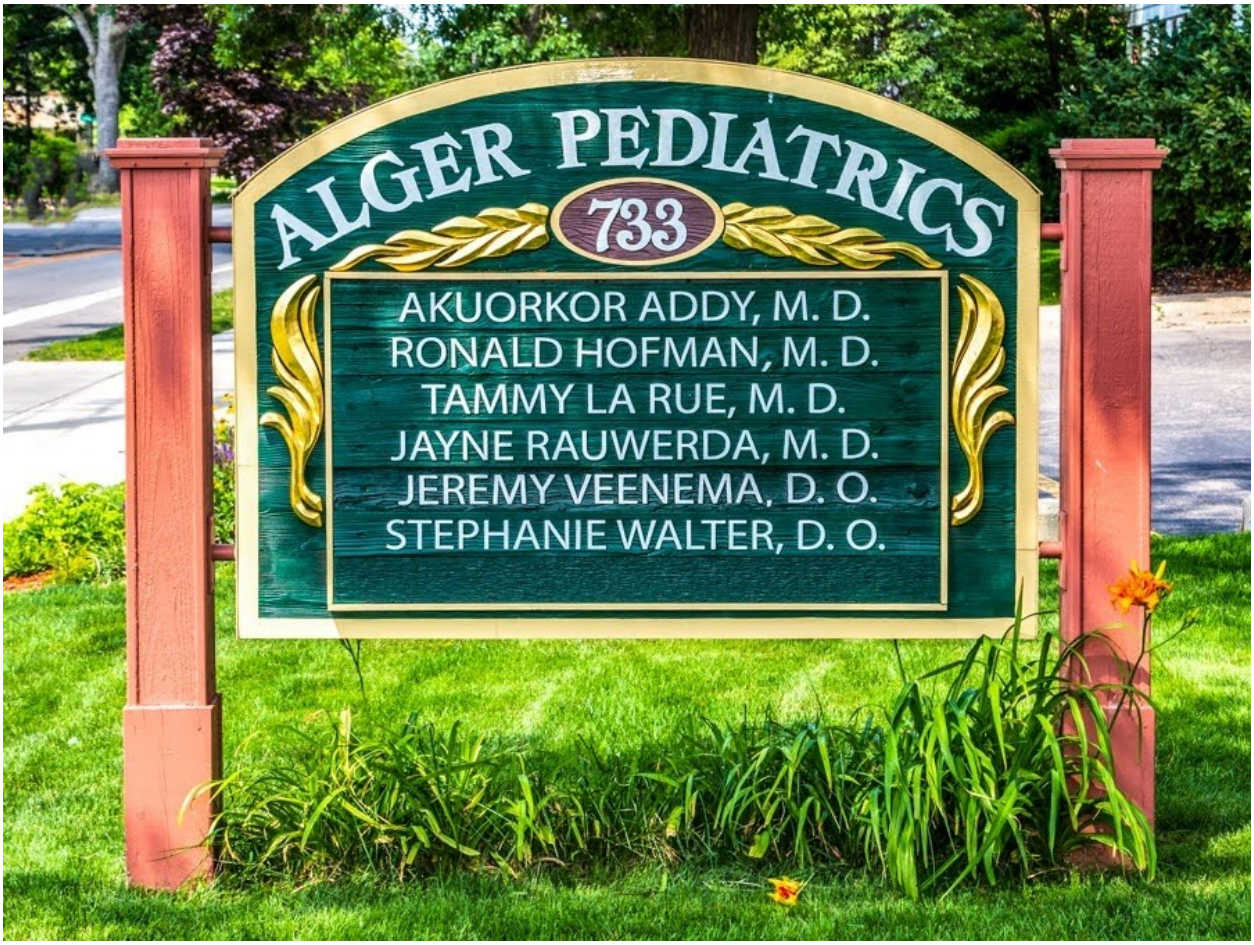
Dear parents,

We at Alger Pediatrics are pleased to be entrusted with the care of your children. As doctors and nurses, we will work with you to keep your children healthy through regular check-ups and immunizations.

However, illnesses and mishaps are inevitable. You will readily manage most of these events in the home setting. We have developed this book to help you with these problems. When an event occurs, we ask that you refer to this booklet. We are more than happy to augment this information when you call the office if this information does not suffice. 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 you to use this service only when necessary, but encourage you to use it when you are worried substantially. Calling in prescriptions should occur during office hours.

