and periodontal disease are among the most common and easily preventable diseases of childhood. Dental caries is also the most common chronic disease of childhood.

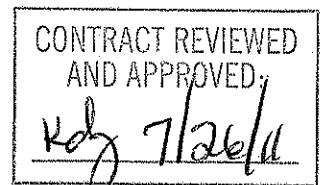
**Presentation:** Painful tooth (teeth), swelling of jaw or gums, and difficulty “biting down” or chewing. May have lesion on gum(s) near tooth (teeth).

**Clinic Assistant, LPN and RN Tasks:**

1. Check mouth and gums for redness or swollen areas.
2. Ask about recent upper respiratory infections (canker sores)
3. Check for caries, broken tooth (teeth) or lesions.
4. Take vital signs—temperature and BP

**Management:**

1. Notify parent or guardian
2. **RNs:** Refer for Dental services.
3. Give Acetaminophen or Ibuprofen for pain (**Refer to Dosage Chart**)  
**Only if enrolled in Healthy Student Program & Approved by School Nurse in Elementary/Middle settings.**



## DISORDERS OF THE HEAD, EYES, EARS, NOSE, MOUTH AND THROAT

### PHARYNGITIS AND TONSILLITIS

**Definition:** Inflammation of the pharynx and surrounding lymph tissue (tonsils).

Causative agents can be Viral, Bacterial or Allergic in nature. The most common pathogen is viruses followed by bacterial (includes Group A b-hemolytic streptococcus). Non-infectious causes include allergic rhinitis, post-nasal drip, mouth breathing, trauma from heat, alcohol, irritants such as marijuana, or sharp objects.

**Presentation:** Students may present with sore throat, tender and/or enlarged lymph nodes (**strep:** often anterior cervical; **mononucleosis:** often posterior cervical nodes), fever, headache, and malaise. There may be small oral vesicles or ulcers on the tonsils, pharynx, or posterior buccal mucosa. Exudate may be clear, white or grey. The pharynx may be red and inflamed with red macule patches (erythema).

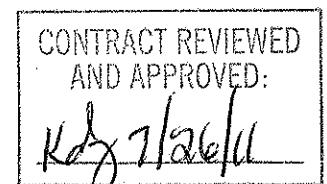
#### Clinic Assistant, LPN and RN Tasks:

1. Obtain history
  - a. Onset, duration, intensity
  - b. Contact with anyone with like symptoms or documented *Strep*?
2. Take vital signs—T, P, R, and BP

#### Management:

1. Give Ibuprofen or Acetaminophen for sore throat (**Refer to Dosage Chart**)
2. Student may gargle with warm normal saline solution (approximately ½ tsp salt in 1 cup of warm water) as needed.
3. Over the counter lozenges such as Cepacol or comparable brand may be used every 2 - 4 hours.
4. If elevated temperature and erythema of tonsils and pharynx with white or yellow exudate, refer to PCP for throat culture.
5. Contact Health Department ARNP for *Strep* screen or arrange for Care Mobile services, if appropriate

**Only if enrolled in Healthy Student Program & Approved by School Nurse in Elementary/Middle settings.**



GROUP A STREPTOCOCCI RAPID TEST (To be performed under directive of CHC ARNP with follow-up).

**Summary and explanation**

Group A streptococci (GAS) are organisms that typically cause illnesses such as tonsillitis, pharyngitis and scarlet fever. These infections can lead to serious complications including rheumatic fever and acute glomerulonephritis. Rapid diagnosis and appropriate antibiotic therapy of GAS infections appear to be the best means of preventing these complications.

**Indications for GAS testing**

Factors to be considered in the decision to obtain throat swabs in children with **pharyngitis**:

1. Patient's age (GAS infection less common in children less than 3 years of age)
2. Clinical signs and symptoms (sore throat, fever, enlarged tonsils)
3. The season (GAS prevalent in winter months)
4. Family medical history (anyone with acute rheumatic fever or history of post streptococcal glomerulonephritis).

**DO SWAB** children with acute onset of sore throat, fever, headache, pain on swallowing, abdominal pain, nausea/vomiting and tender enlarged cervical lymph nodes.

**DO NOT SWAB** children with manifestations of viral infection (e.g. coryza, conjunctivitis, hoarseness, cough, discrete ulcerations and diarrhea)

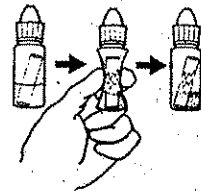
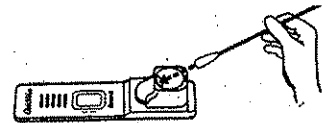
**Specimen collection**

Collect throat swab specimens by standard clinical methods. Depress tongue with a tongue blade or spoon. Be careful not to touch the tongue, sides or the top of the mouth with the swab. Rub the swab on the back of the throat, on the tonsils, and in any other area where there is redness, inflammation or pus. Use **only** the rayon tipped swabs on solid green plastic shafts supplied in the kit to collect throat specimens. It is recommended that swab specimens be processed as soon as possible after collection. Swabs can be held in any clean, dry plastic tube or sleeve up to 4 hours at room temperature, or 24 hours refrigerated

**Test procedure**

Remove the Test Cassette from foil pouch and place on a clean, dry, level surface. Using the notch at the back of the chamber as a guide, insert the swab **completely** into the Swab Chamber

1. Squeeze to crush the glass ampule inside the Extraction Solution Bottle.



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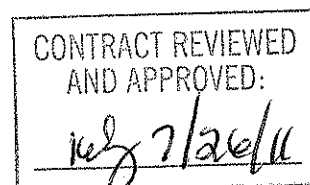
2. Vigorously shake the Bottle five times to mix the solutions. Solution should turn green after the ampule is broken. **Solution must be used immediately.**
3. Remove the cap. Quickly fill the chamber to the rim (approximately 10 drops). **Begin timing. If liquid has not moved across the result window in 1 minute, completely remove the swab and re-insert. If liquid still does not move across, retest with a new specimen, Test Cassette and Extraction Solution Bottle.**  
The Test Cassette should not be moved until the assay is complete.



5. **Read results at 5 minutes.** Some positive results may be seen earlier.



**Remember:** Consult with the Health Department ARNP before doing a throat swab.



## DISORDERS OF THE CHEST

### ASTHMA

**Definition:** Chronic inflammation and hyper reactivity of the airways are primary features of asthma, which is the most common chronic disease of childhood. Factors that may trigger and worsen symptoms include viral infections, exposure to allergens and irritants (smoke, strong odors, fumes, indoor mold, animal dander, dust mites), exercise, strong emotions that elicit crying or laughing, and change in weather/humidity. Children with asthma who exercise without adequate hydration are at increased risk for an asthma episode.

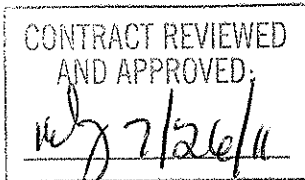
**Presentation:** Children typically present with symptoms of dry cough, cough with exercise and/or during sleep, wheezing, shortness of breath or rapid breathing, and chest tightness. During an acute asthma episode children may have rapid breathing, rapid heart rate, cough, wheezing, and a prolonged expiratory phase. Classic wheezing is not always prominent if air movement is minimal. As an asthma episode progresses to a late phase response you may observe cyanosis (blue/dusky color), decreased lung air movement, retractions, agitation, inability to speak, tripod sitting, and sweating. During an asthma episode, symptoms may range from mild to life threatening.

#### Clinic Assistant/LPN Tasks:

1. Obtain history of current asthma episode, onset, trigger, precipitating factors (i.e. exercise)
2. Listen to lung sounds (if trained)
3. Take vital signs—T, P, R, and BP
4. Reassure victim. Keep quiet and in sitting position.
5. Use inhaler or nebulizer as prescribed for specific student.
6. Give drink of water or caffeinated warm beverage to help thin secretions.
7. Notify parent/guardian.
8. If child has no rescue medicine available at school call parent/guardian to immediately bring medicine to school and pick up child if indicated.
9. **If unable to reach parent/guardian and child does not improve or progresses to late phase (cyanosis, decreased lung air movement, retractions, agitation, inability to speak, sweating) response CALL 911 EMS**

#### Registered Nurse Assessment:

1. Obtain history of current asthma episode, onset, trigger, precipitating factors (i.e. exercise)
2. Listen to lung sounds (if trained)
3. Take vital signs—T, P, R, and BP
4. Observe for late phase response signs of respiratory distress and decreasing air movement
5. Assess peak expiratory flow rate (PEFR) if child has peak flow meter available.

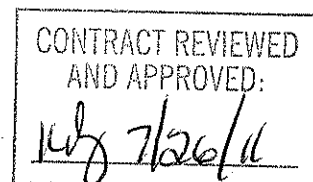


## DISORDERS OF THE CHEST

### ASTHMA (cont.)

#### Registered Nurse Management

1. Follow Asthma Action Plan and administer rescue medications according to plan and PEFR measurement if available.
2. **If child has signs of late phase asthma episode response (such as cyanosis, decreasing air movement, retractions, inability to speak, tripod sitting) or if the child is not responding to the rescue medicine (should relax bronchial smooth muscle within 10 minutes with resulting improved breathing) CALL 911 EMS**
3. If child has no rescue medicine available at school call parent/guardian to immediately bring medicine to school and pick up child if indicated.
4. **If unable to reach parent/guardian and child does not improve or progresses to late phase response CALL 911 EMS**
5. Provide a comfortable quiet place to the extent possible for the child to be treated and recover.
6. Child with exercise induced asthma episode may take sips of water as tolerated.
7. Reassess respiration and heart rate as indicated
8. Notify parent/guardian of asthma episode
9. Advise parent/guardian to have child who is not well controlled on current medications to seek medical evaluation.
10. Inform parent/guardian that children experiencing asthma episodes must have Asthma Action Plan in place and rescue medication available at school.





