ALGER PEDIATRICS

Handbook of Illness and Injuries

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INTRODUCTION

Dear parents/guardians,

We at Alger Pediatrics are pleased to be entrusted with the care of your children. As nurses and physicians, we wish to assist you in maintaining the wellness of your family through regular well visits and immunizations. However, illnesses and mishaps are inevitable. You will readily manage most of these events in the home setting. We have developed this booklet to help you with these problems. When an event occurs, we ask that you refer to this booklet. If this information does not suffice, we are more than happy to augment this information when you call the office. Most problems can be taken care of during office hours. In the evenings and on weekends, we have an on-call service that is provided free of charge. We ask that you use this service only when necessary, but encourage you to use it when you are substantially worried. Calling in prescriptions should occur during office hours.

In life-threatening situations, please use DeVos Children's Hospital ER at Corewell Health downtown.

Abdomen (Gastrointestinal)

ABDOMINAL PAIN

There are many causes of abdominal pain. Two common causes are diarrheal illnesses and constipation (refer to those sections of this handbook).

WHEN TO CALL:

- Your child has bloody stools or bloody urine.
- Your child appears quite ill.
- Your child is unable to walk, or doubles over with pain when asked to walk.
- Your child has pain that moves from the belly button to the lower abdomen on the right or left side.
- Your child has pain in the testicles.
- Your child has a bulge in the groin area.
- Your child is unable to urinate, or has painful or frequent urination.
- Your child has had a recent injury to the abdomen, followed by vomiting or persistent pain.
- Your child's abdomen is very tender to touch.

There are no specific medications for abdominal pain. Medications like antacids and histamine blockers (Zantac, Tagamet, and Pepcid AC) are safe to try in older children if they do not appear to be otherwise ill.

CONSTIPATION

Constipation refers to stools that are hard and difficult to pass. Infants very commonly will not have daily stools, particularly if they are breast-fed. This is not constipation, as long as the stools are soft. However, if an infant seems uncomfortable, rectal stimulation with a lubricated thermometer or Q-tip, or an infant glycerin suppository

may be helpful. Grunting does not necessarily mean that an infant is constipated, either, as long as the resulting stool remains soft.

If an infant has very hard stools, initial treatment might consist of prune juice (1/2 – 2 ounces daily), or strained prunes. These can also be helpful for older children. In toddlers or older children, a Fleets enema can be helpful for expelling very large, hard stools. In these older children, an over-the-counter laxative, such as Miralax, can be used for occasional constipation. Additionally, dietary changes including increased fiber can be helpful to prevent constipation.

If your infant or child has ongoing problems with constipation, call the office to schedule an appointment to discuss this. If a child of any age appears ill, has fever or pain with urination, or is vomiting, these symptoms are not related to constipation, and an alternative explanation should be considered.

DIARRHEA

Most diarrhea-associated illnesses are caused by infections. Most commonly, episodic diarrhea is caused by viruses for which there is no specific treatment. Viral diarrhea may last only a few days, but it is not uncommon for loose stools to continue for 1-2 weeks, although with decreasing frequency.

Less often, bacteria (Salmonella, Shigella, Campylobacter, and others) can cause diarrhea. With bacterial infections, the diarrhea is more likely to be bloody, and the child appears to be more ill. Bloody diarrhea is always a reason to contact our office immediately. Mild diarrhea lasting for more than ten days may be caused by a parasite, which may require anti-parasitic medication.

Anti-diarrheal medications are generally not helpful, and are not routinely recommended. When your child has frequent loose stools, he/she may need to increase fluid intake to replace the water lost in the stool. If your child is also vomiting, offer Pedialyte. If your child

only has diarrhea, he/she can consume a usual diet, with increased fluids, excluding 100% fruit juice.

PINWORMS

Pinworms are white, thin worms that are about ¼ inch long that can live in people's intestines. They are the most common form of worm infection in the U.S. They are usually seen in the anus especially at night or in the early morning when the female worms come out to lay eggs. Occasionally, the worm may be found on the surface of a bowel movement. They cause considerable itching of the anal area, and can cause trouble sleeping. Some people with a severe case may also have stomach pain, nausea and vomiting.

Pinworm infection is caused by swallowing pinworm eggs. No matter how clean you are, your child can still get pinworms. Kids scratch itchy bottoms and touch other things. Ten percent of us carry pinworms without symptoms.

WHAT TO DO:

If your child complains an itchy bottom especially at night, check for pinworms. Examine the area around the anus with a flashlight. Do this a few hours after your child goes to bed or first thing in the morning. If your child has been in recent contact with a child with pinworms but has no symptoms, wait for about a month.

Over the counter pinworm remedies are now available. The people who live with you will usually be treated too since pinworms spread easily between people in the same home.

The following will help to prevent pinworms:

- Have your child wash their hands before eating and after using the toilet.
- Vacuum or wet mop your child's room once per week because any eggs scattered on the floor are infectious for 1-2 weeks.
- Machine wash your child's bedding or clothing at regular temperature to kill any eggs present.

WHEN TO CALL:

During office hours:

- If the skin around the anus becomes red or painful (may be due to streptococcus bacteria or eczema, and not pinworms).
- The anal itching is not resolved within 1 week after treatment.

Immediately if:

- Pinworms are not a medical emergency. Please call with concerns only during office hours.

VOMITING

When vomiting is very frequent, it is best to allow the stomach to rest for a few hours. At any age, the best rehydrating fluid is an oral rehydration solution like Pedialyte. Other liquids, like Gatorade or Kool-Aid, do not contain adequate salts, and are not generally recommended.

Start with small volumes of liquid (1 teaspoon – 1 ounce) every 10-15 minutes. If your child tolerated this amount, you may gradually increase the amount given.

A dehydrated child will not refuse Pedialyte. If your child refuses it because of taste, they are generally not very dehydrated; a dehydrated child is thirsty, and will drink what is offered.
Once vomiting has resolved, bland solids (soups, toast, dry cereal, and crackers) can be introduced within 12-18 hours.

Call the office if your child appears to be significantly dehydrated. Signs of dehydration include dry mouth, absence of tears, and failure to urinate at least a few times in 24 hrs. Very young children are at higher risk of dehydration than are school-age children or teens; it is unusual for an older child to become dehydrated in these typically brief illnesses.

Allergies

Allergy symptoms include: stuffy or itchy nose, or itchy eyes. Allergies may be caused by reactions to pollens, dust, molds, pets, and sometimes foods.

WHAT TO DO:

Allergy medicines should relieve symptoms of the allergy. Sometimes it is necessary to try several medicines to find one that will work. Good over the counter allergy medicines include: Claritin (loratidine), Allegra, Zyrtec, Xyzal, or Flonase. The main side effect of these medications, especially Benadryl, is drowsiness. Prescription medications include oral medications, nose sprays, and eye drops.

WHEN TO CALL:

During office hours if:

- The treatments listed above don't help.
- You have questions or concerns.

Note: Anaphylaxis- if your child has difficulty breathing, swelling of the mouth or throat with a new quick onset of hives, call 911 (or use your prescribed EpiPen if you have one).

Additional Information:

- Eye allergies: If your child has itchy watery eyes, wash the face and eyelids with a damp washcloth. Eye drops such as Visine can help soothe the itching. Prescription eye drops are also available. Zaditor is a good over-the-counter allergy eye drop.
- Pollen allergies commonly occur in the spring, summer and fall. Staying indoors on windy days may help.

- Dust and animal dander allergies are more common when the house is closed up.
- Mold allergies occur during damp periods or in locations where it is damp (many basements).
- Call during office hours for additional information on prevention and treatment of allergies.

Bites and Stings

ANIMAL BITES

Wash the wound vigorously with the soap and water and remove any debris. Most bite wounds are left open to decrease the risk of infection, yet facial wounds are often sutured to avoid scarring. Oral antibiotics are often prescribed for animal bite wounds, especially cat bites or other deep puncture wounds.

BEE STINGS

Most unprovoked stings are caused by yellow jackets. These stings cause immediate painful red swelling. Although the pain usually resolves in 2-3 hours, the swelling may increase for up to 24 hrs. Sometimes the swelling can be quite extensive, but this does not mean that your child is at risk for a serious or life-threatening allergic reaction. Multiple stings (usually more than 10) can cause vomiting, headache, or fever. A sting inside the mouth or on the tongue can cause swelling that can interfere with breathing.