In life threatening situations, please use DeVos Children's Hospital children's ER at Spectrum Downtown.



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CHEST PAINS

There are many causes for chest pains. Some of these causes such as asthma or pneumonia may be serous. Other chest pains such as heartburn, muscle cramps, or sore ribs are not serious. Heart problems are a *rare* cause of chest pains in children.

WHEN TO CALL:

Immediately if:
-your child has a fever and is breathing faster than usual and has chest pain.
-breathing is labored
-there is 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 and develops chest pain.

During office hours:
-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 a bruise).
-your child has chest pain associated with irregular heartbeats.

WHAT TO DO: (Chest Pain Cont.)

-if your child develops chest pain while exercising have them stop and rest.
-if chest pain develops from a bruise, pain reliever can be given and an ice pack should be applied 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. An antacid (Maalox, Mylanta, Tums, etc.) may be given for pain relief.
-if you think your child is hyperventilating, place a paper bag over the child's nose and mouth and have them breath the air in and out of the bag, this will usually stop the hyperventilation within a few minutes.
-if your child is having chest pain you should check the heart rate (call if over 150 beats per minute.) and temperature (call if over 100.5*F or 38.0*C)

BREATHING PROBLEMS

Asthma and Wheezing

What is it?
Asthma involves recurrent attacks of wheezing and coughing, which may result in chest tightness, and shortness of breath.

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
-retractions (sinking in of chest) are present:
    -between the ribs
    -below the Adam's apple
    -above the collar bone
-severe wheezing is not improved within 20 minutes of when asthma medicines are given.
-you have other questions or concerns.

WHAT TO DO: (asthma/wheezing cont.)

-Give a dose of asthma medication. This could include:
-a nebulizer (breathing machine) treatment with Albuterol, Proventil or Ventolin.
-an inhaler treatment of Albuterol, Proventil or Ventolin in addition to any other inhalers your child usually uses
-oral (liquid or pills) of Albuterol, Proventil or Ventolin.
-Have your child rest until the breathing improves.

CROUP

What is it?
Croup is an upper respiratory infection, which causes a hoarse voice, barky (seal-like) cough, and often raspy breathing with labored breathing.

WHEN TO CALL:

Immediately if:
-if breathing is still labored after trying the things listed below
-lips are blue or dusky

During office hours if:
-your child has more than one croup episode or labored breathing during the day or night.
-the barky cough doesn't go away in 3 days.

WHAT TO DO: (croup cont.)

If your child has raspy, labored breathing:

FIRST-bring your child in the bathroom, close the doors, and run the shower on hot to create steam. Wait 15 minutes to see if the steam will end the raspy, labored breathing

SECOND-If it is cool outside (less than 60 degrees):-bring your child outdoors to breathe the cool air. If the raspy, labored breathing doesn't end within 15 minutes call the office.

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.-if your child is older than 6 months cough medicine can be given.

ADDITIONAL INFORMATION: (croup cont.)

-croup is caused by one of a number of viruses
-antibiotics are of no use in treating 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.

PNUEMONIA

What is it?
Pneumonia is an infection in the lung. Signs of pneumonia almost always include a prolonged cough and fever. Signs often include rapid breathing, shortness of breath and chest pain. Rattles in the chest or rattly breathing are not a sign of pneumonia.

WHEN TO CALL:

Immediately if:
-breathing is labored
-lips are blue or dusky
-chest pain is severe when not coughing
-your child is short of breath when not coughing

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
-coughing causes vomiting 3 times or more
-coughing spasms cause exhaustion or more than 1-hour sleep lost per night
-cough causes your child to miss more than 2 days of school
-you have other concerns or questions

WHAT TO DO: (Pneumonia cont.)

The treatment of pneumonia will often require antibiotics. Your doctor listening to the lungs can usually determine the presence of pneumonia. At times your doctor may order a chest x-ray to diagnose pneumonia.

Pneumonia is not and emergency unless there is labored breathing, the lips are bluish or dusky, there is chest pain when not coughing or there is shortness of breath when not coughing. A rattle in the chest is not a sign of pneumonia. (If mucous is rattling in the chest it is in the back of the throat or upper bronchial tubes and can be coughed up.)