## DISORDERS OF THE CHEST

### COUGH

**Presentation:** Cough is a common symptom in children varying from a sudden onset with signs of respiratory distress to a cough lasting a week or more with a respiratory infection, or intermittent cough seen with asthma episodes. Coughing reflects the involvement of the larynx, trachea, or bronchial tree.

Type:

Productive- loose, rattling cough, yellow/green/bloody sputum

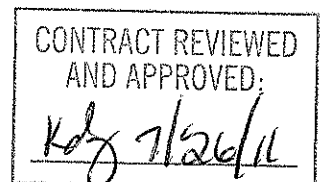
Non-productive- dry, brassy cough indicates tracheal irritation

Timing:

1. A nighttime cough that is worse when lying down may be from postnasal drip or asthma
2. A morning productive cough may be related to sinusitis
3. A cough that worsens with eating may be indicative of gastroesophageal reflux or conditions with uncoordinated swallow
4. A cough with seasonal patterns may indicate allergy-induced bronchospasm or rhinitis, winter cough may be related to dry indoor/outdoor environment
5. A cough with exposure to certain environments in the school setting may indicate a sensitivity to certain environmental elements such as are found in cosmetology classrooms, culinary arts, science labs, agricultural areas; or off campus secondary or primary tobacco smoke exposure and other environmental element exposures in home or work environments

#### Clinic Assistant/LPN Tasks:

1. General observation of respiratory status includes quality of air movement, respiratory rate and effort, signs of adequate oxygenation. **Any signs of respiratory distress such as wheezing or decreased air movement in the lungs, skin color changes to dusky/pale with blue mucous membranes and nail beds warrant a 911 EMS call.** For a child who is a known asthmatic, refer to the Asthma Action Plan or care plan for emergency treatment medications. (see Asthma Standing Orders)
2. Take vital signs – T, P, R, and BP
3. Listen to the lungs with a stethoscope (**if trained**).
  - a. Generalized coarse crackles which may clear somewhat with coughing indicate accumulated mucous in the large airways
  - b. Fine inspiratory crackles suggest accumulated mucous in the smaller airways
  - c. Diminished air entry in the lung fields indicates bronchial obstruction such as in asthma episodes or foreign body aspiration
4. Cough drops may be given  
**Only if enrolled in Healthy Student Program & Approved by School Nurse in Elementary/Middle settings**



## DISORDERS OF THE CHEST

### COUGH (continued)

#### Registered Nurse Assessment:

1. General observation of respiratory status includes quality of air movement, respiratory rate and effort, signs of adequate oxygenation. **Any signs of respiratory distress such as wheezing, stridor, decreased air movement in the lungs, skin color changes to dusky/pale with blue mucous membranes and nail beds warrant a 911 EMS call.** For a child who is a known asthmatic refer to the Asthma Action Plan or care plan for emergency treatment medications. (see Asthma Standing Orders)
2. Take vital signs—T, P, R, and BP
3. Listen to the lungs with a stethoscope.
  - a. Generalized coarse crackles, which may clear somewhat with coughing indicate accumulated mucous in the large airways
  - b. Fine inspiratory crackles suggest accumulated mucous in the smaller airways
  - c. Diminished air entry in the lung fields indicates bronchial obstruction such as in asthma episodes or foreign body aspiration
4. Assess for related signs of upper respiratory infection/bronchitis/chronic allergy/asthma/URI: (see Standing Orders for Pharyngitis/Tonsillitis, Otitis Media, Sinusitis)
  - a. Enlarged lymph nodes in neck
  - b. Redness and /or exudate in pharynx
  - c. Enlarged tonsils

#### Bronchitis:

- a. Acute phase URI symptoms, nasopharyngitis, fever, cough which is dry, brassy, harsh, or hacking, lasting 3-5 days
- b. Second phase 6-12<sup>th</sup> day of illness increased lower respiratory tract involvement with productive cough, thick yellow mucopurulent sputum, coarse crackles/wheezes heard on auscultation
- c. Persistent cough often beyond the usual two weeks of illness

#### Allergy:

- a. Allergic shiners – dark circles around eyes
- b. Transverse nasal crease – red line across bridge of nose
- c. Pale swollen nasal mucosa
- d. Mouth breathing

#### Asthma:

- a. May exhibit allergic symptoms as above
- b. Chest tightness
- c. Shortness of breath
- d. Wheezing

Cough and related respiratory symptoms occur with exercise



## DISORDERS OF THE CHEST

### COUGH (continued)

#### Registered Nurse Management:

1. Manage asthmatic students presenting with cough and signs of asthma episode according to their Asthma Action Plan or care plan
2. Cough drops may be given
3. Robitussin DM cough syrup per label dose recommendations may be given for students with cough not relieved with cough drops
4. Advise supportive measures including hydration, avoidance of respiratory irritants (e.g. cigarette smoke)
5. Refer to PCP if further intervention is needed, such as reoccurring fever with yellow, mucopurulent sputum beyond 2 weeks
6. Inform parents if medical intervention is needed.

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## DISORDERS OF THE ABDOMEN AND GI TRACT

### DYSMENORRHEA/MENSES

**Presentation:** Dysmenorrhea is painful menstrual cramps. The classic symptoms of dysmenorrhea are severe spasmodic cramping in the lower back and suprapubic area. Pain is usually greatest before heavy flow and during the first 12-24 hours of heavy menstrual blood loss. Associated symptoms may include nausea, vomiting, and diarrhea. Dysmenorrhea due to other causes may also present several days preceding menstrual flow and continue throughout menstruation.

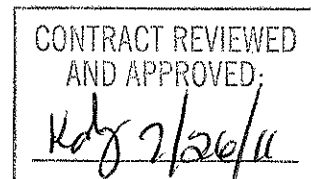
#### Clinic Assistant/LPN Tasks:

1. History:
  - a. Location of pain, when it begins, radiation, and any associated symptoms of nausea, vomiting, and diarrhea
  - b. Past menstrual problems/diagnosed
  - c. Inquire if pain occurs independently of menses, other urinary tract symptoms, vaginal discharge
  - d. Any medication taken recently
  - e. Usual treatments and results

**Registered Nurse Task:** Palpate and/or inspect abdomen for localized areas of tenderness, tension, masses evidence of injury if indicated by history

#### Management:

1. Heating pad may be applied to back or abdomen for 20 minutes on low/medium range.
2. **NO prescription narcotic analgesics should be dispensed at school.**
3. Refer students for medical evaluation who exhibit debilitating dysmenorrhea or symptoms and /or history indicate a possible underlying cause of pain other than menses.
4. Sanitary napkins may be provided to those needing feminine hygiene products.  
**Tampons may be available for use at secondary schools with specific instructions to change tampon every 4 - 6 hours.**
5. If pain is usual menstrual pain for student give Ibuprofen, if no contraindications and student has eaten. May give Acetaminophen if ibuprofen is contraindicated or student has not eaten. (See dosage chart for Ibuprofen and Acetaminophen)  
**Only if enrolled in Healthy Student Program & Approved by School Nurse in Elementary/Middle settings**



## DISORDERS OF THE ABDOMEN AND GI TRACT

### NAUSEA

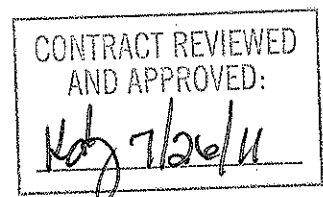
**Presentation:** Nausea is entirely subjective and is commonly described as a sensation immediately proceeding vomiting; may or may not elicit vomiting. Nausea and vomiting are among the most common symptoms that children experience and may be associated with a variety of clinical presentations. Causes can be due to underlying pathology, physiological condition, or psychological in nature, or a combination of these factors. **A few common causes are acute gastroenteritis, non-gastrointestinal infections (i.e. otitis media), UTI, GI obstructions, Irritable Bowel Syndrome, migraine, Increased Intracranial Pressure, inner ear disorders, pregnancy, and diabetic ketoacidosis.**

#### **Clinic Assistant, LPN and RN Tasks:**

1. Obtain history
  - a. Onset, duration, intensity, frequency, and possible precipitating factors
  - b. Recent food intake
  - c. Food/other allergies
2. Take vital signs T, P, R, and BP

#### **Management:**

1. Notify parent/guardian of clinic visit and any recommended medical evaluation or follow-up.
2. If severe and/or associated with fever, abdominal rigidity, diarrhea, frequent vomiting, etc, refer for immediate medical evaluation.
3. If nausea is mild to moderate and student is otherwise asymptomatic, give TUMs and ice chips, if appropriate.  
**Only if enrolled in Healthy Student Program & Approved by School Nurse in Elementary/Middle settings**



## DISORDERS OF THE ABDOMEN AND GI TRACT

### STOMACH ACHE

**Presentation:** The term stomach ache covers a broad spectrum of ailments with a variety of complaints. The areas affected can be the epigastric area (stomach), mid-epigastric (below stomach and small bowel area) or mid to lower abdominal (large intestines and colon). Complaints vary from pain, distention, cramping to diarrhea.