WHAT TO DO:

- If a honeybee stung your child, you may see a small black stinger in the bite. Remove it by scraping it off.
- Apply ice to reduce the swelling. Use Benadryl and topical hydrocortisone to limit swelling.
- Give your child Motrin (ibuprofen) or Tylenol (acetaminophen) for pain.

WHEN TO CALL:

During office hours if:

- The swelling continues to spread after 24 hours.
- You have other questions or concerns.

Immediately if:

- Breathing or swallowing is difficult.
- Extensive hives are present.
- There are 10 or more stings.
- A sting occurs in the mouth.

INSECT BITES

Bites from mosquitoes and other biting insects can cause itchy, red bumps, which can vary in size from a small dot to more than 2 inches. Mosquito bites near the eye may cause large swelling. Some children tend to have larger reactions to insect bites; this does not mean that they are allergic to them. Large reactions are very common in late spring with the first bites of the year.

Insect bites can be treated with an ice cube or 1% hydrocortisone cream. Benadryl (given by mouth) will help decrease the itching, but may make your child feel sleepy. Zyrtec or Claritin may also be used.

Many insect bites can be prevented by applying insect repellant sparingly to clothing and exposed skin. DEET-containing insect repellants can be toxic, especially if swallowed. Avoid use on hands, especially in small children who may put their hands in their mouths. Avoid use on sunburned skin, which absorbs DEET more readily than intact skin. Wash the repellant from the skin when your child comes indoors.

WHEN TO CALL:

During office hours if:

- Bites are infected (red, pus, streaking).
- Any other concerns.

Immediately if:

- Insect bites are not a medical emergency. Please call with concerns only during office hours.

TICK BITES

A tick is a small brown insect that attaches to the skin and sucks blood for 3-6 days. The bite is painless and doesn't itch. The wood tick (dog tick) is up to ½ inch in size, and harmless. The deer tick, which transmits Lyme disease, is the size of a pinhead. Deer ticks are much less common in Michigan than wood ticks.

The simplest way to remove a tick is to pull it off. Use a tweezers to gently but firmly grasp the tick at the head as close to the skin as possible. Apply steady upward traction until the tick releases its grip. Do not twist the tick or jerk suddenly because this may cause its head to break off. Do not squeeze the tick hard enough to crush it, as this may cause it to release germs into the skin. Tiny ticks can be scraped off with the edge of a credit card. After removal, wash the wound and your hand with soapy water.

If you will be hiking in tick-infested areas, you and your children should wear long pants and tuck the ends of the pants into the socks. Apply insect repellant to the socks and shoes. At least once daily, inspect the skin for ticks. Removing ticks promptly prevents the transmission of Lyme disease, which only occurs after the tick has been attached for 18-24 hours.

If a rash develops at the site, your child needs to be seen.

Ear Infections

- An **outer ear infection** ("Swimmer's Ear") is caused by irritation of the skin inside the ear canal, often caused by moisture from swimming or bathing. Symptoms include ear pain worse with movement of the outside of the ear. These children rarely have cold symptoms or fever. Call during office hours to be evaluated. Treatment includes keeping the ears dry for seven days and using antibiotic ear drops.

- An **inner ear infection** is caused by bacteria and fluid in the middle ear space, behind the eardrum. It has nothing to do with exposure to cold air or submerging in water. Middle ear infections are very common in babies and young children. Ear pain often follows a cold, which causes a dysfunction of the Eustachian tube. The Eustachian tube is a small tube that connects the middle ear to the back of the throat to equalize air pressure and drain fluid from the middle ear space. This tube is short and more horizontal in young children, allowing fluid and bacteria to build in the middle ear space.

Signs of an inner ear infection may include the following: ear pain, fever (not always), irritability (increased when lying flat), night waking, refusal to nurse on one side, crying or pulling away from the breast or bottle, dizziness, popping or plugged sensation, diminished hearing.

WHAT TO DO:

Treat pain with Tylenol or Motrin. Warm sweet oil or olive oil dropped in the ear canal may provide comfort. Warmth to the ear is often soothing. Hold the child upright, or have a child sleep in a car seat. (The pain of a middle ear infection throbs more when a child is lying flat.)

WHEN TO CALL:

- If your child is younger than 2 months of age and has a fever 100.5F degrees or higher, call the office or the on call doctor.
- If your child is younger than six months of age, call the office during office hours for an appointment.
- If your child is six months of age or older, treat their pain for 48 hours. *If symptoms have not improved after 48 hours*, then call the office during office hours to schedule a visit. The majority of children six months of age or older are able to fight off an ear infection on their own, thereby avoiding antibiotics.
- If your child develops a stiff neck or severe headache or acts very sick despite Tylenol or Motrin, call.

Note: It is important to diagnose and document ear infections. Doctors will not call in antibiotics over the phone for presumed ear infections.

Complications:

Some children have so much infected fluid buildup behind the ear drum that the ear drum will burst. These children usually feel much better as the pressure is relieved. You may note mucous-like discharge draining from the ear. If drainage occurs, do not put oil in the ear. Call our office during office hours to get a prescription for antibiotic drops for the ear. If a child perforates an eardrum, it usually heals on its own without issues. We always re-check these ears 4-6 weeks after the ear infection.

Treatment:

- Antibiotics kill bacteria that cause inflammation in the middle ear. If your child's symptoms have not improved 48 hours after starting antibiotics, call during office hours. The bacteria may be resistant to the antibiotics, and we may need to switch medicine.
- It is normal to have fluid remain in the middle ears for 4-6 weeks following an infection. Children may have decreased hearing, muffled speech, or complain of popping noises. If these symptoms persist longer than six weeks, please call during office hours. Fluid in the ears does not cause pain and would not wake children from sleep.

Prevention:
In addition to simply being young, several factors place children at higher risk for ear infections:

- Protect your child from tobacco smoke. Never smoke in the house or car. Secondhand smoke has been linked to increased frequency of middle ear infections.
- Day care centers often expose children to more upper respiratory infections, leading to more ear infections.
- Breastfeed your baby during the first 6-12 months of age. Breastfed babies have a lower incidence of ear infections.
- Avoid bottle propping. Feeding in the horizontal position can cause a backflow of formula and other secretions into the Eustachian tube.

Fever

Fever is the body's normal response to various illnesses (usually infections). Temperatures 100.5F or above are considered fevers. When reporting fevers, be able to tell the nurse how many *hours* your child has had a fever, and report it as measured, do not add or subtract degrees. We recommend a cheap digital thermometer as the most accurate and consistent means to check core body temperature.

How to take a temperature:
The most accurate temperature for all infants (under 3 months old) is a rectal temperature. Ear thermometers are not recommended for infants less than 12 months.

- **Taking a rectal temperature:** You may lubricate the end of a digital thermometer. Place about a half inch into rectum until thermometer keeps.
- **Taking an oral temperature:** This method should only be used if your child can hold the thermometer in the mouth with the mouth closed. Be sure that your child has not recently had anything hot or cold to drink. Place the thermometer tip under the tongue and close the mouth.
- **Taking an axillary temperature (armpit):** Place the tip of the thermometer in the armpit, and close the armpit by holding the elbow against the chest.

WHEN TO CALL:

During office hours if:

- Your child has a fever *and* burning or pain with urination.
- Your child has a fever lasting more than 72 hours.
- You have further questions.

Immediately if:

- Your child has a fever of 100.5F or more ***and*** your child is less than 2 months of age (unless your baby has had shots in the previous 48hrs).
- Your child has a fever over 100.5F and is crying inconsolably despite pain medication (for children over 2 months of age).
- Your child is difficult to awaken.
- Your child is confused or delirious.
- Your child has had a seizure.
- Your child has a rash of purple spots that look like bruises.
- Your child has a stiff neck and has a fever. They should not have pain at the back of their neck when stretching chin to chest.
- Your child has a fever and is anxious and drooling because he cannot swallow. This does not apply to drooling babies.
- Your child has a fever and additional risk factors such as: sickle cell anemia, cancer, asplenia, or immune deficiency.
- Your child has a fever and has bloody diarrhea.

Additional Information:

- The object of treating children when they have a fever is to try to make them comfortable. The fever itself does *no* harm. Dress the child in a way that makes them comfortable. If they are flushed, hot, and sweaty, they should wear less. If they are cold and shivery, they should wear more. Infants should not be bundled when they have a fever.
- Fever does *not* cause brain damage. Some of the infections that cause fever such as meningitis and encephalitis can cause brain damage. The advice under the *When to Call* section will alert you to the presence of these types of infections.
- Fever is not a disease; it is the body's response to help fight off an illness.