If you suspect your child has pneumonia please contact the office during office hours.

ADDITIONAL INFORMATION: (pneumonia cont.)

-Pneumonia in most cases is treated with antibiotics at home
-A rattle in the chest is not a sign of pneumonia.
-RSV 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.

INGESTIONS: (Poisoning)

If your child has swallowed something you think may be harmful, call the Poison Control Center immediately.

If your child got something in the eye or on the skin that you think may be harmful, first rinse off eye or skin, then call the Poison Control.

The phone numbers for the Poison Control Center are as follows:

1-800-632-2727
1-800-764-7661
1-800-POISON-1

ALLERGIES

What are they?

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

WHEN TO CALL:

-During office hours when the treatments listed below don't help or if you wish to try a prescription medicine for your child's allergies.

-if you have questions or concerns

WHAT TO DO:

-Allergy medicine:

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: Clemestine, Dimetapp, Benadryl, Dimetane, and Chlortrimeton. The main side effect of these medications is drowsiness. The drowsiness usually wears off within a week if the medication is used regularly. Prescription medications include oral medications, nose sprays and eye drops.

-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.

ADDITIONAL INFORMATION: (Allergies)

-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 location where it is damp (many basements)

-call during office hours for additional information on prevention and treatment of allergies.

CROUP

See information within Breathing Problems section

ASTHMA

See information within Breathing Problems section

PNEUMONIA

See information within Breathing Problems section

COUGHS AND COLDS

COUGHS:

-Cough and Fever
See ***pneumonia*** in the Breathing Problems section.

-Barky or Raspy Cough
See ***croup*** in the Breathing Problems section.

-Cough with shortness of breath or wheezing
See ***asthma*** in the Breathing Problems section.

COLDS:

What is a cold?

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

WHEN TO CALL:

During regular office hours if:
-the cold lasts longer than 2 weeks
-your child has a fever of greater than 101* on three or more days
along with the cold
-if you have other questions

WHAT TO DO:(Cough & Colds Cont.)

For infants under 6 months of age:

We ***do not*** recommend cold medication for infants under 6 months of age because they may cause the baby's heart to beat irregularly.

Babies often do better with their colds if they have their head elevated during sleep. Elevate the head of the crib, or allow the baby to sleep in a 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, 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.

It may help to run a vaporizer or humidifier in the bedroom.

WHAT TO DO: (Cough & Colds Cont.

For children older than 6 months of age:

Cough suppressants can be used if the cough is very frequent or if it keeps the child awake. Cough suppressants are not needed for most colds during the day. All effective non-prescription cough medicines contain DM (dextromethorphan). There are many brands. Doses for cough medicine are on the labels. For children under 2 years of age, doses are as follows:

Weight of child	Dosage of medicine
20 lbs.	1/2 tsp.
30 lbs.	1 tsp.
40 lbs.	11/2 tsp.
6 to 8 years of age	2 tsp.
9 to 12 years of age	3 tsp.
13 to adult	4 tsp.

COUGHS-

Many cough medications include a decongestant and an antihistamine. Cough medication may cause either drowsiness or wakefulness. If your child is of school age it may be helpful to give a pure decongestant such as Sudafed, which may cause wakefulness but will not cause drowsiness.

-It is common for babies with colds to sound as if the mucous is rattling in their chest even to the point where it can be felt. This is *not* a sign of pneumonia or severe illness. It is a normal part of a cold.

COUGHS: (Cont.)

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

-the cold lasts longer than 2 weeks

-a fever of greater than 101* 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.

-it is normal for mucous to be both clear and 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.

FEVER

Fever is the body's response to various illnesses (usually infections). Temperatures 100*F (38*C) or above are considered fevers.

How to take a temperature:

Rectal temperatures should be taken on all infants (under 12mos.old)

Taking a Rectal temperature:

1.) Shake down the thermometer so that it is less than 98*F (37*C)
2.) Have your child lay stomach down on your lap
3.) Lubricate the end of the thermometer with Vaseline
4.) Place the thermometer in the rectum about an inch and hold it still for 2 minutes

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.