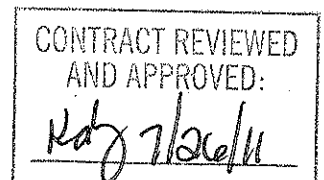
**Clinic Assistant, LPN and RN Tasks:**

1. Take vitals T, P, R, BP
2. Obtain history:
  - a. Present symptoms-onset, location, intensity, previous episode with similar symptoms
  - b. Recent food intake
  - c. Last bowel movement-diarrhea or constipation

**Registered Nurse Task:** Palpate and/or inspect abdomen for localized areas of tenderness, tension, masses, evidence of injury if indicated by history

**Management:**

1. If temperature or diarrhea occurs, notify parent or guardian to take home.
2. If acute abdominal pain and or vomiting call parent/guardian and refer to MD.
3. If no temperature or acute abdominal pain may use TUMS or available antacids (per pediatric dosing recommendations) and /or acetaminophen (1 dose) and allow to rest.  
**Only if enrolled in Healthy Student Program & Approved by School Nurse in Elementary/Middle settings**
4. If symptoms not improved in one hour, call parent/ guardian to take home.



## DISORDERS OF THE INTEGUMENTUARY SYSTEM (SKIN)

### SKIN RASHES

#### **Presentation:**

The term rash is extremely vague and can cover a multitude of skin abnormalities. A rash may simply be a minor irritation or a contagious disease. Taking a complete history along with identifying the specific presentations of a rash will often lead to an accurate diagnosis. *This information does not cover rashes associated with common childhood communicable diseases (i.e. measles).*

**Impetigo** - Caused by group A beta-hemolytic strep and/or staphylococci.

Fluid filled vesicles with honey colored crusts found in groupings or singularly. Commonly occurs around mouth, nasal folds, and lower extremities. Often a result of skin trauma and insect bites.

**Tinea (Ringworm)** - Caused by different fungi.

Corporis (body) - oval to round, scaly plaques with distinct red, raised borders with central clearing. Appears singularly or in multiples. Itching is common.

Capitis (head) - scaly plaques as above. May also have pustules and papules with crusting. Alopecia (hair loss) and itching are common.

Pedis (foot) - scaly plaques as above. May also have fissures, scaling, and blisters between toes. Itching common.

**Dermatitis** -

Atopic (eczema) - darkened, thickened, leathery appearing skin especially in 'fold areas' - neck, arms, fingers, behind knees, etc. May be present any surface. May be red, itchy, scaly, and crusty.

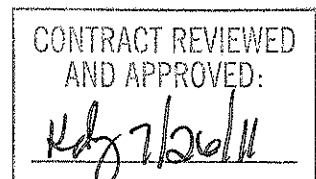
Contact - sudden onset of papules or vesicles with redness, swelling and itching at contact site.

**Scabies** - Caused by the *Sarcoptes scabiei* mite.

Pruritus (itching) most severe at night. May see thin burrow lines, small red papules and vesicles. Severe cases may present with excoriation, pustules, weeping and scaling. Most often found in skin folds of extremities or trunk. Most common locations are finger webs, wrists, elbows, thighs, external genitalia, and buttocks. Not commonly found on face.

#### **Registered Nurse - Physical Assessment -**

1. History of the rash -
  - a. Determine onset, location, intensity, previous episode with similar presentation.
  - b. Other family members with similar condition
  - c. Previous treatments
2. Description of rash.
3. Location of rash.
4. Signs of associated illness. For example: eczema is common in asthmatic and allergic children.



## DISORDERS OF THE INTEGUMENTUARY SYSTEM (SKIN)

### SKIN RASHES (continued)

#### Management -

##### Impetigo -

###### Home Care:

1. Wash affected area gently with warm soapy water several times daily to remove crusting.
2. Apply topical antibiotics as prescribed to area.
3. Keep clean and covered.
4. Continue treatment until healed.

###### School Care:

1. Provide above care initially.
2. Refer to RN regarding school exclusions and information for families.

##### Tinea -

#### 1. Corporis – (body)

###### Home Care:

- a. Over-the-counter topical anti-fungal medications available.
- b. Treat area 2-3 times daily for 2-4 weeks.
- c. Keep area covered.
- d. Keep clothing, linens, shoes, and showers clean.
- e. Do not share items with friends and family.

###### School Care:

- a. Provide above care initially.
- b. Refer to RN regarding school exclusions and information for families.
- c. RN: Refer for medical evaluation as needed.

#### 2. Pedis – (foot)

###### Home Care:

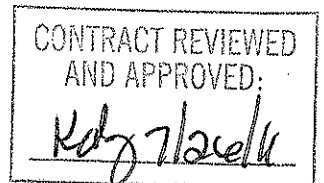
- a. Over-the-counter topical anti-fungal medication available.
- b. Treat area 2-3 times daily for 4-6 weeks.
- c. Use cotton socks and limit use of tennis shoes.
- d. Dry skin thoroughly after bathing or swimming.
- e. Keep clothing, linens, shoes, and showers clean. Do not share items with friends and family.

###### School Care:

- a. Provide above care initially.
- b. Refer to RN regarding exclusions and information for families.
- c. RN: Refer for medical evaluation as needed.

#### 3. Tinea capitis and severe cases of Tinea – (head)

- a. Refer to RN regarding exclusions and information for families.
- b. RN: Refer for medical evaluation as needed.





## DISORDERS OF THE INTEGUMENTUARY SYSTEM (SKIN)

### SKIN RASHES (continued)

#### Dermatitis and Eczema

**Only if enrolled in Healthy Student Program & Approved by School Nurse in Elementary/Middle settings**

##### 1. Atopic (chronic)

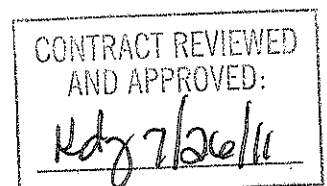
- a. Mild: Use mild unscented soaps and moisturizing ointments and creams to help with dryness. (Eucerine cream, Lachydrin or Keri lotions may decrease dryness). If no improvement in a week or not under medical care, refer for medical evaluation.
- b. Moderate- Severe: recommend topical hydrocortisone 1% to affected areas to reduce itching and inflammation for up to 1 week. Recommend use of mild soaps (superfatted), i.e., Dove. Recommend use of Eucerine cream or Keri lotion to decrease dryness.
- c. **RN:** Refer for medical evaluation as needed.

##### 2. Contact –

- a. Avoid contact with known irritants.
- b. Cool compress to area
- c. Topical corticosteroids to affected areas.
- d. **RN:** Refer for medical evaluation as needed

##### Scabies –

1. Refer to RN regarding exclusions and information for families.
2. **RN:** Refer for medical evaluation.



## DISORDERS OF THE INTEGUMENTUARY SYSTEM (SKIN)

### SKIN TRAUMA (WOUNDS)

**Presentation:** The skin is the largest organ system in the body. It is the first line of defense against infection. Skin trauma is a broad category and includes anything that sacrifices the integrity of the skin barrier. Skin trauma tends to make up a large portion of the clinic population. Some trauma, such as sunburns span the ages while others such as lacerations might be seen more often in high school settings while students are learning new skills.

**Abrasion** - superficial damage to the outer most layer of skin.

**Burns** - Amount of damage depends on length and type of exposure.

**First degree** - skin with erythema (redness), edema (swelling), and pain.

**Second degree** - blister formation - closed, open, weeping. Skin with erythema, edema, and pain. Common with scalding.

**Third degree** - charred or whitish appearance, black, dryness, edema. Loss of sensation. Common with flame, hot metals.

\*\*\***A major burn is:**

**a 2<sup>nd</sup> or 3<sup>rd</sup> degree burn**

**a burn that covers more than 10% (area of examiners hand) of the body surface area**

**a burn that involves the hands, feet, face, perineum.**

**Insect bites** - pruritis (itching), pain, erythema, single or multiple red, raised lesions on exposed areas of body. May be localized to systemic reactions.

**Laceration** - often a linear slicing type wound.

**Splinter** - foreign body inserted into the skin.

**Sunburn** - Amount of damage depends on length of exposure. Classified as 1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup> degree depending on severity of edema, erythema, pain, blistering.

#### **Clinic Assistants, LPN, and RN Tasks:**

1. Assess ABC'S – take appropriate action (Trauma bag, 911).

2. Obtain history:

Onset – when and how it occurred.

Location and description of trauma/wound.

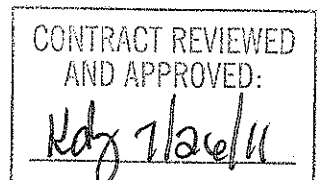
**RN:** Severity and progression of symptoms.

**RN:** Signs of infection.

Determine what treatment has been used.

Note location, type and extent of trauma

**Be alert for potential of child abuse in the case of burns/skin trauma.**



## DISORDERS OF THE INTEGUMENTARY SYSTEM (SKIN)

### SKIN TRAUMA (WOUNDS) (continued)

#### Management:

##### Abrasion -

1. Wash wound well with antibacterial soap.
2. Apply antibacterial ointment and dressing.

##### Burns -

###### Non-major burns -

1. Cool compress or submerge skin in cool water till heat subsides. **Do not apply ice.**
2. Offer fluids for hydration.
3. Cover with clean, loose, dry dressing.

###### RN:

1. Medicate for pain per guidelines.
2. Cover with clean, loose, dry dressing.
3. Do not open blisters.
4. Assess status of tetanus immunization.
5. Refer for medical evaluation as needed.

**Only if enrolled in Healthy Student Program & Approved by School Nurse in Elementary/Middle settings**

###### Major burns -

1. Cool compress or submerge skin in cool running water. **Do not apply ice.**
2. Refer immediately for medical care.

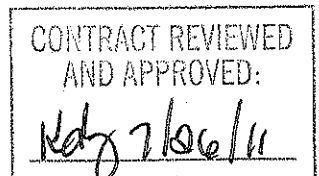
##### Insect bites -

1. Clean area with antibacterial soap.
2. Cool compress or ice to area.
3. Check student records for history of allergies-treat per established care plan.
4. Observe for 20 minutes for allergic response.

###### RN:

5. Apply Caldyphen Clear lotion.
6. May apply hydrocortisone cream 1% to area. Do not apply near eyes.
7. Refer for medical evaluation if needed.