- **It is *not* necessary to get the fever down.** With many common illnesses the fever will not come all the way down even after medication for the fever.
- Except with babies, it is not necessary to know the exact temperature, nor is it necessary to know the temperature at all times. If your child is over 3 months and is acting fine, you don't need to take the temperature at all.
- We are often asked, "When should a parent worry about a fever?" The section of *When to Call* outlines the conditions under which there is concern if your child has a fever.
- Sponging is rarely necessary. Never sponge your child before giving acetaminophen (Tylenol) or ibuprofen (Advil or Motrin) first. Sponging or cool baths (not ice water) can be used if your child says he is too hot. Sponging or cool baths should be used in emergencies such as heat stroke or delirium.
- You should encourage but not force your child to drink when there is a fever. The fever causes additional fluid losses. A child who is dehydrated (low on fluids) will want to drink.
- We treat fevers if the child is uncomfortable with the fever. The child frequently has aches when there is a fever, and pain and fever medication can help reduce those aches. If your child has a fever but feels "ok", no treatment is needed.
- Medications are given for *comfort.* They are not given to control the fever.
- You do not need to wake a child to give fever medication.
- Tylenol or Motrin can be used**.** ***Do not*** **give Aspirin to children.**

Ibuprofen (Advil, Motrin, or another brand.)

Give every 6 to 8 hours as need: always with food. Other strengths available by prescription.

***Do not give more than 4 doses in 24 hours.**

Weight in pounds (lbs.)	**Dose**	**Liquid** 1 teaspoon = 100 mg/5ml	**Chewable Tablets** 1 tablet = 100 mg	**Tablets** 1 tablet = 200 mg
11-21 lbs.	50 mg	½ teaspoon (2.5 ml)	½ tablet	
22-32 lbs.	100 mg	1 teaspoon (5 ml)	1 tablet	
33-43 lbs.	150 mg	1 ½ teaspoons (7.5 ml)	1 ½ tablet	
44-54 lbs.	200 mg	2 teaspoons (10 ml)	2 tablets	1 tablet
55-65 lbs.	250 mg	2 ½ teaspoons (12.5 ml)	2 ½ tablets	
66-87 lbs.	300 mg	3 teaspoons (15 ml)	3 tablets	1 ½ tablets
88+ lbs.	400mg	4 teaspoons (20 ml)	4 tablets	2 tablets

Acetaminophen Dosage Chart

Since 2012, acetaminophen liquid has only one strength Acetaminophen (Tylenol or another brand). Give every 4-6 hours as needed. (Also available in suppositories; use the same number of mg.)

***Do not give more than 4 doses in 24 hours.**

Weight in pounds (lbs.)	**Elixir** 1 teaspoon = 160mg/5ml	**Chewable** 1 tablet = 80 mg	**Jr. Strength** 1 caplet = 160 mg	**Reg. Strength** 1 tablet = 325 mg
6-11 lbs.	¼ teaspoon (1.25 ml)	------	-------	
12-17 lbs.	½ teaspoon (2.5ml)	------	-------	
18-23 lbs.	¾ teaspoon (3.75 ml)	------	-------	
24-35 lbs.	1 teaspoon (5 ml)	2 tablets	-------	
36-47 lbs	1 ½ teaspoons (7.5 ml)	3 tablets	-------	
48-59 lbs.	2 teaspoons (10 ml)	4 tablets	2 caplets	1 tablet
60-71 lbs	2 ½ teaspoons (12.5 ml)	5 tablets	2 ½ caplets	1 tablet
72-95 lbs	3 teaspoons (15 ml)	6 tablets	3 caplets	1 ½ tablets
96+ lbs.	-------	------	4 caplets	2 tablets

Head Injury

Most children with a serious head injury will have symptoms right away, yet signs of serious injury can develop hours to days after the injury occurs. It is reassuring to have children cry immediately after a fall, respond to you, and look you in the eyes.

WHAT TO DO:

- Avoid using narcotics or sedatives.
- Acetaminophen (Tylenol) or ibuprofen (Motrin) may be given for headache. If your child is tired or if it is bedtime, put your child to bed. If they are asleep, there is no need to wake them up. Otherwise, check them every 4 hours. When you check, they should recognize you and respond.

WHEN TO CALL:

- Persistent vomiting: In many cases, a child will vomit once or twice shortly after a head injury especially if they swallow blood from a cut in the mouth. If the vomiting occurs more than twice, or resumes after it had stopped, call our office.
- Excessive drowsiness: Your child may be tired after a head injury. However, you should be able to rouse the child just as you normally could wake him/her from a deep sleep.
- Eye changes: If one pupil (the dark center of the eye) seems larger than the other or if the eyes are not moving together normally, or if your child complains of double vision, call.
- Unsteady walking or difficulty moving: Call if your child has any weakness or coordination problems, like stumbling.
- Confusion or memory loss or slower processing speeds.
- Bleeding or unusual drainage from the nose or ears.
- Severe, persistent headache: If your child's headache is not relieved by rest, acetaminophen, or other routine pain relief

practices, or if it lasts longer than 24 hours or if worsens significantly, call.
- Seizures or convulsions.
- Personality changes, such as excessive irritability or aggressive behavior.
- If your child lost consciousness at the time of the injury, call.

Lice

Lice are small (1/16 inch long) gray insects that can infect the scalp. They move quickly, yet they cannot jump. Nits are eggs laid near the scalp, firmly attached to hairs. Lice cause an itchy rash on the scalp—especially behind the ears and at the nape of the neck. They are extremely contagious by contact with an infected person's hair or belongings (hats, clothes, combs, etc.).
Lice only infect human beings, and anyone can be infected. They are not caused by lack of hygiene. With effective treatment, all lice and nits will be killed. However, some lice are now becoming resistant to the regular anti-lice shampoo.
Do not mistake simple flakes of dandruff for nits. Nits stick to the hair shafts.

WHAT TO DO:
- Use an anti-lice shampoo (e.g. Nix) that kills lice and nits, and comb thoroughly with a lice-removing comb.
- Apply the anti-lice shampoo to the washed and towel-dried hair, saturating hair and scalp. Allow to remain on hair for 10 minutes and rinse thoroughly. Remove nits with provided comb. Repeat after 7 days if living lice are still observed. Remove the nits using a fine-tooth comb and backcombing the hair. The best lice removing comb is the "Licemeister".
- Clean the house: Vacuum carpet, couches, and car. Soak your child's combs and brushes for about 1 hour in a solution made from anti-lice shampoo. Wash bedding, clothing, coats, and

hats in hot water. Items that can't be washed should be put in plastic bags for 3 weeks, which is the longest time nits can survive.

- Be sure to check the hair of everyone else in your home. If anybody has a scalp rash, sores, or itching, go ahead and treat them too even if you may not find any lice or nits.

Note: Most schools require that all nits be removed in order for the child to return to school.

WHEN TO CALL:

During office hours:

- The rash or itching are not cleared by 1 week after treatment.
- The sores start to spread or look infected.
- The lice or nits return.
- You have other questions or concerns.

Immediately if:

- Lice are not a medical emergency. Please call with concerns only during office hours.

Lungs (Respiratory)

ASTHMA OR WHEEZING

Asthma involves recurrent attacks of wheezing and coughing, which may result in chest tightness, and shortness of breath. A **wheeze** is a whistling, airy sound when your child breathes out. (It is not a rattling, mucousy sound which is less worrisome.)

WHAT TO DO:

- If you have an asthma action plan follow that. Give a dose of asthma medication. This could include:
  -a nebulizer (breathing machine) treatment with Albuterol or Xopenex

-an inhaler treatment of Albuterol, (Pro Air, Provental or Ventolin) in addition to any other inhalers your child usually uses
-oral Albuterol

- Have your child rest until the breathing improves.

WHEN TO CALL:

Immediately if:

- Lips are blue or dusky.
- Pain develops in chest or neck.
- Your child is too short of breath to complete a short sentence in one breath.
- Breathing is labored (fast/shallow breaths, nostrils flare with each breath, or retracting).
- Retractions (muscles tug in):
  -between the ribs
  -below the Adam's apple
  -above the collar bone
- Wheezing is not improved within 20 minutes after asthma medicines are given.
- If your child has asthma, give two puffs of albuterol (or use nebulizer) every 20 minutes three times- that is 6 puffs total in one hour. If no better, call the doctor.