1.) Place the thermometer tip beside the tongue or inside the cheek
2.) Have your child hold the thermometer with their fingers while their mouth is shut
3.) Leave the thermometer in the mouth for 3 minutes

Taking an Axillary temperature (armpit)

1.) Place the tip of the thermometer under the armpit.
2.) Close the armpit by holding the elbow against the chest.
3.) Leave the thermometer in place for 4 minutes

Automated ear thermometer

These should not be used to take the temperature of children less than 12mos. old (see Rectal temp.) Follow the manufacture's instructions.

<u>WHEN TO CALL:</u> (Fever Cont.)

Immediately if:
-your child has a fever of 101*F (38.4*C) or more ***<u>and</u>*** your child is less than 3 months of age (unless your baby has had shots in the previous 48hrs.)
-your child has a fever over 105*F (40*C)
-your child has a fever over 101* and is crying inconsolably
-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
-your child has a fever and is 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.

During office hours if:
-your child is less than 2 years old ***and*** has a fever between 104* and 105*
-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

WHAT TO DO: (fever cont.)

The object of treating children when they have a fever is to try to make them comfortable. The fever itself does ***no*** harm.

Dress- 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.

Medications- 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
-acetaminophen (Tylenol, Tempra, etc) or Ibuprofen
(Motrin or Advil) can be used. ***Do not*** give Aspirin to
control fever

MEDICATION DOSE BY WEIGHT: (Fever Cont.)

BRAND	STRENGTH	6-12LBS	12-17LBS	17-23LB	23-30LB
Acetaminophen Drops (Tylenol, Tempra, Panadol, Liquiprin)	80mg per dropper	½ dropper	1 dropper	11/2 dropper	2 droppers
Acetaminophen Syrup	160mg tsp.	¼ tsp.	½ tsp.	¾ tsp.	1 tsp.
Ibuprofen Infant Drops (Advil, Motrin)		½ dropper	1 dropper	11/2 dropper	2 dropper
Ibuprofen Syrup		¼ tsp.	½ tsp.	¾ tsp.	1 tsp.

MEDICATION DOSE BY AGE

BRAND	STRENGTH	2-3Yrs	4-5Yrs	6-8Yrs	9-11Yrs	12+Yrs
Acetaminophen Syrup (Tylenol, Tempra)	160mg per tsp	1 tsp.	11/2 tsp.	2 tsp.	21/2 tsp.	4 tsp.
Acetaminophen Chewables	80mg tabs	2 tab	3 tab	4 tab	6 tab	8 tab
Acetaminophen Junior	160mg tabs	NA	NA	2 tab	3 tab	4 tab
Adult Acetaminophen	325mg tabs	NA	NA	1 tab	11/2 tab	2 tab
Ibuprofen Syrup	100mg per tsp	1 tsp.	11/2 tsp.	2 tsp.	3 tsp	4 tsp
Ibuprofen Chewables	100mg tabs	1 tab	1/12 tab	2 tab	3 tab	4 tab
Adult Ibuprofen	200mg tabs	NA	NA	1 tab	11/2 tab	2 tab

ADDITIONAL INFORMATION: (Fever Cont.)

-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 can be used if your child says he/she 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.

PINK EYE

What is it?

"Pink eye" is a broad term used to describe several different conditions in the eye characterized by varying degrees of injection (bloodshot appearance), excessive tearing, itchy sensation and a mucous discharge (yellow mucous, "matter"). An eye discharge can be a little yellow crusting at the corners of the eye to a large amount of yellow mucous which may even cause the eyes to be stuck shut.

These symptoms can be caused by a variety of conditions. An eye irritant such as shampoo may cause injection and itching although the symptoms are generally mild and brief. There may be some discharge in the eye when the child has a bad cold or a sinus infection although this symptom is really not an eye infection. A young infant may have a blocked tear duct which causes the collection of tears and sometimes some yellow mucous. A bacterial infection of the lining of the eye (conjunctivitis) may cause all four of the symptoms to be quite prominent, although the child is not otherwise ill. True "pink eye" generally refers to a virus infection of the eye which is quite contagious. Symptoms of a virus infection are similar to that of a bacterial infection although generally milder and the infection will clear up without treatment. Allergies such as hay fever or an allergy to cats or dogs may cause the eyes to be very itchy and watery and sometimes even have a discharge.