**Only if enrolled in Healthy Student Program & Approved by School Nurse in Elementary/Middle settings**



## DISORDERS OF THE INTEGUMENTARY SYSTEM (SKIN)

### SKIN TRAUMA (WOUNDS)

#### Laceration -

1. Wash wound well with antibacterial soap.
  2. May apply ice pack to area.
- RN:**
3. Apply antibacterial ointment and dressing.
  4. Medicate for pain per guidelines as needed
  5. Check student records for status of tetanus immunization.
  6. Refer for medical evaluation as needed.
  7. Depending on severity:
    - a. Pressure dressing
    - b. Butterfly dressing.

**Only if enrolled in Healthy Student Program & Approved by School Nurse in Elementary/Middle settings**

#### Splinter -

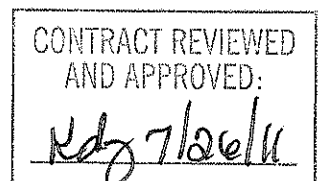
1. Wash area well with antibacterial soap.
2. If splinter protrudes from the skin use tweezers to remove.
3. If unable to remove easily – apply antibiotic ointment and dressing. Inform parent/guardian
4. Refer for medical evaluation if erythema, edema, purulent discharge.

**Only if enrolled in Healthy Student Program & Approved by School Nurse in Elementary/Middle settings**

#### Sunburn -

1. Cool compress to skin.
2. Offer fluids for hydration.
3. Medicate for pain per guidelines.
4. Aloe Vera gel to affected area for comfort.

**Only if enrolled in Healthy Student Program & Approved by School Nurse in Elementary/Middle settings**



## DISORDERS OF THE INTEGUMENTUARY SYSTEM (SKIN)

### PIERCINGS AND TATTOOS

**Presentation:** New piercings or tattoos are expected to be slightly red and swollen at the site with scant serosanguinous drainage. Within a few days the drainage should become serous and begin to crust over at the site. Within two weeks there should be only slight redness at the edges with no drainage. Redness should decrease over the next few weeks. Healing time of the body piercing or tattoo is dependent on observance of principles of sterility during the procedure, as well as location on the body and follow-up care after the procedure. Generally healing time for piercings in cartilage tissue such as the upper ear or nasal septum is longer due to decreased blood flow. Both piercings and tattoos carry a risk of local infection as well as blood-borne infections, such as hepatitis B, hepatitis C, tetanus, and HIV. Other problems are metal hypersensitivity, allergy to dyes used in tattoos, scarring including raised scar tissue (keloids). More serious problems include infective endocarditis, brain abscess, and upper airway compromise associated with tongue piercings. Symptoms of an infection with a piercing or tattoo include pain, increased redness, increased swelling, and prolonged drainage of blood or pus that does not follow the expected healing pattern. Systemic effects can include fever and body aches (myalgia). Symptoms of hypersensitivity or allergy to metal of piercing jewelry or tattoo dyes include intense itching at the site and possible hives.

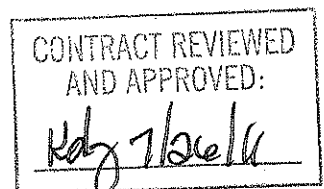
#### Clinic Assistant, LPN and RN Tasks:

1. If swelling of the tongue is involved check airway/breathing.
2. If child reports fever and body aches inquire as to duration and measure temperature.
3. Inspect skin for signs of infection – look for area of redness, pus or other discharge at site, and pustules in area of piecing/tattoo site.

#### Management:

1. For swelling of a new (1 to 2 days) piercing or tattoo apply an ice pack for 15 minutes.  
**If swelling of the tongue is involved call 911 if child reports difficulty breathing and maintain airway.**
2. Notify parent and refer for medical evaluation if temperature is elevated.
3. For signs of infection gently clean the site with antibacterial soap or antiseptic wipe, pat dry, apply antibiotic ointment, cover with a nonstick bandage.  
Refer for medical evaluation.
4. For signs of metal hypersensitivity/allergy ask student to remove the piercing jewelry.  
Cleanse the area and cover with a bandage if drainage is present. May apply ice for 15 minutes.
5. For signs of allergy to tattoo dye apply ice for 15 minutes. If hives are present may give Benadryl according to pediatric dosing recommendations. Notify parent and refer for medical evaluation.

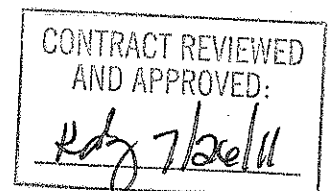
**Only if enrolled in Healthy Student Program & Approved by School Nurse in Elementary/Middle settings**



**DISORDERS OF THE INTEGUMENTUARY SYSTEM (SKIN)**

**PIERCINGS AND TATTOOS** (continued)

6. Advise student on general care of piercing or tattoo site:
- Use an antibacterial soap and warm water to wash the area at least twice a day
  - Pat dry and do not rub
  - Do not pick or scratch area
  - Always wash your hands before touching the area
  - No swimming until piercing or tattoo is healed
  - Wear only clean clothing next to area
  - Seek medical care immediately if there are signs of infection



## DISORDERS OF THE NEUROLOGICAL SYSTEM

### ANXIETY EPISODES

**Presentation:** Anxiety is a normal component of human life, however, anxiety can be excessive with such conditions as unfounded fears and worries, phobic avoidance, anticipatory anxiety, panic attacks, or overwhelming dread. Symptoms of anxiety may present when a child is exposed to a sudden traumatic event or repeated trauma over time such as physical or sexual abuse. Anxiety is considered pathologic when it is persistent and interferes with achievement of goals, quality of life, or psychological well-being. The spectrum of symptoms ranges from mild worry to incapacitating panic attacks. Anxiety disorders are diagnosed by clustering of a symptom complex rather than a single symptom presentation. There may be overlapping symptoms of more than one disorder. **Some medical cardiac and respiratory disorders may mimic panic attacks.** Anxiety episodes may also be a result of substance abuse. Presenting symptoms of anxiety disorders which may be seen in the school setting are:

**Generalized Anxiety Disorder** (6 months or more of persistent & excessive anxiety/worry):

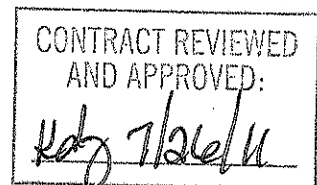
1. Restlessness or feeling keyed up or on edge
2. Unrealistic worry about future events
3. Being easily fatigued
4. Difficulty concentrating or mind going blank
5. Irritability
6. Muscle tension
7. Sleep disturbance

**School Phobia** (Social Anxiety Disorder)

1. Persistent fear of situations in which the child is subjected to public scrutiny in a peer setting (school, sports, other social situation)
2. Exposure to feared social situation provokes anxiety which may take the form of panic attack, crying, tantrums, freezing, or withdrawing from the situation

**Separation Anxiety Disorder**

1. Recurrent excessive distress when separation from home or major attachment figures occurs or is anticipated
2. Persistent and excessive worry about losing, or about possible harm befalling major attachment figures
3. Persistent and excessive worry that an untoward event will lead to separation from a major attachment figure (e.g. getting lost or being kidnapped)
4. Persistent refusal to go to school or elsewhere because of fear of separation
5. Repeated complaints of physical symptoms (headaches, stomachaches, nausea, or vomiting)



## DISORDERS OF THE NEUROLOGICAL SYSTEM

### ANXIETY EPISODES (continued)

**Panic Attack:** A discrete period of intense fear or discomfort, in which 4 or more of the following symptoms developed abruptly and reached a peak within 10 minutes

1. Palpitations, pounding heart, increased heart rate
2. Sweating
3. Trembling or shaking
4. Sensations of shortness of breath or smothering
5. Feeling of choking
6. Chest pain or discomfort
7. Nausea or abdominal distress
8. Feeling dizzy, unsteady, lightheaded, or faint
9. Feelings of unreality or being detached from oneself
10. Fear of losing control or going crazy
11. Numbness or tingling sensations
12. Chills or hot flashes

#### **Clinic Assistant / LPN Tasks:**

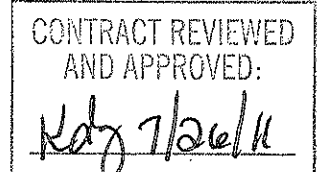
1. Take vital signs T, P, R, & BP
2. Obtain history (any medications, history of medical condition)
3. Call parent

#### **Registered Nurse Assessment:**

1. Assess respiration and lung air movement, heart rate; reassess as needed
2. Assess mental status
3. Obtain history of presenting physical/emotional symptoms and precipitating event from child as possible
4. Observe for presenting behaviors listed above or expressions of unrealistic worries

#### **Management:**

1. **If there are respiratory or cardiac abnormalities, complaints of severe chest pain, or other symptoms of a life threatening nature CALL 911**
2. If child is hyperventilating initiate rebreathing into a paper bag held with opening pressed to conform around nose and mouth
3. Provide a private quiet area to the degree possible for the recovery of the child who may be hyperventilating or is exhibiting symptoms of extreme anxiety
4. Notify parent/guardian and refer for medical/psychological evaluation
5. In the event an anxiety disorder is diagnosed after medical evaluation or diagnosis is pre-existing, discuss with the parent/guardian recommended strategies for management in the school setting. School resources may include the school social worker, psychologist, and guidance counselor.