CHEST PAIN

There are many causes of chest pain. Some of the causes are due to problems like asthma, pneumonia, heartburn/reflux, muscle cramps, or sore ribs. Often chest pain is what physicians call functional pain and is not related to something wrong with the heart.

WHAT TO DO:

- If your child develops chest pain while exercising, have them stop and rest.

- If chest pain develops from an injury, give pain reliever and apply an ice pack to the bruise.
- If your child develops pain directly under the breastbone (sternum), heartburn may be present. This may or may not be a burning feeling in children. Give an antacid (Maalox, Mylanta, Tums, etc.) for pain relief.
- If you think your child is hyperventilating, place a paper bag over the child's nose and mouth and have them slowly breathe the air in and out of the bag, this will usually lessen the symptoms of hyperventilation within a few minutes.
- If your child is having chest pain, you should check the heart rate and temperature.

WHEN TO CALL:

During office hours if:

- If your child has chest pain (not a side ache) while exercising.
- Your child has chest pain at rest frequently.
- Your child has mild chest pain that lasts more than a few hours (unless it is from an injury).
- Your child has chest pain associated with irregular heartbeats.

Immediately if:

- Your child has a fever (greater than 100.5F), is breathing faster than usual, has chest pain, and is struggling to breathe.
- Breathing is labored (nostrils are flaring).
- There is coughing and wheezing with the chest pain.
- Your child has an extremely rapid heart rate (more than 150 beats per min. at rest).
- Your child says the heart feels like it is skipping or is jumping and there is chest pain.

- If your child has a heart defect and develops chest pain.
- The chest pain is severe and lasts more than 30 minutes after pain reliever is given.
- Your child has sickle cell anemia (not sickle cell trait) and develops chest pain.

COLDS

A cold (upper respiratory infection or URI) describes symptoms of cough and nasal congestion caused by one of many viruses. URIs do often include a mild fever and aches the first several days. URI's last 1 to 2 weeks in children. URIs are caused by viruses and are not treated with antibiotics.

WHAT TO DO:

We **do not** recommend cold or cough medication for children under 6 years of age because they have no proven benefit and may lead to heart arrhythmia (irregular heartbeats).
Children often do better with their colds if they have their head elevated during sleep. For infants, elevate the head of the crib or allow the baby to sleep in a buckled car seat or bouncy chair.

Saline nose drops can be purchased or made to put in the baby's nose to clear congestion. Put in 2 or 3 drops, wait about 10 seconds, and then suction out the nose with a bulb syringe. Saline nose drops can be made by dissolving ¼ teaspoon of salt in 1 cup of warm water. Avoid overuse of the bulb syringe. They can grow mold and repeated use can cause inflammation to the nose.
It may help to run a vaporizer or humidifier in the bedroom.

Vapor rubs are safe and may help nasal congestion.
Older children/adolescents may benefit from saline nasal irrigation or neti pots.

WHEN TO CALL:

During office hours if:

- The cold lasts longer than 2 weeks.
- Your child has a fever (100.5F or higher) for more than three days.
- Symptoms worsen.

CROUP

Croup is an upper respiratory infection that causes swelling of the larynx (voice box) or trachea (windpipe).
It causes a hoarse voice, barky (seal-like) cough, and often raspy, labored breathing. Often, the smaller the child, the greater the distress as their trachea is also smaller. Older children may simply have laryngitis or a barking cough.

WHAT TO DO**:**

If your child has raspy, labored breathing you may try one of the following:

- Calm your child down. Toddlers are often worried by the hoarse voice.
- Bring your child in the bathroom, close the doors, and run the shower on hot to create steam.
- If it is cool outside (less than 60 degrees), bring your child outdoors (or to an open window) to breathe the cool air. If the labored breathing doesn't improve within 30 minutes, call.
- If your child has a barky cough and hoarse voice but no raspy, labored breathing, run a vaporizer (hot or cold) or humidifier in the room.
- If your child is old enough, have them sleep on an extra pillow. (If you have a baby, elevate the head of the mattress or have the baby sleep in a car seat).

WHEN TO CALL:

During office hours if:

- The barky cough doesn't go away in 3 days.

Immediately if:

- Lips are blue or dusky.
- Breathing is still labored after trying the things listed below.

Additional Information:

- Croup is caused by one of a number of viruses.
- Antibiotics do not treat croup.
- Your child may have a fever with the croup.
- Your child may often have a sore throat with the croup.
- Croup is contagious. Your child should stay home from school and daycare until the signs of croup (barky cough and fever) are gone for 24 hours.
- The barky cough of croup is always worse at night and usually improves during the day. It often lasts three nights.
- Rarely, if children are too distressed, we prescribe a steroid (after seeing them) to decrease the swelling. Most children do not need steroids.

PNEUMONIA

Pneumonia is an infection in the lung caused by a virus or bacteria. Pneumonia usually includes a cough and fever, and sometimes rapid breathing, shortness of breath and chest pain. Rattles in the chest or rattly breathing are not necessarily signs of pneumonia. Rattles are typically just mucous or congestion.

WHAT TO DO:

- Try frequent sips of fluid or a steamy bath or shower to alleviate cough.

- Make an appointment. Your doctor listening to the lungs can usually determine the presence of pneumonia. Your doctor may order a chest x-ray to diagnose pneumonia.
- If pneumonia is caused by bacteria, your doctor will prescribe antibiotics.

WHEN TO CALL:

During office hours if:

- Your child has a cough with fever that lasts 3 days or more.
- Your child has a cough with chest pain.
- Your child has a breathing rate of over 40 times a minute while resting.
- Your child's cough lasts more than 2 weeks or if the cough worsens after 1 week.
- Coughing causes several episodes of vomiting.
- Coughing spasms tire your child or keep them up more than 1 hour at night.
- Cough causes your child to miss more than 2 days of school.
- You have other concerns or questions.

Immediately if:

- Lips are dusky or blue.
- Breathing is labored (fast, nostrils flaring, anxious, muscles between ribs or under chin are tugging).
- Chest pain is severe when not coughing.
- Your child is short of breath when not coughing.
- The cough is constant.

Additional Information:

- Pneumonia is not an emergency unless there is labored breathing.
- If you suspect your child has pneumonia, please contact the office during office hours.
- Pneumonia in most cases is treated with antibiotics at home.

- RSV (Respiratory Syncytial Virus) is a type of viral infection that may cause pneumonia in infants and young children. RSV occurs in the late fall and winter. RSV is a virus; therefore, antibiotics are not used to treat it.

Newborn Problems

DIAPER RASH

Diaper rash is any rash in the skin covered by a diaper. Almost every child gets diaper rash; it is one of the most common skin disorders of infants and children.

Most diaper rashes are due to prolonged contact with moisture. Rashes may also be caused by bacteria, ammonia, diarrhea, and yeast. A child in either disposable or cloth diapers can get diaper rash.

WHAT TO DO:

Most diaper rashes improve in three to four days with proper treatment. The best thing you can do for your baby's skin is change diapers frequently. Leave your baby's bottom exposed to air as much as possible. Fan his bottom after diaper changes or even use a blow dryer on a cool setting to gently dry the skin. Apply a thick, greasy barrier cream to protect the skin from new moisture. These emollients include Desitin paste, A&D, and Vaseline. Apply generously—at least 1/8 inch thick. When in doubt, use more!

Note: Do not remove all diaper creams from the skin with each diaper change. Wipe off the top layer and reapply. Avoid talcum powder as it may cause your baby to wheeze.

If the rash does not improve, suspect a yeast infection. Yeast causes bright red skin (which is surprisingly not very painful) with satellite polka dot type spots at the edge. Yeast infections are most common in the skin creases. If your baby also has thrush, suspect a yeast infection.

WHEN TO CALL:

During office hours if:

- The rash is not improving after three to four days.
- You suspect a yeast infection (see above).
- The skin looks infected: pimples, blisters, pus-filled, spreading redness.
- Your child starts acting sick.

Immediately if:

- Diaper rash is not a medical emergency. Please call with concerns only during business hours.

FUSSY BABY

Infants under four months of age often cry a lot. It is normal for them to cry for an hour or two each evening or to have fussy periods throughout the day.