WHAT TO DO:

Watch the child for other symptoms of illness such as fever or redness around the eye. Clear the "matter" from around the eye with a clean, moist cotton ball. Use of over the counter eye drops is generally not helpful if there is an eye infection. Sometimes in the case of itchy, allergic eyes over the counter drops such as Naphcon may be helpful.

WHEN TO CALL: (pink eye cont.)

Immediately if:
-your child is very uncomfortable and eye is very injected and draining.
-symptoms are accompanied by significant fever and redness of the eyelid and area surrounding the eye.
-your child has cold sore type blisters around the eye
-your child has a significant change in vision

WHEN TO CALL:

During office hours:
-if your child's eye symptoms are persistent, and not responding to cleansing the eye. Prescription treatment such as antibiotic eye drops will depend on the situation and the symptoms. Mild problems may not need specific treatment. If your child's eye symptoms are due to a respiratory infection, he/she may need to be seen to check for a possible ear or sinus infection. Call back if treatments prescribed over the phone are not helpful in several days.

THRUSH

What is it?
Thrush is a yeast infection in the mouth usually occurring in babies in the first few months of life. Thrush causes white spots and patches on the tongue, cheeks and palate that cannot be wiped away. Unless thrush is very widespread, it does not seem to cause the baby much discomfort. It is never serious. Your baby is more likely to get this infection if he/she has been on an antibiotic. There may be a yeast rash in the diaper area accompanying the thrush. This will be a red, peeling rash with satellite polka dot like spots on the edges.

WHEN TO CALL:

During office hours:
-if your child has the white spots on tongue, cheek or palate that cannot be wiped away
-if a nursing mother is developing an increase in breast tenderness along with white spots in the mouth

TREATMENT:

Thrush is usually treated by a medication (Nystatin), which works by contact with the spots. It generally takes several days to see improvement. Call back in a week or so if there does not seem to be response to treatment as there are other treatments available.

SORE THROATS

When older children have a sore throat they will usually complain of a sore throat or trouble swallowing. Ear pain from the throat is common. Infants and younger children may just be fretful and not want to swallow. Most sore throats are caused by viruses, often as part of a cold. Sometimes a sore throat can be due to dryness or irritation, such as coughing, or a lesion in the throat such as a canker sore.

About 10% of sore throats will be due to a strep bacteria infection and will need to be treated with antibiotics. If a strep infection includes a rash it is called "scarlet fever". Very young children do not often get "Strep throat". The sore throat of Strep will improve without treatment but accurate diagnosis (by culture) and completion of treatment once begun is important to prevent the complications of Strep, which include Rheumatic fever.

While examination of the pharynx and tonsil area will provide clues as to the cause of the sore throat, it is not totally reliable and a culture needs to be done. Presence of cold symptoms (runny nose and cough) is often an indication that the sore throat is due to a virus. A high fever and other symptoms such as headache and stomachache in addition to a sore throat may suggest that it is due to strep.

WHEN TO CALL: (sore throat cont.)

During office hours:
-if child is experiencing symptoms of sore throat
*The nurse will sometimes schedule a time for a culture to be done depending on symptoms accompanying the sore throat.

WHAT TO DO:

Children can be offered pain relievers, such as Tylenol or Motrin, and liquids that are not likely to increase irritation of the throat (i.e. Avoid citrus juices etc.) Throat lozenges or just hard candy may be soothing to older children.

NOSE BLEEDS (Epistaxis)

Nosebleeds are very common throughout childhood. They are usually caused by dryness of the nasal lining plus the normal rubbing and picking that all children do when the nose becomes blocked or irritated. Vigorous nose blowing can also cause bleeding. All of these behaviors are increased in children with nasal allergies. Once the nose bleeds, the scar protecting the injured area can more easily be interrupted and repeated bleeding from the same sore spot often occurs. Infrequently, repeated nosebleeds may occur in children who have a tendency to bleed easily. Once in a while there is a little blood vessel that is unusually close to the surface of the nose lining and may cause repeated, more serious, bleeding. Usually, the bleeding is from only one of the nostrils and it is important to notice if it is from both sides.