## DISORDERS OF THE NEUROLOGICAL SYSTEM

### SYNCOPE (FAINTING)

**Presentation:** A child presenting with a syncopal (fainting) episode requires a careful assessment. Syncope is defined as a rapid, transient, complete loss of consciousness and postural tone. Syncope is the result of low oxygen delivery to the brain, low blood pressure, or low blood sugar due to a variety of causes. The most common cause is a vasovagal response caused by prolonged standing or sitting leading to a drop in blood pressure and slowed heart rate. Outdoor heat exposure may also play a role. More serious causes include cardiac abnormalities, seizure disorders, endocrine abnormalities and head trauma. The duration of the syncopal episode may range from a few seconds to 1 or 2 minutes. **A duration of unconsciousness beyond 1 minute may indicate a more serious problem.**

#### Clinic Assistant/LPN Tasks:

1. Measure vital signs: T, P, R, and BP (if heat related).
2. Determine level of consciousness, note confusion and fatigue, and observe for any other injuries that may have occurred during episode.
3. Obtain description of event from available witness: circumstances surrounding the episode, onset and duration of loss of consciousness, any associated body movements.

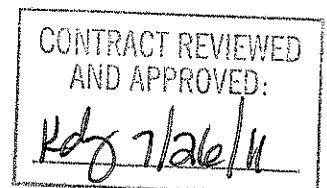
#### Registered Nurse Tasks:

Obtain history from child or parent/guardian:

- Previous fainting event
- Medical evaluation if previous incidence
- Known cardiac, neurologic, or respiratory disease
- Explore drug use-prescription, nonprescription, street drugs/ alcohol
- If female explore possibility of pregnancy
- Triggering factors such as exercise, heat, pain, injury, emotional event

#### Management:

1. **Position child lying down with feet higher than head.** If head or neck injury is suspected **DO NOT MOVE CHILD.**
2. If child remains unresponsive longer than 1 minute call 911
3. **Continue to monitor vital signs every 15 minutes.**
4. **Notify parent and refer for further medical evaluation as indicated**
5. **If episode is related to heat exposure, call 911.**



## DISORDER OF THE MUSCULOSKELETAL SYSTEM

### MUSCULOSKELETAL INJURIES/STRAIN/SPRAIN

A complaint of joint, muscle or bone pain may be due to an inflammatory process or related to a systemic disease unless recent documented injury or accident to affected part.

**Presentation:** Pain after injury, limp with pain, joint swelling, joint dysfunction, inability to stand, walk or bear weight on injured foot, ankle or knee. Obvious misalignment of limb or bones. Pain, tenderness and swelling of any injured part.

#### Clinic Assistant/LPN Tasks:

- Take vital signs T, P, R, and BP
- Obtain history: present injury – when, how, mechanism of injury, i.e. jumped for ball, came down on foot and rolled over to ankle, or direct blow from object (ball); previous musculoskeletal injury, medications used, recent illness.

#### Management:

##### SPRAINS/STRAINS

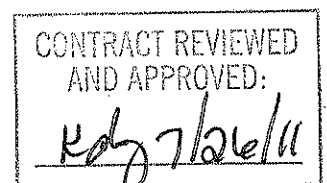
- Use ice pack and immobilize until evaluated.
- **RN:** Use nursing judgment to decide if parent can transport or needs 911.
  - a. Give Ibuprofen (1 – 2 tablets, depending on severity of pain and age/weight).
  - b. Instruct in signs and symptoms (numbness, tingling, parathesia, change in color) that would need immediate medical attention.

**Only if enrolled in Healthy Student Program & Approved by School Nurse in Elementary/Middle settings**

##### MUSCLE SPASMS

- RN:**
1. Give Ibuprofen (1-2 tablets or 1-2 Acetaminophen depending on severity of pain dose according to age/weight guidelines).
  2. May use Icy-Hot or other comparable ointment if student provides product.
  3. Refer to MD if no improvement in 12-24 hours, if pain is severe, or if motion is moderately limited.

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## DISORDERS OF THE IMMUNE SYSTEM

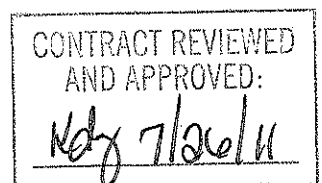
### ALLERGIC REACTIONS

**Presentation:** Allergic reactions may involve only the skin, or nose, eyes, lungs, and gastrointestinal tract alone or in combination. Be aware that an allergic reaction may rapidly progress to a life threatening anaphylactic reaction involving the entire respiratory tract, cardiovascular system, gastrointestinal system, and neurologic system. The speed of symptom onset and progression may reflect the severity of the anaphylactic reaction (see Anaphylaxis, page 36). Children with allergic reactions may have chronic symptoms as a result of regular exposure to an inciting trigger in their environment, or an acute episode of symptoms from an infrequent environmental exposure (e.g. yellow jacket sting). Chronic allergic symptoms may be seen in children with conditions such as asthma, allergic rhinitis, and eczema. Allergic triggers most commonly are: foods (egg, milk, wheat, peanuts, tree nuts, soy, shellfish, fish, strawberries), medications, insect stings (honeybee, yellow jacket, hornets, wasp, fire ants), contact/inhaled substances (latex, pollens, dust mites, molds, animal saliva, nettle plants, caterpillars). Typical presenting symptoms of allergic reactions are:

1. Urticaria (hives)-raised red lesions with pale centers that are intensely itchy, vary in size, may be large or small clusters anywhere on body, arise suddenly, last 1-2 hours or as long as 24 hours
2. Angioedema-deep dermis or subcutaneous tissue swelling, may persist longer than 24 hours, may become life threatening if swelling affects upper airway
3. Nasal congestion
4. Nasal itchiness
5. Clear watery nasal discharge
6. Throat clearing, coughing, sneezing
7. Wheezing
8. Abdominal pain and diarrhea or vomiting

#### Registered Nurse Assessment:

1. Rapid evaluation of airway, breathing, circulation, skin exam, mental status examination (note any signs of respiratory or cardiac compromise, e.g. swollen lips/tongue, wheezing, crackles in lungs, low blood pressure, abnormal heart rate)
2. Measure vital signs, repeat as indicated
3. Obtain history as to pre-existing allergy and nature of exposure- insect sting, exposure to allergenic substance, ingestion of food in the last 24 hours
4. Observe for any of presenting symptoms listed above
5. Observe for progressive worsening of symptoms such as increasing respiratory distress, increased wheezing, dropping blood pressure, decreasing level of consciousness



## ALLERGIC REACTIONS

### ALLERGIC REACTIONS (continued)

#### Management:

1. If symptoms are progressing rapidly and child is deteriorating consider that the child may be having an anaphylactic reaction. **Immediately call 911.** (see Anaphylaxis, p. 35)
2. May give Benadryl as follows:
  - a. Adults (over 12 years old) 25 mg.
  - b. Children (6 - 12 years) 25 mg. Or 1-2 tsp syrup (12.5/5mg)
  - c. Children (2 - 6 years) 1/2 tsp. syrup (12.5/5mg.)
3. Student may not drive following dose of Benadryl
4. Monitor student for response if Benadryl is given
5. Notify parent/guardian of student's allergic response at school and medical referral if indicated
6. Benadryl is only to be used for acute allergic reactions. Chronic allergic responses should be referred for medical evaluation and management.  
**Only if enrolled in Healthy Student Program & Approved by School Nurse in Elementary/Middle settings**



## DISORDERS OF THE IMMUNE SYSTEM

### ANAPHYLAXIS

**Presentation:** Anaphylaxis is an acute, potentially fatal systemic immune system reaction closely following exposure to a particular allergen such as a food, drug, or insect sting. The most frequent presenting symptoms of anaphylaxis are dermatologic signs including urticaria (hives) and/or angioedema (up to 90%), hypotension (72%), and symptoms of upper or lower respiratory tract obstruction (70%), or gastrointestinal hypermotility (30%). Anaphylaxis typically begins within 30 minutes of exposure to the causative agent. Fatal reactions are associated with irreversible shock or respiratory failure. The severity of an anaphylactic reaction is often proportional to the speed of symptom onset. Presenting symptoms include:

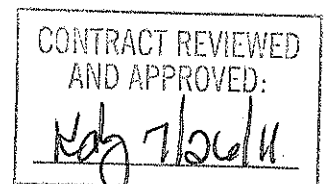
1. Urticaria (hives)
2. Angioedema-deep dermis or subcutaneous tissue swelling
3. Flushing and warmth
4. Nasal congestion/itchiness
5. Clear watery nasal discharge
6. Throat clearing, coughing, sneezing
7. Edema of the lips, tongue, pharynx
8. Hoarseness
9. Stridor
10. Wheezing
11. Dyspnea
12. Tachycardia and/or irregular heart beat
13. Hypotension
14. Shock
15. Dizziness
16. Syncope
17. Seizure
18. Abdominal pain and diarrhea and/or vomiting

#### **Clinic Assistant, LPN, and RN Tasks:**

1. Rapid evaluation of airway, breathing, circulation, level of consciousness
2. Take vital signs, repeat as indicated
3. If possible, obtain history as to pre-existing allergy and nature of exposure- insect sting, exposure to allergenic substance, ingestion of allergenic food in the last 24 hours
4. Observe for any of presenting symptoms listed above

#### **Management:**

1. Call 911 Emergency Medical Services for transport
2. Maintain airway
3. Administer Epipen if prescribed for specific student.  
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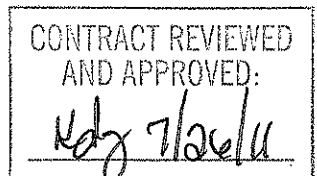


## DISORDERS OF THE IMMUNE SYSTEM

### ANAPHYLAXIS (continued)

#### Management (continued):

4. Follow orders on student specific Allergy Action Plan if available
5. Notify parents/guardian and advise them to notify current physician of reaction
6. Be aware that reaction can recur in 5 - 20% of patients with anaphylaxis with recurrence of symptoms 4-6 hours after the initial event; therefore these children must be monitored during this time period.
7. Document student reaction and nursing management provided in student medical record after student has left the facility.