WHAT TO DO:

- Is the baby hungry?
- Is the diaper too tight or is an extremity caught in a position to make the baby uncomfortable?
- Did the baby scratch an eye?
- Is there a hair wrapped around toe or finger?
- Is there a hernia (large bulge in groin area)?
- Is the baby overdressed or underdressed?
- Is the baby over stimulated (too much activity, noise, etc.)?

WHEN TO CALL:

Immediately if:

- The child is under 2 months of age and has a rectal temperature of >100.5F.
- The child seems lethargic, pale, or won't effectively nurse or is excessively regurgitating.

- The child cries for longer than three hours with no response to comforting techniques.

Note: Grunting is something many babies do to keep from spitting up. Do not interpret this to be constipation.

Comforting Techniques:

- Swaddling (inhibits innate startle responses)
- Massage of the abdomen
- Placement on your chest or in an infant swing
- A stroller or car ride
- Placement in a car seat on a running washing machine secured by attending parent
- Holding as a football, face down while securely supported by hand on chest and on the back.
- A pacifier
- Singing
- Gently humming in contact with baby's cheek
- A warm bath

At times it is legitimate to allow a baby to cry for 10-15 minutes if all the comfort measures do not stop the crying.
If your baby is persistently fussy, stop by the office to check the weight to assure adequate nutritional intake. Gas is a normal byproduct of digestion. When babies cry, it is normal reflex for them to curl up their legs like the startle or suck reflex. Generally, colic medicines are not helpful. Some physicians will use medication to treat gastroesophageal reflux although the evidence for its success is marginal. Recent studies show that probiotics may be helpful for colic.

THRUSH

Thrush is a yeast (candida) infection of the mouth that typically affects babies in the first few months of life. Unless thrush is very widespread, it does not seem to cause a baby much discomfort. It is never serious. Thrush causes white patches or spots on the tongue, cheeks, inner lips, and palate that cannot be wiped off with a washcloth. The spots look like cottage cheese that is stuck on. (It is very common for babies to have white tongues due to milk fat—this is normal; this is not thrush.) Your baby is more likely to get thrush if he/she has been on an antibiotic. The antibiotic can kill off good bacteria, allowing yeast to colonize. Also, babies with thrush often have a yeast diaper rash as well. The rash is very red, located in skin creases, and has satellite lesions – polka dot like spots on the edges of the rash.

Nosebleeds

Nosebleeds are very common during childhood. They are usually caused by trauma – rubbing or picking the nose, falling on the nose, sniffing or blowing the nose hard, etc. Nosebleeds are also caused by dryness to the nasal lining. All of these behaviors are increased in children with nasal allergies.

It is very common for a child to have another nosebleed in the hours to days following the first nosebleed. The fragile scab that forms is easily disturbed, causing the nose to bleed again from the same spot. Some children have repeated nosebleeds from the same nostril over several weeks' time. This condition may be due to a small, fragile blood vessel that is too close to the surface and therefore easily damaged.

Rarely, recurrent nosebleeds are caused by a bleeding problem.

Do not be alarmed if, after a nosebleed, a child may have bowel movements that contain bright red or black from swallowed blood. Also, they may vomit swallowed blood.

WHAT TO DO:

- Stop the nosebleed. Calm your child and have him/her sit up and *lean forward* so he/she doesn't have to swallow the blood. Initially, the child may spit out any blood in the mouth and blow the nose once to free any debris or large clots. After this, do *not* have your child blow his/her nose. Tightly pinch the soft parts of the nostrils together against the center wall (the same area you would hold if you were blowing the nose) for ten minutes. Don't release pressure for ten minutes. Do not pinch the bridge of the nose.

Note: Ice or a washcloth generally does not help a nosebleed. Don't pack anything into the nose at home because when it is removed, bleeding will recur.

- If nosebleeds are recurrent over several weeks, note if they occur on the right or left side (or both).
- Run a humidifier or put a small amount of petroleum jelly just inside each nostril.
- Treat nasal allergies.
- Discourage excessive blowing or picking the nose, as much as possible.

WHEN TO CALL:

- Call if fairly significant bleeding does not stop after 20 minutes of pressure.
- Call during office hours if nosebleeds are recurring over several weeks or for other unexplained signs of bruising or bleeding.

Pink Eye

"Pink eye" or conjunctivitis is a general term that refers to a pink or bloodshot appearance of the whites of the eye or eyes. Sometimes the pink color is also associated with excessive tearing, itchy eyes, light sensitivity, or a mucous discharge or "matter." The lids may be puffy – especially immediately after a child wakes up, and the lids may be crusted shut with mucous. The salts in tears dry to a crust. The protein in tears often causes a whitish or yellowish mucous-like discharge.

Pink eye has many causes:

- Eyes may turn pink due to **irritation** (ex. dust, shampoo, or a scratch to the eye).
- **Allergies** may cause redness of both eyes and cause itchiness. Allergic conjunctivitis often involves a clear runny nose.
- Infants under the age of one may have a **blocked tear duct**. These children have tearing or matter from one or both eyes, but the whites of the eyes are not pink. This condition requires no treatment unless it persists beyond a year of age.
- The most common cause of pink eye is a **virus**. It is simply a "cold" in the eye. For some reason, daycares and schools often panic about this condition, yet children with a cough or runny nose are far more contagious than children with viral conjunctivitis, and the American Academy of Pediatrics does not recommend school exclusion. These children typically have a runny nose and/or a cough. Both eyes tend to be pink, and may have impressive amounts of yellowish or mucous-like discharge. No special treatment is required for these children other than lid soaks. Bacterial eye drops will not help a viral infection. If the eye symptoms worsen, especially as the cold symptoms resolve, call our office during office hours.

- Some conjunctivitis is caused by **bacteria**. A bacterial cause is more likely when cold symptoms are not present. It typically involves only one eye, but it may involve both. Bacterial conjunctivitis is treated with prescription antibiotic drops.

WHAT TO DO:

- **Wait** – the puffiness of your child's eyes often improves an hour or so after your child gets up. Most cases of pink eye are caused by a virus – it is a "cold" in the eye. If your child has a runny nose and cold symptoms with the red eyes, it is fine to watch them for a few days. If symptoms worsen over 3-4 days, call the office during office hours.
- **Lid soaks** – Moisten a clean cotton ball or washcloth and gently wipe the gooey lids. If your child's eyes are crusted shut, you may use a few drops of diluted baby shampoo to clean the lashes. If the skin around the eyes becomes chapped, it is fine to use a plain emollient, such as petroleum jelly.
- **Treat allergies** – For itchy eyes, you may use Benadryl or Claritin by mouth. If your child has allergies and these products are not helping, you may get allergy eye drops over the counter, such as Zaditor or Patanol.
- **Stay home** – If your child has a fever or excessive cough or runny nose, he/she should not go to school or daycare, regardless of how the eyes look. If your child has allergies, he/she is obviously not contagious and may attend school.

WHEN TO CALL:

Please call the office immediately if your child has vision changes, eye pain, sensitivity to light, blisters around the eye, or increasing redness/warmth/pain around an eye.

Poisoning

If your child has swallowed something you think may be harmful, call the Poison Control Center immediately. **1-800-222-1222**
If your child got something in the eye or on the skin that you think may be harmful, first rinse off eye or skin with plain water or saline solution, then call the Poison Control Center.

Sinus Infections

Sinus infections may result from prolonged colds. A sinus infection should be suspected if:

- The cold lasts longer than 2 weeks.
- A fever of greater than 100.5F or greater occurs for three days or more as part of the cold.
- Your child has had a cold for several days and then starts complaining of a headache under the eyebrows or in the cheekbones. It is common to have a headache and body ache the first few days of a cold.

Additional information:

- It is normal for mucous to be either clear or colored (yellow or green) at various times during the cold. Yellow or green mucous is *not* a sign of a sinus infection.
- Young children get colds frequently. Children under three get an average of 6 to 10 colds a year, each lasting for 1 to 2 weeks.
- The use of nasal saline flushes (neti pot) can be very useful in alleviation of symptoms.

Skin

ABSCESS/CELLULITIS

Abscesses or cellulitis are bacterial infections of the skin. These conditions usually require medical treatment and are sometimes serious. Bacteria may enter through any break in the skin, such as a cut, scrape, hang nail, or insect bite. An abscess is a pocket of pus under the skin. It is red, warm, painful, and usually firm. Sometimes an abscess is mushy, and you can feel liquid move under the skin. Cellulitis is infection of the skin tissue itself. Skin is warm, pink or red, and tender. It looks like sunburn surrounding a small scrape.