WHAT TO DO:

Most nosebleeds can be stopped easily at home. The child needs to sit up and lean forward so he/she does not have to swallow the blood. He/she should spit out any blood that drains into his/her throat. At the beginning of treatment the child can blow his/her nose to free any debris and large clots that may interfere with the applying of pressure. Thereafter, the nose should **not** be blown. Tightly pinch the soft parts of the nose against the center wall for 10 minutes. Don't release the pressure until 10 minutes are up. (Pinching should be in the same area, as you would blow the nose, not on the bridge of the nose. If the bleeding continues, you may not be pressing on the right spot. Your child may swallow some blood leading to vomiting due to irritation of the stomach. Once the nosebleed stops it is very important to avoid trauma to the injured area.

TREATMENT: (nose bleeds cont.)

- Small amounts of petroleum jelly can be applied twice each day to the lower part of the central wall of the nose.
-increasing the humidity in the room by the use of a humidifier for a few days may be helpful.
-saline nasal sprays that moisturize the nose may also help.
-treatment of nasal allergies may prevent recurrent nosebleeds
*Your child should be discouraged from blowing and picking the nose as much as possible.

Common mistakes in treating nosebleeds:

-using ice or a cold washcloth does not generally help a nosebleed
-pinching the top, bony part of the nose does not stop a nosebleed
-**NOTHING** should be packed into the nose at home, because when it is removed bleeding will usually reoccur.

WHEN TO CALL:

Immediately:
-if fairly significant bleeding does not stop after 20 minutes of direct pressure.
-if child faints or appears extremely dizzy due to loss of large amount of blood.

During office hours:
-if nosebleeds seem to be recurrent and preventative measures are not helping.
-if you have any other concerns

EAR INFECTIONS

An ear infection is a bacterial infection of the space behind the eardrum called the middle ear. Most children (75%) will have one or more ear infections and over 25% of these will have repeated ear infections. In 5-10% of children, the pressure in the middle ear causes the eardrum to rupture and drain a yellow or cloudy fluid. This tear usually heals well.

An ear infection often follows a cold which causes a dysfunction of the Eustachian tube which connects the middle ear to the back of the throat. This tube serves to equalize air pressure and drain fluid from the middle ear space. This tube is short and narrow in young children and is easily blocked, allowing fluid and bacteria to build up in the middle ear space causing an ear infection. The peak age is from 6 months to 2 years. As to be expected, ear infections are more common in the fall and winter months, correlating to respiratory virus season. It has little to do with not covering the ears.

SIGNS OF AN EAR INFECTION

The child has often had a cold or upper respiratory infection and then develops one or more signs of an ear infection.

1. Ear pain
2. Fever
3. Irritability
4. Diminished hearing
5. "Popping" sound in ears
6. Ears feel "plugged"
7. Poor appetite or crying while trying to suck on a bottle or breast.
8. Dizziness
9. Night Waking
10. Ear drainage

TREATMENT: (Ear infections cont.)

*If the following treatment is carried out, your child should do fine. Permanent damage to the ear or hearing is very rare.

Pain Relief:
Acetaminophen or Ibuprofen may help ease the earache. A heating pad may also provide some relief. Warm sweet oil or olive oil may be instilled into the ear canal to help ease the pain. However, oil should be avoided if the ear is draining from a ruptured eardrum because it will enter the middle ear.

Antibiotics:
We usually prescribe a 10-day course of antibiotics to treat the ear infection. Antibiotics kill the bacteria causing the ear infection but the ear may not return to its fluid free state for several weeks. Sometimes the bacteria causing the infection are resistant to the initial antibiotic. If your child's fever or pain does not improve within 48hrs on the first antibiotic a second antibiotic is prescribed for 10 days.
*In order to prevent reoccurrence it is very important for your child to take the medication as often and as long as prescribed even if they are starting to feel better.
*It is important that an examination of the ears precede treatment. Calling out antibiotics based on symptoms only makes for overuse of antibiotics and misdiagnosis of other causes of ear pain.

Decongestants and Antihistamines:
These are usually of no benefit in clearing fluid from the middle ear.

Tympanostomy Tubes:
These may be indicated if a child has had chronic ear infections unresponsive to antibiotics, or has fluid in the middle ear space for several months accompanied by a decrease in hearing. The placement of tympanostomy tubes is not without risks; therefore we do not quickly refer children for this procedure unless it is really necessary.

FOLLOW-UP VISIT: (Ear infections cont.)