## DISORDERS OF THE ENDOCRINE SYSTEM

### DIABETES

**Diabetes:** Group of metabolic diseases characterized by hyperglycemia from defects in insulin secretion, insulin action, or both.

1. **Diabetes Type I** (formally known as insulin dependent, IDDM or juvenile - onset) usually not enough insulin is produced to support normal daily function.
2. **Diabetes Type II** (formally know as non insulin dependent, NIDDM or adult onset) impaired insulin secretion and the inability of the cells to adequately use the available insulin.

**Presentation:** Students with know history of Diabetes should have a written plan of care or standing orders from their primary care provider on file. I. E. guide for evaluating blood sugars and the appropriate response. Student may come to the clinic complaining of headache, weakness, dizziness, lethargic, shakiness, anxious or problems with concentration.

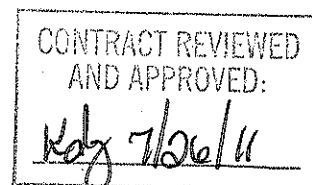
#### Clinic Assistant, LPN, and RN Tasks:

1. Take vitals (BP, P, R) and repeat as needed.
2. If properly trained, measure blood glucose with student's personal glucose monitor. (Students should have their own monitor, insulin and syringes)

#### Management:

- **Call 911 for students with decreasing level of consciousness or if student is found unconscious.**
- **Otherwise: Students with a plan of care or standing orders.**
  1. Refer to the student's plan of care or "standing orders" from their physician\*\*
  2. Notify parent/guardian for problems not covered by the above.
- **Students who comes to the clinic with no plan of care or standing orders and identifies themselves as a Diabetic**
  1. Notify the parent/guardian of the student's clinic visit and request "standing orders" to be utilized for that student while at school.
  2. Have parent pick up student if symptoms indicate need for immediate action.

**\*\*Standing orders should have guidelines for high and low blood sugars, insulin doses, and what to administer for low blood sugar. Each trauma bag has a tube of Insta-Glucose (24gms) for extremely low sugars. Utilize juice first if student's sugar is low (60) but they are not diaphoretic, unconscious or incoherent and BP is within normal range for that student. Recheck sugar in 15-20 minutes (provided there is no change in the students vital signs or level of consciousness).**



## DISORDERS OF THE THERMO REGULATORY SYSTEM

### FEVER

**Presentation:** Fever is usually defined as core body temperature greater than 100.0° F. Fever most commonly occurs when the immune system responds to the presence of viruses, bacteria, toxins or other foreign agents in the body. Through a pathogenic process the body's thermostat is readjusted upward and the process of heat production and conservation is initiated. Other causes include hypersensitivity to drugs, recent immunization with certain vaccines, vascular occlusive event such as pulmonary emboli, hemolytic episode such as sickle cell crisis, neoplasms, and central nervous system abnormalities. True fever is different than hyperthermia that may be due to increased metabolic heat, increased environmental temperature and environmental conditions. (see Heat Illness p. 40). Fever by itself is not an illness but a sign that the body is fighting an infection or reacting to a stimulus. Normal temperatures will vary according to time of day (lowest early morning, highest evening) and deviate with physical activity, ovulation, and environmental heat. Typical symptoms include malaise, fatigue, myalgias, and tachycardia (10-15 beats per 1° C. elevation). Central nervous system symptoms may range from mild changes in alertness to delirium. Children will have decreased activity, flushed checks, and hot dry skin. Children with cardiac disease or other chronic debilitating diseases, and infants and toddlers are at greater risk for developing dehydration with fever.

#### Clinic Assistant/LPN Tasks:

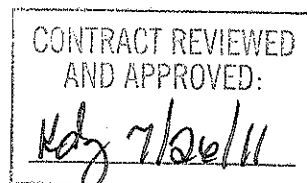
1. Measure temperature
2. Contact RN

#### Registered Nurse Assessment:

1. Inquire about associated symptoms such as anorexia, chills, headache, neck stiffness, URI symptoms, abdominal pain, vomiting, diarrhea, painful urination, swollen joints
2. Ask about hydration status- fluid intake/output
3. Explore possibilities of heat illness
4. Inquire about last dosage of antipyretic or any other self-treatment measures (eg. OTC combination cold meds)
5. Observe general appearance and behavior looking for signs of change in alertness and activity/playfulness
6. Observe skin for color, rashes, petechiae
7. Assess for signs of dehydration

#### Management:

1. Call parent/guardian for immediate pick-up and any special instructions for care until pick-up. Children with fever above 100.0 may not return to class. Children must be fever-free for 24 hours before returning to school.
2. Do not cover child with blanket, remove coat/sweater so child is dressed lightly
3. Encourage intake of cool, clear liquids such as water, cracked ice, carbonated drinks, and juices. If the child is not nauseated or complaining of stomach pains, give up to 4 ounces every 30 minutes.





## DISORDERS OF THE THERMO REGULATORY SYSTEM

### **FEVER** (continued)

#### **Management** (continued):

4. Sponge exposed skin (arms, legs, face, neck) with tepid water. This may be done continuously or until temperature starts dropping. Do not use alcohol or cold water.
5. Monitor temperature every 30-45 minutes
6. If unable to reach parents notify administration for assistance

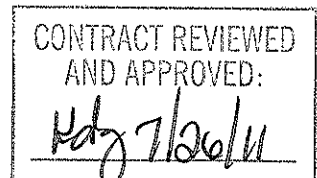
**RN:** Give the recommended dose of Tylenol for age

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**Call 911 for Emergency Medical Services if any of the following occurs with fever:**

- a. Seizures
- b. Difficulty breathing, blue/dusky color around face or lips
- c. Decreasing level of consciousness or unable to arouse
- d. Fever over 102° F. (oral) that does not decrease in 30 minutes using measures #2 - 5 above.

If 911 called, notify the school office. Continue trying to reach parents or emergency numbers. Have emergency card available when EMS arrives.



## DISORDERS OF THE THERMO REGULATORY SYSTEM

### HEAT ILLNESS

**Presentation:** The body gains heat through basal metabolism and from the surrounding environment. The body loses heat four ways: conduction, convection, evaporation, and radiation. Heat-related illness occurs when these thermoregulatory mechanisms are impaired or the heat generated by exertion and/or increased ambient temperature exceeds the amount of heat that can be lost. When ambient air temperature is greater than skin surface temperature evaporation of sweat is the only cooling mechanism, however, when humidity reaches 75% the surrounding air is so saturated that sweat can no longer evaporate. The body then has no means of heat loss. Most children will be seen with heat illness when both temperature and humidity are high. Heat illness spans a continuum from heat cramps, heat exhaustion, to heat stroke, which is a potentially fatal condition. Dehydration of greater than 3% of body weight substantially increases the risk of heat illness. Children are more likely than adults to suffer heat illness because of a greater ratio of body surface area to body mass than an adult, diminished sweat production, greater endogenous heat production, dependence on others to provide fluids, and failure to recognize their rehydration needs. Children who have had recent illness with vomiting or diarrhea, a previous heat illness event, or who have underlying medical conditions including cystic fibrosis, sickle cell disease, and diabetes have increased susceptibility to heat illness. Some drugs such as amphetamines and tricyclic antidepressants also increase susceptibility.

**Heat Cramps:** caused by excessive loss of bodily fluids and sodium from sweating

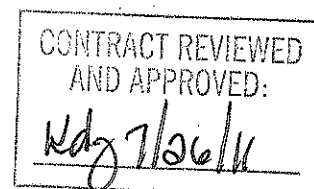
#### Signs & Symptoms

- Brief, severe muscle contractions (usually legs, shoulders, abdomen); occur in clusters
- Body temperature in normal range

**Heat Exhaustion:** caused by inadequate replacement of fluids

#### Signs & Symptoms

- Headache
- Weakness, dizziness
- Syncope
- Confusion/disorientation
- Profuse sweating
- Nausea
- Pale skin
- Cool, clammy skin
- Rapid weak pulse



## DISORDERS OF THE THERMO REGULATORY SYSTEM

### HEAT ILLNESSES (continued)

**Heat Stroke:** severe rise in body temperature caused by failure of the body's cooling mechanisms. THIS IS A LIFE THREATENING CONDITION

#### Signs & Symptoms

- Hot, dry, red skin
- Significant changes in mental status, possible loss of consciousness
- Tachycardia
- Shallow breathing
- Hypotension

#### Clinic Assistant, LPN, and RN Tasks:

1. For all students suspected of any level of heat illness, measure temperature, heart rate, blood pressure, and respirations.
2. Check for level of consciousness / orientation / responsiveness.
  - Assess skin-profuse sweating, cool, clammy, hot dry

#### Management:

##### Heat Cramps

- Give cold fluids and salty food such as crackers or pretzels,
- Stretch involved muscle
- Application of ice pack over cramping muscle,
- Keep in cool area

##### Heat Exhaustion

- Place student in cool area
- Remove excess clothing
- Elevate legs above head
- Monitor vital signs
- Place ice packs at axilla, groin, and neck
- If student is conscious offer fluids
- Notify parent/guardian

##### Heat Stroke

- Call 911 Emergency Medical Services & notify parent/guardian
- Place student in cool area
- Remove clothing, initiate cooling by spraying with water & blow air over child with fans
- Place ice packs at axilla, groin, and neck
- Monitor vital signs



**PASCO COUNTY PUBLIC SCHOOLS  
HEALTHY STUDENT PROGRAM**

**TIPS FOR PREVENTION OF HEAT ILLNESS**

- Reduce the intensity of activities that last longer than 15 minutes when air temperature and humidity are high.
- Drink plenty of fluids before exercising or participating in a sporting event, about 2 cups (16 oz.) two hours before the event and another cup (8 oz.) 20 minutes before the event.
- Drink periodically (about every 20 minutes) during exercise. If exercise lasts longer than an hour, drink fluids containing glucose and electrolytes, such as sports drinks (ideal carbohydrate concentration should be 6-8%).
- Do not drink: Fruit juices, carbohydrate gels, sodas or sports drinks that have carbohydrate levels above 8%, or beverages containing caffeine, alcohol, or carbonated water.
- Weigh in before and after an athletic workout or event and replace any weight loss with fluid over the next two hours.
- Wear lightweight, light colored clothing; change out of sweat-saturated garments into dry clothes.
- Be aware of the warning signs of heat illness. If you or another student/teammate experience nausea, headache, dizziness, stumbling, or any change in mental status, such as confusion, stop exercise immediately! Seek a cool environment and drink cold fluids. Inform an adult coach, teacher, or parent right away.