WHAT TO DO:

- Soak the infected area in warm, soapy water. Warmth draws out infection. You may do “bleach baths” to decrease bacteria of open wounds. Add 1/3 cup laundry bleach to a bathtub of water and soak for at least 5 minutes (or as long as your child wishes).
- With a pen mark the perimeter of the redness. These marks help determine whether a lesion is getting worse and how quickly it is worsening.
- If an abscess pops on its own, keep the area clean. If it heals on its own, no further treatment is needed.

WHEN TO CALL:

Call during office hours if:

- Your child has a small lesion <1 inch.
- Symptoms persist despite soaking.
- You have other concerns.

Call immediately if:

- Your child has a large (1 inch) abscess or a rapidly enlarging abscess.
- Your child has a fever or is acting more sick.
- The redness is expanding quickly or you see red streaks moving up from the sore towards the heart.
  These lesions typically require antibiotics, and abscesses sometimes need to be drained.

ACNE

Acne involves pimples and blackheads, most commonly on the face, back, and chest. Acne is caused by increased oil production (typical of puberty) and bacteria, and results in inflammation.

WHAT TO DO:

- Clean your face gently twice per day with soap and water. Aggressive scrubbing only increases inflammation. Wash your face or shower after running and working out too.
- Do not pick, poke, or pop pimples, which can result in redness, swelling, and sometimes scarring.
- Use only oil-free products on your face. These may be labeled "non-comedogenic" as a comedone is a pimple.
- You may use a topical benzoyl peroxide over-the-counter product once or twice per day.

WHEN TO CALL:

Call during office hours if:

- If acne is extensive despite proper hygiene, please call to set up an appointment. Your child may need topical creams or oral antibiotics.

CHICKEN POX

Chicken pox is an infection due to varicella, a highly contagious virus that causes fever and multiple red, itchy bumps. Thankfully, it is less common due to the varicella vaccine. Classically, children will have multiple spots in different stages of healing: itchy red spots, blisters, cloudy blisters, and crusted scabs. Repeated "crops" of lesions occur for about five days. Spots usually start on the head and back and spread everywhere.

WHAT TO DO:

- There is no specific treatment for chicken pox. Itching can be alleviated with an antihistamine like Benadryl. (See table in Hives section). Oatmeal baths or topical Caladryl may also provide relief from itching.
- Tylenol or Motrin may be given for fever. Aspirin should be avoided in children and adolescents with chicken pox because of the link with Reye's syndrome.
- For mouth pain, encourage cold fluids, and a soft bland diet. Avoid salty foods and citrus fruits or juice. If the mouth sores become troublesome, paint the sores with a solution made of equal proportions of Maalox and Benadryl about 4 times a day. Children older than 4 years may be able to gargle with this solution.
- To prevent infected sores, trim your child's fingernails. For young babies who are scratching, you may cover their hands with cotton socks or mittens.
- Children with chicken pox are contagious until all the sores have crusted over, usually 6-7 days after the rash begins. If you have an appointment during this time, let our office staff know so that other children are not exposed.

WHEN TO CALL:

During office hours if:

- Fever persists for more than 4 days.
- The itching is severe and doesn't respond to treatment.
- You have other questions or concerns.

Immediately if:

- The chicken pox look infected (yellow pus, spreading redness, red streaks).
- Your child develops a speckled red rash.
- Your child has difficulty breathing.
- Your child starts acting very sick.

CUTS AND SCRATCHES

If cuts are deep or gaping, they may need stiches. Also, if cuts are longer than ½ inch, or ¼ inch on the face, they may need stiches. The reason to have a wound sutured (stitched) instead of just letting it heal without stitches is that a sutured wound tends to heal with a neater scar. Cuts in areas where appearance is unimportant, such as the scalp, do not need to be sutured unless the cut is large or gaping. Cuts should be stitched within 8 hours of the injury.

WHAT TO DO:

- For minor cuts and scrapes, wash the wound vigorously for 5 minutes with soap and water. If the wound is in an area which will probably get dirty, cover it with a Band-Aid for the first few days. Antibiotic ointments are not generally necessary if the wound has been carefully washed.
- For deep wounds, apply pressure with a clean cloth.

WHEN TO CALL:

During office hours if:

- You feel your child may need stiches.
- Your child has not had a Tetanus shot in more than five years. Most children will have had several tetanus shots (DTaP) during

their first few years, including one at 4-5 years, and 11 years (Tdap).
- The cut looks infected (yellow pus, spreading redness, red streaks).
- Pain, redness, or swelling increase after 48 hours.

Immediately if:
- Bleeding won't stop after 10 minutes of direct pressure.
- The cut is split apart or deep.
- You are unable to clean the wound adequately.

ECZEMA

Eczema is overly dry skin. It may be rough, pink skin or thick and itchy plaques of cracked skin. It is the most common skin problem in pediatrics. Eczema sometimes results in generally dry skin and sometimes is seen only in small "thumb print" sized patches. Eczema runs in families, and it is especially common in children with allergies or asthma. Children with eczema have broken skin and are thus more likely to get other skin infections.

Eczema can be worsened by very wet or very dry environments. Some children have eczema on their feet from sweaty shoes. Most healthcare providers have eczema on our hands from frequent hand washing. Eczema may also be worsened with rubbing. A child might get a dry, rough patch from scratching or where clothing rubs.

WHAT TO DO:

- Moisturize, moisturize, moisturize! Choose an unscented emollient, such as Eucerin, Aquaphor, Cocoa Butter, Aveeno, Vaseline, etc. The alcohol in scented lotions is drying, so avoid them. Dermatologists and allergists recommend moisturizing the dry patches 3 times per day or more. Creams and ointments are more effective than lotions.

- Seal the skin after bathing. Warm bathwater pulls oil from the skin, yet water prevents infection and can be hydrating. Either bathe children without soap or with a mild soap like Dove. When you take your child out of the tub, immediately pat them dry and seal moisture in the skin with a good emollient or lotion.
- Keep fingernails short to prevent scratching.
- Hydrocortisone 1% over the counter may be applied twice per day to dry, rough, itchy skin that has not responded to moisturizers for 5-7 days. Then moisturize on top of hydrocortisone.
- For severe eczema, consider wet to dry dressing overnight. Bathe your child, apply hydrocortisone and emollients, and cover affected skin with damp cotton clothing (a onesie or t-shirt, cotton leggings, socks, etc.). Then put regular pajamas over the damp layer. As odd as this sounds, the children stay warm and the skin gets rehydrated quickly.

WHEN TO CALL:

During office hours if:

- Skin is red, itchy, cracked, or thickened despite treatment.
- Skin looks infected – red, pus or wet-looking, painful.
- You have other concerns.

Immediately if:

- Eczema is not a medical emergency. Please call with concerns only during office hours.

HIVES

Hives are very itchy, warm, red, raised bumps or welts with pale centers. Hives vary in size from 1/4 inch to several inches across. They are usually worse where the child is warm (under the arms, worse after bathing, or after being bundled). Hives can migrate—a

spot may disappear and new spots may emerge over a short time. Hives are caused by histamine in the skin.

Hives can be caused by various things:

- Medicines, especially antibiotics.
- Foods such as nuts, eggs, fish, or shellfish.
- Something touched, such as a plant, latex, etc.
- Infections.
- Having cold air or water on the skin.
- Insect stings.
- Unknown- often hives are idiopathic, or the trigger is unknown.

WHAT TO DO:

- If your child is acting well, with no breathing problems and no itchiness, simply observe.
- If your child is bothered by hives, an antihistamine (like diphenhydramine) is the best medication. It doesn't cure the hives but will reduce their number and relieve itching. You can buy it over the counter. The main side effect is drowsiness. Give Benadryl four times daily in the following dosages. Most hives will linger an average of 4-6 days.

Benadryl (diphenhydramine)

Child's Wt. More than:	22lbs	33lbs	44lbs	55lbs	110lbs
Total amount (mg)	10mg	15mg	20mg	25mg	50mg
Liquid 12.5mg/5ml (tsp)	¾ tsp	1 tsp	1 ½ tsp	2 tsp	-----
Chewable 12.5mg	-----	1	1 ½	2	4
Capsules 25mg	-----	-----	-----	1	2

Avoidance:

Avoid anything that you think might have caused the hives. If your child is on an antibiotic, stop the medicine and call the office during regular office hours for further advice. For localized hives, wash the allergic substance off the skin with soap and water. Localized hives usually disappear in a few hours, lessening the need for oral treatment.