Be sure to make an appointment to bring your child back in 3-4 weeks for a recheck of his or her ears. This appointment is important in determining if the ear infection is cleared up and to assess whether the middle ear is free from fluid. We may also want to test your child's hearing.

PREVENTION: (ear infections cont.)

In addition to simply being young, there are several factors that can place some children at higher risk for ear infections. Trying to change them may prevent some of these infections.

1. Protect your child from second hand tobacco smoke because passive smoking increases the frequency and severity of ear infections.
2. Day care centers often expose children to more colds, leading to more ear infections. Try to delay the use of large day care centers during your child's first year as much as possible by using a sitter in your home or a small home-based daycare.
3. Breastfeed your baby during the first 6-12 months of age.
4. Avoid bottle propping. Feeding in the horizontal position can cause a backflow of formula and other secretions into the Eustachian tube.

WHEN TO CALL:

Immediately if:
-your child develops a stiff neck or severe headache.
-your child starts acting very sick

During office hours if:
-the fever or pain is not gone after your child has taken the antibiotic for 48 hrs.
-you feel your child is getting worse

RASHES

HIVES:

Hives are raised bumps or welts with pale centers that are very itchy. They vary in size from ½ inch to several inches across.

Widespread hives can be caused by an allergic reaction to drugs, especially antibiotics, foods, insect bites or a host of other substances. However90% of the time the cause is not found. Localized hives are usually due to skin contact with plants, pollen, or food etc. Localized hives are not caused by drugs, infections, or swallowed foods. More than 10% of children get hives. Hives are **not** contagious.

EXPECTED COURSE:

Hives come and go for 3-4 days and then they disappear.

WHAT TO DO:

An antihistamine, like Benadryl, one of the most commonly used

medications, is the best medication for hives. It doesn't cure the hives but will reduce their number and relieve itching. You can obtain it without a prescription. The main side effect is drowsiness. Give Benedryl four times daily in the following dosages. Give the medication regularly until you are sure that the hives are completely gone. Most hives will linger an average of 4-6 days.

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:(Rashes cont.)

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:

Immediately if:
-breathing or swallowing become difficult
-your child starts acting very sick

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

CHICKEN POX:

Chicken pox is caused by exposure to a highly contagious virus. The incubation period is usually 10-14 days but can be as early as 10 days or as late as 21 days. It causes multiple small red bumps that progress to water blisters then cloudy blisters, and finally dried brown crusts. There are repeated crops of these for 4-5 days. The rash usually starts on the head and back and spreads. Some ulcers (sores) develop in the mouth, eyelids and genital area. There is usually fever unless the rash is mild.

EXPECTED COURSE: (chickenpox cont.)

New rashes continue to crop up daily for 4-5 days. The fever is usually highest on the third or fourth day. Your child will start feeling better once the fever stops and they stop getting new bumps. Children rarely get permanent scars from chicken pox unless the sores become infected or they repeatedly pick off the scabs. One attack gives your child lifelong immunity. Chicken pox is usually a mild uncomplicated illness in children but it can be severe or even fatal. A chicken pox vaccine is available for preventing chicken pox in children over 1 year of age. **It is now required by the state of Michigan for your child to be vaccinated against chicken pox before attending school.**

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 may also provide relief from itching.

FEVER: Tylenol may be given for fever. Aspirin should be avoided in children and adolescents with chicken pox because of the link with Reye's syndrome.

WHAT TO DO: (Chicken pox cont.)

SORE MOUTH: This may effect eating. Encourage cold fluids. Offer a soft, bland diet and avoid salty foods and citrus fruits or juice. For infants using a cup rather than a bottle may help. 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.

PREVENTION OF INFECTED SORES: **Trim your child's finger nails short. For young babies who are scratching badly you may want to cover their hands with cotton socks or mittens.**

CONTAGIOUSNESS: **Children with chicken pox are contagious until all the sores have crusted over, usually 6-7 days after the rash begins. If you have to bring your child to the office during that time, let the office staff know and arrange with them to enter through the back door so that other children are not exposed.**

WHEN TO CALL: (chickenpox cont.)

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

During office hours if:
-fever persists for more than 4 days
-itching is severe and doesn't respond to treatment
-you have other questions or concerns

DIAPER RASH: Any rash in the skin area covered by a diaper. Almost every child gets a diaper rash.