Signs your body is adequately hydrated:

- Your body weight is within 2% from previous exercise session.
- Light yellow urine (dark yellow or orange urine indicates dehydration)
- Thirst is satisfied. Remember by the time you are thirsty you are already dehydrated.



## BLOOD PRESSURE REFERENCE SHEET

**Blood Pressure** is a peripheral measurement of cardiovascular function. By using a stethoscope and a sphygmomanometer we can get an indirect measure of blood pressure.

Cuffs are available in a variety of sizes: the appropriate size is determined by the size of the child's limb.

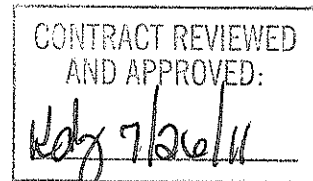
- a. For an adolescent or large child choose a cuff that is one third to one half the circumference of the limb.
- b. For a child the cuff width should be two thirds of the upper arm or thigh.

**Caution:** Cuffs that are too wide will give a false low BP, and those that are too narrow will give a false high measurement.

<u>AGE</u>	<u>SYSTOLIC BP</u>	<u>DIASTOLIC BP</u>
1- 2 years	80 - 100	34 - 44
3 - 6 years	86 - 125	44 - 84
7 - 9 years	92 - 129	55 - 89
10 - 13 years	97 - 112	61 - 63
14 - 15 years	109 - 134	63 - 64
16 - 17 years	111 - 136	66 - 70
18 - Adults		
• Normal	<120	<80
• Pre-hypertensive	120 - 139	80 - 89
• Stage 1	140 - 159	90 - 99
• Stage 2	160 or >	100 or >

The above values are based on the recommendations from the National High Blood Pressure Education Program Committee. (Values are the 50<sup>th</sup> percentile averages)

If Diabetes present then acceptable values are lower, i.e. Adults <130 / <84



**HEALTHY STUDENT PROGRAM  
STANDING ORDERS  
Elementary, Middle, High Schools and Exceptional Student Programs**

**RECOMMENDED PEDIATRIC DOSING FOR IBUPROFEN**

<u>AGE</u>	<u>WEIGHT</u>	<u>SUSPENSION 100 MG/5ML</u>	<u>TABLETS 200 MG</u>
2 - 3 YRS	24 - 35 LBS	1 TSP (5 ML)	-----
4 - 5 YRS	36 - 47 LBS	1 TSP (7.5 ML)	-----
6 - 8 YRS	48 - 59 LBS	2 TSP (10 ML)	1 TABLET
9 - 10 YRS	60 - 71 LBS	2 TSP (12.5 ML)	1 TABLET
11 YRS	72 - 95 LBS	3 TSP (15 ML)	1 TABLET
>12 YRS	>96 LBS	4 TSP (20 ML)	2 TABLETS

**Caution:** When calculating dosage for students consider weight and medical condition as well as above guidelines.

**NOT RECOMMEND FOR < 6 MO**

12 - 17 LBS	½ TSP (2.5 ML)
18 - 23 LBS	¾ TSP (3.25 ML)

For greater than 24 lbs., use above dosing for weight but not to exceed recommended for age. (i.e., a 10-year-old weighing 100 lbs will still only get 12.5 ml or 1 tablet. However a 12-year-old weighing 50 lbs will only get 2 tsp or 1 tablet.

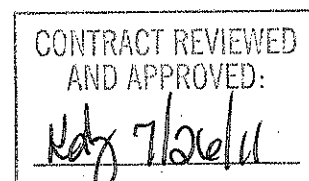
One dose of Acetaminophen or Ibuprofen may be given to a student for complaint of headache, fever, etc. with verbal parent permission.

**\*\*This may only be administered one time per school year without written, signed application form.**

**CONTRAINDICATIONS FOR IBUPROFEN:**

- A. Student has history of aspirin allergy or intolerance.
- B. History of gastric disorders such as ulcers and hyperacidity.
- C. History of bleeding disorders.

**If dose is needed for a persistent complaint more than 3 times in a 30-day period call parent and refer to primary care provider for evaluation.**



**HEALTHY STUDENT PROGRAM  
STANDING ORDERS  
Elementary, Middle, High Schools and Exceptional Student Programs**

**RECOMMENDED PEDIATRIC DOSING FOR ACETAMINOPHEN**

AGE	WT	INFANT DROPS (80MG/0.8ML)	ELIXIR 160 MG/5ML	CHEWABLE TABS 80MG	TABLETS 325MG
0-3 MOs	6-11 LBS	½ DPPR 0.4 ML			
4-11 MOs	12-17 LBS	1 DPPR 0.8 ML	½ TSP (2.5 ML)		
12-23 MOs	18-23 LBS	1-1/2 DPPR 1.2 ML	¾ TSP (3.75 ML)		
2-3 YEARS	24-35 LBS	2 DPPR 1.6 ML	1 TSP (5ML)	2 TABS	
4-5 YEARS	36-47 LBS		1-1/2 TSP (7.5 ML)	3 TABS	
6-8 YEARS	48-59 LBS		2 TSP (10 ML)	4 TABS	1 TAB
9-10 YEARS	60-71 LBS		2 ½ TSP (12.5 ML)	5 TABS	1 TAB
11 YEARS	72-95 LBS		3 TSP (15 ML)	6 TABS	1 ½ TABS
>12 YEARS	>95 LBS		4 TSP (20 ML)	8 TABS	2 TABS

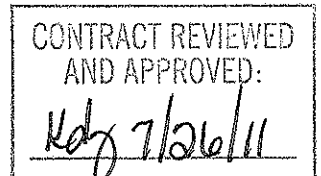
**Caution:** When calculating dosage for students consider weight and medical condition as well as above guidelines.

**RECOMMENDATION DOSING BY WEIGHT**

Dosing for every 4 hours not to exceed 5 doses in 24 hours:

6 - 11 LBS	40 MG	36 - 47 LBS	240 MG
12 - 17 LBS	80 MG	48 - 59 LBS	320 MG
18 - 23 LBS	120 MG	60 - 71 LBS	400 MG
24 - 35 LBS	160 MG	72 - 95 LBS	480 MG
		>96 LBS	640 MG

**DOSING FOR WEIGHT BUT NOT TO EXCEED RECOMMENDED FOR AGE.** (i.e. a 10 year old weighing 100 lbs. will still only get 400 MG. However a 12 year old weighing 50 lbs. will only get 320 MG NOT 640 MG.)



**RECOMMENDED PEDIATRIC DOSING FOR ACETAMINOPHEN (continued)**

**CONTRAINDICATIONS FOR ACETAMINOPHEN**

- A. Caution against frequent use if anemia or renal disease present.
- B. Do not give to children who have a breathing problem such as chronic bronchitis, or who have glaucoma, heart disease, high blood pressure, thyroid disease, or diabetes, without physician consultation.
- C. Do not give this product to a child who is taking a prescription MAOI.
- D. Over dosage can cause liver damage- refer to Poison Control, ER or MD immediately.
- E. Excessive use with alcohol can cause liver damage.
- F. **Be sure to check with parent to make sure this student is NOT taking any other OTC medications containing acetaminophen (Tylenol) prior to administration of dosage. If so, consult with school nurse for guidance.**

**If dose is needed for a persistent complaint more than 3 times in a 30-day period call parent and refer to primary care provider for evaluation.**





## GLASGOW COMA SCALE

Level of consciousness can be evaluated and quantified when the patient (student) has an acute brain/head injury.

<u>ASSESSED BEHAVIORS</u>	<u>CRITERIA FOR SCORING</u>	<u>SCORES</u>
Eyes opening (E)	Spontaneous opening	4
	To verbal stimuli	3
	To Pain	2
	None	1
Verbal Response (V)	Normal conversation	5
	Disoriented conversation	4
	Words, but not coherent	3
	No words, just sounds	2
	None	1
Motor Response (M)	Normal	6
	Localizes to pain	5
	Withdraws to pain	4
	Decorticate posture	3
	Decerebrate posture	2
	None	1

Add the numbers from each category.

**Student with less than 14 should be referred for medical evaluation.**

The Glasgow Coma Scale is the most widely used scoring system used in quantifying level of consciousness following traumatic brain injury. It is used primarily because it is simple, has a relatively high degree of inter-observer reliability and because it correlates well with outcome following severe brain injury.

It is easy to use, particularly if a form is used with a table similar to the one above. One determines the best eye opening response, the best verbal response, and the best motor response. The score represents the sum of the numeric scores of each of the categories.



Dear Parent/Guardian,

The main purpose of the **Healthy Student Program** is to improve **school attendance** and to **reduce health problems** that occur during the school day. **Healthy Student Program** services are offered at no direct cost to you and all students are eligible. The program is the commitment of the District, which believes a child who feels well learns better. A student may be withdrawn from the **Healthy Student Program** at any time by the parent or the school health services staff with written notice.