WHEN TO CALL:

During office hours if:

- The itch is not controlled after your child has been taking continuous Benadryl for 24 hours.
- The hives last more than 1 week.
- You have other questions or concerns.

Immediately if:

- Breathing or swallowing becomes difficult, nausea and vomiting, cramps or stomach pain, itchy or swollen lips and throat.
- Your child starts acting very sick.

IMPETIGO

Impetigo is a superficial bacterial skin infection. The sores of impetigo are often on the face and look “honey crusted” or like a wet sore that isn’t healing. Impetigo usually starts as a small red bump that changes to cloudy blisters, then pimples or sores. Impetigo increases in size and is sometimes covered by a yellow-brown scab.

Impetigo is caused by staph or strep bacteria, which is normally found on our skin, especially near our nostrils. Infections may occur any time the skin is broken (scrapes, insect bites, cuts, eczema, etc.).

WHAT TO DO:

- Keep the area clean.

- Spots on the body (not face) may respond to bleach baths. Add 1/3 cup laundry bleach to a bathtub of water and soak for at least five minutes. This is very diluted, less chlorine than a pool, but very effective for eliminating staph infection.
- Use a topical antibiotic cream over the counter three times per day.
- Avoid touching or picking sores.
- Cover the infected area, and your child may still attend daycare.

WHEN TO CALL:

During office hours if:

- Spots are spreading despite treatment for five to seven days.
- Sometimes impetigo requires an oral antibiotic. Call for an appointment.

Immediately If:

- Impetigo is never a medical emergency. Please call with concerns only during office hours.

MOLLUSCUM

Molluscum contagiosum are small, firm, flesh-colored or pink, round bumps that are very common in childhood. Molluscum are easy to identify because they are “umbilicated” – they have a belly button like dimple in the center of each lesion. They are caused by a virus and will eventually go away on their own, although it may take a year. Each bump contains a firm white core surrounded by a watery substance. This liquid contains thousands of virus particles and is highly contagious, so if your child has one bump, they may very well infect themselves with more by scratching.

WHAT TO DO:

- Watch and wait if the lesions do not bother the child and are not a cosmetic problem.

- Moisturize! Dry, open skin or eczema is a perfect breeding ground for new lesions. Moisturize skin to avoid spreading more bumps.

WHEN TO CALL:

During office hours if:

- Your child has multiple lesions that are bothersome or spreading.
- Lesions are red, inflamed, or look infected.
- Lesions are cosmetically bothersome.

Immediately if:

- Molluscum are never a medical emergency. Please call with concerns only during office hours.

Note: Like warts, treatment often consists of freezing or topical irritants.

POISON IVY

The rash is caused by the oil of poison ivy (poison oak or poison sumac) plants. More than 50% of people are sensitive to the oil, which causes redness and blisters that are extremely itchy. Spots often occur in lines or streaks on exposed body parts where the plant oil brushed the skin. These appear 1-2 days after plant exposure and usually last about two weeks.

Prevention is the best approach. Teach your older children to recognize and avoid all plants with three large shiny leaves even if the plant is dead. There is a saying, “Leaves of 3, let them be.” Wear long sleeves, pants and socks when walking through woods or brush in the spring, summer, and fall.

CONTAGIOUSNESS: The rash or fluid from the blisters is not contagious. However, anything that has the poison ivy oil or sap on it can cause rashes for about one week after exposure. This includes the shoes and clothes worn into the woods as well as any pets that

may have oil on their fur. Be sure to wash them off with soap and water. Also, areas of skin with the most exposure to poison ivy may break out a day or so before lesser exposed areas. For instance, plant oil on the hand may be spread when you scratch your face. The face may break out later. The rash is not spreading.

WHAT TO DO:

Apply 1% hydrocortisone cream early to reduce itching. Keep your child cool. Calamine or Aloe may be soothing.

WHEN TO CALL:

During office hours if:

- The face, eyes, lips, or genitals become involved.
- The rash looks infected (yellow pus, spreading redness, or red streaks).
- The poison ivy lasts longer than 2 weeks.
- You have other questions or concerns.
- A large amount of the body's surface area is involved.
- There is a great deal of swelling.

Note: If poison ivy is extensive, your doctor may consider using steroids. Steroids will never be called in over the phone without first seeing a patient.

RASHES

There are many common skin reactions in childhood, but rarely are they emergencies. Read through the following information for clarity. However, here are three skin findings worth calling about:

1. **Petechiae**: Petechiae are pinpoint reddish or purplish bruises. They do not lighten in color if the skin is stretched. If these occur where a child was squeezed or bumped, it is understandable. However, if these occur over much of the body or with no sign of trauma, please call.

2. **Infection**: If the area is painful, red, warm, spreading, and your child has a fever, call.
3. **Illness:** If your child acts extremely ill and also has a rash, call us.

RINGWORM

Ringworm is a round pink, scaly patch with a raised border and a flat normal center. The ring slowly increases in size, yet the center remains clear. Ringworm may be mildly itchy. It is cause by a fungus infection of the skin.

Note: Ringworm of the skin is mildly contagious and after 48 hours of treatment is not contagious at all. Your child does not need to miss school or daycare.

WHAT TO DO:

Apply an antifungal cream that you can purchase over the counter (Tinactin, Micatin, or Lotrimin). Apply the cream twice a day for at least 2 weeks. Continue for 1 week after the patch is smooth and seems to be gone.

WHEN TO CALL:

During office hours if:

- The ringworm continues to spread after 1 week of treatment.
- The rash has not cleared up in 4 weeks.
- You have other questions or concerns.

Immediately if:

- Ringworm is never a medical emergency. Please call with concerns only during office hours.

RINGWORM OF THE SCALP

Ringworm of the scalp causes round patches of hair loss that increase in size slowly. Broken hair shafts at the surface of the scalp give a black-dot stubbed appearance. The scalp may have some

scaling and be mildly itchy. It usually affects children, and rarely adults.

Ringworm is caused by a fungus, and over 90% of cases are spread from other infected children. Combs, brushes, hats, barrettes, seat backs, pillows, and bath towels can transmit the fungus. Less than 10% of the cases are caused by infected animals.

With treatment, hair re-growth usually occurs, but may take several months. Ringworm of the scalp is not dangerous. Some children develop a tender swelling that can drain pus; this sore is an allergic reaction to the fungus. These children may require an additional treatment with an oral steroid.

CONTAGIOUSNESS**:** Once your child has been started on Griseofulvin, he/she can return to school. Your child should not share combs or hats with other children.

WHAT TO DO:

- Ringworm on the scalp will not get better with topical creams. It requires a prescription medicine, Griseofulvin, by mouth for six to eight weeks. Please call for an appointment.
- Use an antifungal shampoo with selenium sulfide (like Selsun Blue) once a week to make your child less contagious.
- Once your child has started Griseofulvin they can return to school. Your child should not share combs or hats with other children.

WHEN TO CALL:

During office hours if:

- The ringworm looks infected with pus or a yellow crust.
- The scalp becomes swollen.
- The ringworm continues to spread after 2 weeks of treatment.
- You have other questions or concerns.

Immediately if:

- Ringworm is never a medical emergency. Please call with concerns only during office hours.

SUNBURN

Symptoms of sunburn usually appear 2-4 hours after the sun has already done its damage. Redness, pain and swelling are not seen for 18-24 hours. Repeated sun exposure causes long-term damage to the skin, ranging from premature wrinkling to skin cancer. Since a large percentage of most people's lifetime sun exposure occurs during childhood, teach your children to use sunscreen and avoid direct sun exposure during the peak hours of the day (generally from 10am to 3pm) if possible. Remember to reapply sunscreen every 3-4 hours and after swimming or profuse sweating. Even "waterproof" sunscreens tend to wash off after 30 minutes in the water or after being wiped dry with a towel. The skin of infants burns very easily. Use sunscreen, protective clothing, and a hat with a brim if your infant is outside during peak sun hours.

WHAT TO DO:

- Acetaminophen or ibuprofen started early and continued for 48 hours can reduce discomfort.
- Nonprescription hydrocortisone creams or moisturizing creams applied three times daily may also decrease swelling and pain if started early.
- Cool baths or wet compresses several times daily are helpful in relieving pain.
- Offer extra fluids to replace fluid lost into the swelling of sunburned skin.

WHEN TO CALL:

During office hours if:

- The sunburn causes extensive blistering.