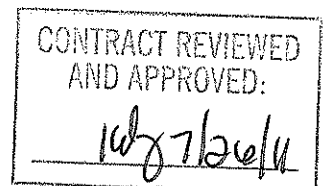
Your child \_\_\_\_\_  
will be withdrawn from the Healthy Student Program as of today  
\_\_\_\_\_, due to the following:

- Poor Attendance
- Non-compliance (refusal to follow suggested protocols)
- As per our phone conversation
- Other:

If you have any questions, please contact the school nurse.

---

School Nurse



**APPLICATION FOR HEALTHY STUDENT PROGRAM MEMBERSHIP 2011 - 2012**

Student Name \_\_\_\_\_ Sex \_\_\_\_\_ Grade \_\_\_\_\_ DOB \_\_\_\_\_  
 (Last, First, MI)

Student ID: \_\_\_\_\_ Home Address \_\_\_\_\_ Home Phone \_\_\_\_\_

PERSON TO BE CONTACTED IN CASE OF EMERGENCY:

Parent Name	Place of Business	Business Phone	
Backup Person to be Called		Home Phone #	Cell Phone #

**STUDENT MEDICAL HISTORY**

List any ALLERGIES to Medications or Food \_\_\_\_\_

List any MEDICATIONS student is presently taking \_\_\_\_\_

List any SURGERY/HOSPITALIZATION student has had \_\_\_\_\_

CURRENTLY, DOES THIS STUDENT HAVE ANY MEDICAL / HEALTH PROBLEMS THAT WE SHOULD BE AWARE OF? \_\_\_\_\_

Family Medical History: (Circle all that apply and indicate which family members have or have had the condition)

High Blood Pressure \_\_\_\_\_ Tuberculosis \_\_\_\_\_ Diabetes \_\_\_\_\_  
 Epilepsy \_\_\_\_\_ Sickle Cell \_\_\_\_\_ Cancer \_\_\_\_\_  
 Heart Problems \_\_\_\_\_ Asthma \_\_\_\_\_ Arthritis \_\_\_\_\_

Name of Family Physician \_\_\_\_\_ Phone \_\_\_\_\_

Name of Family Dentist \_\_\_\_\_ Phone \_\_\_\_\_

Date of Student's Last Physical Exam \_\_\_\_\_ Dental Exam \_\_\_\_\_

Is student Medicaid eligible? YES _____ NO _____ Medicaid # _____
---

**ENROLLMENT STATEMENT**

We agree to enroll \_\_\_\_\_ in the Healthy Student Program. We understand that the program offers a limited range of MEDICAL & NUTRITIONAL COUNSELING services on an as-needed basis. We further understand that these services DO NOT REPLACE the services of our family doctor. In case of accident or serious illness, the school policies outlined on the School's Emergency Information Card will be observed. We further understand that student information is confidential except in those instances when professionals are required by law to report Child Abuse, Death Threats, Suicide Risk, and public health concerns.

Parent/Guardian Signature \_\_\_\_\_ Date \_\_\_\_\_

CONTRACT REVIEWED AND APPROVED: 
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## HEALTHY STUDENT PROGRAM APPLICATION FORM 2011-2012

Dear Parent:

Your child is eligible for enrollment in the **Healthy Student Program**, available only at *selected schools* in the District where there are extended nursing services.

The main purpose of the **Healthy Student Program** is to **improve school attendance** and to **reduce health problems** that occur during the school day. **Healthy Student Program** services are offered at no direct cost to you and all students are eligible. A student may be withdrawn from the **Healthy Student Program** at any time by the parent or the school health services staff with written notice.

The Healthy Student program is the commitment of the Pasco County School District, and is intended as an effort to help students remain in school, ready to learn. Services available to students enrolled in the **Healthy Student Program** may include:

- **Management of acute illness or injury and the administration of limited medications**, following physician guidelines and protocols (i.e. Tylenol, Motrin, Robitussin, Tums, antifungal and antibiotic ointment, Benadryl, hydrocortisone, etc.).
- **Observation and follow up re: communicable diseases** (i.e. pink eye, ringworm, etc.).
- **A health professional will communicate with you** about your child's particular health findings that may require an evaluation, follow up or referral.
- **Physical Examinations** (ARNP services) for school entry, sports, etc. may be available at limited school sites.
- **Lab screenings** (hematocrit/hemoglobin, anemia, blood sugar, urinalysis, rapid Strep A test, and pregnancy testing in the high schools) may be available at limited school sites.

Please inform the school nurse of any newly diagnosed health conditions for your child or changes in health status during the school year.

**The primary goal of school health services is to support academic success by maintaining the physical and mental well being of your child.**

### TO ENROLL YOUR CHILD IN THE HEALTHY STUDENT PROGRAM:

- Please complete the application for Healthy Student Program Membership
- Be sure to complete "Student Medical History" section
- Parent signature is required below the "Enrollment Statement"
- Return completed form to the school clinic assistant or school nurse

*All medical information remains confidential between you and the health services provider. Records are stored and maintained within the Health Office and are shared with no one as per HIPAA compliance. The Medical Director of the Pasco County Health Department provides oversight for this program.*

05/11

CONTRACT REVIEWED  
AND APPROVED:  
*Rdy 7/26/11*

**Elementary Schools**

Anclote Elementary  
Calusa Elementary  
Centennial Elementary  
Chasco Elementary  
Connerton Elementary  
Cotee River Elementary  
R. B. Cox Elementary  
Cypress Elementary  
Deer Park Elementary  
Denham Oaks Elementary  
Double Branch Elementary  
Fox Hollow Elementary  
Dr. Mary Giella Elementary  
Gulf Highlands Elementary  
Gulfside Elementary  
Gulf Trace Elementary  
Hudson Elementary  
Lacoochee Elementary  
Lake Myrtle Elementary  
Mitty P. Locke Elementary  
Longleaf Elementary  
James M. Marlowe Elementary  
Moon Lake Elementary  
New River Elementary  
Northwest Elementary  
Oakstead Elementary  
Odessa Elementary  
Pasco Elementary  
Pine View Elementary  
Quail Hollow Elementary  
Richey Elementary  
San Antonio Elementary  
Sand Pine Elementary  
Schrader Elementary  
Seven Oaks Elementary  
Seven Springs Elementary  
Shady Hills Elementary  
Sunray Elementary  
Chester W. Taylor Elementary  
Trinity Elementary  
Trinity oaks Elementary  
Veterans Elementary  
Watergrass Elementary  
Wesley Chapel Elementary  
West Zephyrhills Elementary  
Woodland Elementary

**School Nurse**

Jeanne Hoidalén  
Laura Hauser  
Karen Ray  
Kathy Giarratano  
Barbara Early  
TBA  
Kathy Browning  
Antoinette Beneduci  
Jeanne Hoidalén  
Donna Johnson  
Ira Kittling  
Antoinette Beneduci  
Michele Lennon  
Laura Hauser  
Jeanne Hoidalén  
TBA  
Michele Lennon  
Patty Barthle  
Cindy Stephens  
Lynn Goettel  
Kathy Giarratano  
Melanie Hagerty  
Kristina Tenney  
Lyn Herbert  
TBA  
Lyn Herbert  
Mary Davis  
Lindsey Harrie  
Casey Viera  
Debbie Dee  
Melanie Hagerty  
Karen Ray  
Lyn Herbert  
Antoinette Beneduci  
Barbara Early  
Kathy Giarratano  
Michele Lennon  
Melanie Hagerty  
Shae Burgess  
TBA  
TBA  
Debbie Dee  
Karen Perry  
Debbie Dee  
Kathy Browning  
Lindsey Harrie

CONTRACT REVIEWED  
AND APPROVED:  
*Rdy 7/26/11*

**Middle Schools**

Bayonet Point Middle  
Centennial Middle  
Chasco Middle  
Crews Lake Middle  
Gulf Middle  
Hudson Middle  
Dr. John Long Middle  
Pasco Middle  
Pine View Middle  
River Ridge Middle  
Charles S. Rushe Middle  
Seven Springs Middle  
Paul R. Smith Middle  
R. B. Stewart Middle  
T. E. Weightman Middle

**School Nurse**

TBA  
Diane Plumley  
Laura Hauser  
TBA  
TBA  
Debbie Triglia  
Karen Perry  
Karen Summerhays  
Donna Johnson  
Arlene Meyer  
Kelley Huelle  
TBA  
Andi Spinale  
Mary Jane Waldron  
Diane Plumley

**High Schools**

Anclote High  
Fivay High  
Gulf High  
Hudson High  
Land O'Lakes High  
J. W. Mitchell High  
Pasco High  
Ridgewood High  
River Ridge High  
Sunlake High  
Wesley Chapel High  
Wiregrass Ranch High  
Zephyrhills High

**School Nurse**

Andi Spinale  
Kristina Tenney  
Lynn Goettel  
Debbie Triglia  
Cindy Stephens  
Mary Davis  
Margaret Polk  
Susan Sawyer  
Arlene Meyer  
Kelley Huelle  
Shae Burgess  
Ira Kittling  
Mary Jane Waldron

**Alternative / Technical Schools**

James Irvin Education Center  
F. K. Marchman Technical Education Center  
Moore-Mickens Education Center  
Harry Schwettman Education Center

**School Nurse**

Karen Summerhays  
TBA  
Margaret Polk  
Susan Sawyer

**Charter Schools**

Academy At The Farm  
Athenian Academy  
Countryside Montessori  
Dayspring Academy  
Imagine School at Land O'Lakes

**School Nurse**

Diane Plumley  
Susan Sawyer  
Barbara Early  
Mary Davis  
Donna Johnson

CONTRACT REVIEWED  
AND APPROVED:  
*Katy* 7/26/11