WARTS

Warts are dry, firm bumps on the skin or a pit or callus on the bottom of the feet. Warts are caused by a virus, which sort of hijacks good skin cells. The only way to get rid of a wart is to destroy some of the good skin cells infected with the wart virus. All warts will eventually go way on their own, but they may take years. If the wart is not bothersome to the child or cosmetically upsetting, it is fine to simply watch and wait.

Note: "Plantar" simply means bottom of the feet. Because we stand on our feet, warts grow in instead of out.

WHAT TO DO:

- Watch and wait.
- Duct tape – yes, there is evidence that show that occlusion may get rid of warts. Place a piece of Duct tape over your child's wart. Remove and replace only after bathing.
- Topical over the counter salicylic acid.
  Dr. Schools or Compound W is a weak acid that you drip onto the wart once per day. To avoid irritation, coat the surrounding good skin with Vaseline before applying. This medication also comes in a tape. Cut out a small circle the size of your wart and keep on at all times. (Remove and replace only after bathing.)
- Topical freezing: There are liquid nitrogen kits that may freeze large warts. Because the applicator is wide, this method is often uncomfortable for small warts.

Note: Warts are gone when you see normal skin lines (like fingerprints) where the warts once were.

WHEN TO CALL:

During office hours if:

- You have poor results with over-the-counter methods for more than 2 weeks.
- You have warts on the face.
- You have multiple or very large warts.

Immediately if:

- Warts are never a medical emergency. Please call with concerns only during office hours.

Sore Throat

Older children with throat pain often complain of swallowing. Young children with sore throats are usually crabby, refuse to eat, or grab their tongues. Sore throats may have redness, swelling, or white spots on the tonsils. These children usually have “swollen glands” or inflammation of lymph nodes under the chin. These swollen lymph nodes sometimes cause pain in the front of the neck.

Throat pain has many causes:

- **Irritation** may cause pain or inflammation in the throat. Causes include yelling, post nasal drainage (ex. allergies), frequent coughing or throat clearing.
- **Sores** or lesions in the mouth may cause sore throats. Check your child’s mouth for canker sores, sores on the palate, or irritation from accidentally biting their cheeks.
- **Viruses** cause most sore throats. These children usually have cold symptoms such as runny nose, coughing, hoarse voice, and fevers.
- About 10% of sore throats are caused by **bacteria**, such as strep. Unfortunately, examination of the mouth, throat, and neck is not totally reliable, and a strep test and culture need to be done during office hours to correctly diagnose and treat strep throat. Strep throat rarely affects children younger than school age. Usually, strep throat is associated with fever, feeling tired or achy, swollen glands in the front of the neck,

stomach aches, and a red/irritated throat. Sometimes a child with strep will also get a classic rash: a sandpaper-like feel of tiny red bumps on the trunk and face that spares the mouth; the tongue can look like a strawberry – bright red with white dots. Strep associated with this rash is called scarlet fever. It is no more worrisome than strep throat, but still needs antibiotic treatment. The sore throat of strep will improve without treatment, but it is imperative to treat strep throat with a full course of antibiotics to prevent complications that can hurt your heart (rheumatic fever) or kidneys.

- **Mono** or mononucleosis is a viral cause of sore throats. Mono is spread by saliva (sharing sips of fluids, bites of foods, kissing, etc.) and typically affects adolescents or older children. Mono is associated with extreme fatigue, fever, muscle aches, posterior lymph node swelling, stomach aches and painful, irritated throat. Mono is diagnosed by blood test. While there is no specific treatment for mono, it is important to be diagnosed for explanation and reassurance of ongoing illness. Children with mono may return to school/work when they are fever free but should refrain from high-contact activities if they have enlarged spleens.

WHAT TO DO:

Tylenol or Motrin may help alleviate throat pain. Drinking sips of fluids or standing in a shower may alleviate irritation of the throat. Some children prefer ice chips or popsicles; others prefer warm beverages. Gargling may help alleviate mucous irritation of the throat. Throat lozenges or just hard candy may be soothing to older children.

WHEN TO CALL:

Call during office hours if your child has a sore throat, especially without cold symptoms. Often the nurse may schedule a visit to obtain a throat culture. Please call during office hours if a sore throat

is worsening or not improving over the course of a week, or if your child is unable to stay hydrated.

Urinary

FREQUENCY OF URINATION

A child may suddenly begin to urinate every 10-30 minutes, as often as 30-40 times per day. He/she urinates only small amounts without pain. Frequency can be due to emotional stress, bladder spasm, urinary tract infection (UTI), skin irritation, or diabetes. Diabetes may present over 1-2 weeks but is usually accompanied by increased thirst, increased appetite, and weight loss. With diabetes, the child still urinates large volumes. Skin irritation or UTI often have painful urination.

WHAT TO DO:

- Bring a urine sample to the office. Have your child urinate in a clean jar or container. Catch a midstream urine and deliver it to our office within one hour (during office hours).
- Reassure your child that they are physically healthy and that they need to learn to wait longer to urinate.
- Help your child relax, especially children over 8 years of age.
- Try to figure out what may be stressing your child. Ask teachers or daycare staff to help reduce any tensions. These may include restriction on bathroom use.
- Try to ignore the behavior. Do not punish or tease your child as this may worsen the behavior.
- Avoid bubble baths or soap to urethra.
- Encourage your child to completely empty the bladder every time he/she urinates. “Double pee” – when they think they are finished, try to go again before getting up.

WHEN TO CALL:

During office hours if:

- The frequency is not resolved in 1 month or is severely limiting activity and participation.
- There is pain or burning with the frequency.
- Your child begins to wet themselves during the day.
- Your child begins to drink excessive fluids.
- You have other questions or concerns.

HEMATURIA/BLOODY URINE

Hematuria is blood in the urine. By itself, bloody urine is not painful. The blood may look bright red if bleeding occurs at the bladder, vagina, or urethra, or brownish "cola-colored" if bleeding occurs at the kidney. There are many causes of hematuria, including urinary tract infection (UTI), skin irritation, viral illness dehydration, menstrual period, kidney disease, kidney stores, sickle cell, bleeding disorder, trauma, medications, or even food or dyes. The most common cause of hematuria in children is UTI.

WHAT TO DO:

- Bring a urine sample to the office. Have your child urinate in a clean jar or container. Catch a midstream urine and deliver it to our office within 1 hour (during office hours).
- Check your child for skin irritation, other illness, or pain.

WHEN TO CALL:

During office hours if:

- Bloody urine continues; call to set up an appointment.
- Your child develops a fever.

- You have other questions or concerns.

Immediately if:

- There is painful flank (back) and lower abdominal pain, or if pain is extreme.
- It occurs 1-3 weeks after an episode of strep throat or impetigo.
- There are associated puffy eyelids, your child is passing only very small amounts of urine, and has a headache.
- There is a recent history of blunt injury to abdomen.
- Your child starts acting very sick**.**

DYSURIA/PAIN WITH URINATION

Dysuria is burning or stinging with urination. Urgency and frequency may be present. Some small children will have more accidents and some will refuse to urinate. The most common cause of painful urination in young girls is irritation of the vulva and vagina. Irritation is caused by bubble baths, shampoo, or soap used on the genital area. Occasionally, it is due to poor cleaning of the genital area after a bowel movement. Some girls have irritation from wet swimsuits or Lycra. Sometimes painful urination is caused by a bladder infection.

WHAT TO DO:

- Lubricate the vagina and vulva with Vaseline at bedtime and after bathing or urinating as needed.
- Encourage fluids. Cranberry juice does show some benefit.
- Bathe with baking soda or vinegar to alleviate symptoms.
- Bring a urine sample to the office. Have your child urinate in a clean jar or container. Catch a midstream urine and deliver it to our office within 1 hour (during office hours).

To prevent painful urination, never use bubble bath or soap on the vagina. Shampoo hair last, then rinse girls with clean water before

they get out of the tub. Help girls wipe from front to back to avoid bacterial contamination. Have children drink and urinate appropriately. Avoid holding urine or stool for long periods of time. Use cotton underwear and make sure children remain dry with no dribbles and not staying in wet swimsuits for prolonged periods of time.

WHEN TO CALL:

During office hours if:

- The pain continues for more than 24 hours after sitz baths and lubricants.
- Your child develops a fever.
- You have other questions.

Immediately if:

- The pain with urination becomes severe, especially if the child has flank (low back) pain or a fever.
- Your child starts to act sick.