CAUSES: Most diaper rashes are due to prolonged contact with moisture, bacteria, and ammonia. Diarrhea also causes a diaper rash as well as yeast. Disposable and cloth diapers equally cause diaper rash.

EXPECTED COURSE: Most diaper rashes usually improve in 3 days with proper treatment. For rashes that do not improve, suspect a yeast infection, which causes a bright red peeling rash, with satellite, polka dot type spots on the edge. If your child with thrush develops a diaper rash, you could suspect a yeast infection.

HOME CARE: Change your baby's diapers frequently. Leave your baby's bottom exposed to the air as much as possible each day to keep it dry. Wash your baby's skin after each bowel movement. Apply an ointment like Desitin to protect the skin from contact with the irritants. Avoid talcum powder because of the risk of pneumonia if your baby inhales it.

WHEN TO CALL:

Immediately if:
-it looks infected-yellow pus, pimples, blisters, spreading redness, red streaks
-your child starts acting very sick

During office hours if:
-rash is not better after 3 days or you suspect a yeast infection

POISON IVY: Caused by the oil of the 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 and shaped like streaks or patches in exposed body surfaces. These appear 1-2 days after the child has been exposed and usually lasts about 2 weeks.

PREVENTION: This is the best approach. Teach your older children to recognize and avoid all plants with three large shiny leaves. Wear long pants or socks when walking through woods that may contain poison ivy.

CONTAGIOUSNESS: The 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.

WHAT TO DO:

Steroid creams, if applied early, can reduce itching. If itching persists, give Benadryl orally every 6 hours as needed.

WHEN TO CALL:

Immediately if:
-the rash looks infected (yellow pus, spreading redness, or red streaks)

WHEN TO CALL: (poison-ivy cont.)

During office hours if:
-the face, eyes or lips become involved
-the itching becomes severe even with treatment
-poison ivy lasts longer than 2 weeks
-you have other questions or concerns
-large amount of the body's surface area is involved

IMPETIGO: Superficial infection of the skin causing an infected sore. The sore usually begins as a small red bump that changes to cloudy blisters, then pimples and finally sores. They increase in size and are covered by a soft yellow-brown scab. Impetigo usually spreads and increases in number from scratching and picking at the initial sore.

CAUSE: Impetigo is caused by streptococcus or staphylococcus bacteria. Any time the skin is broken by cuts, excessive itching, abrasions and insect bites, it becomes susceptible to infection. It is more common in the summer months. It usually involves areas such as the face, around the nose, mouth, buttocks or extremities. These bacteria often are harbored inside the nose or anus.

CONTAGIOUSNESS: Impetigo is quite contagious so be certain that other people in the family do not use your child's towel or washcloth. Keep your child out of school or daycare until he or she has been on oral antibiotics for 24 hours. If the impetigo is mild and is being treated with an antibiotic ointment, your child can continue to attend daycare or school with a covering over the area.

WHAT TO DO: (impetigo cont.)

A mild case of impetigo often responds to an antibiotic cream, Bactroban, which is applied to the area 3 times a day for 10 days. The more serious and widespread cases of impetigo will need an oral antibiotic. Be sure to give it as instructed until it is finished. Discourage your child from touching or picking at the sore and touching another part of the skin to prevent spread.

WHEN TO CALL:

Immediately if:
-spreading redness or red streaks appear
-your child starts to act very sick
During office hours if:
-the impetigo increases in size and number after 48 hours of treatment
-a fever or sore throat develops
-it is not healed in about a week
-you have other questions or concerns

RINGWORM: A ring-shaped pink patch with a scaly raised border. The ring slowly increases in size and has a clear center. It may be mildly itchy. It is cause by a fungus infection of the skin.

CONTAGIOUSNESS: 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 from the pharmacy (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

RINGWORM OF THE SCALP: 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**.** **Often pus filled sores that worsen in children of African descent is ringworm.**

CAUSE: **Ringworm of the scalp is caused by a fungus. Over 90% of cases are cause by transmission of the fungus from other children who are infected. 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.**

EXPECTED COURSE: **With proper treatment, hair re-growth occurs but may take several months. Ringworm of the scalp is not dangerous. Some children develop a lesion which is a tender swelling that can drain pus, and is an allergic reaction to the fungus. They 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:

Griseofulvin taken orally is the main treatment. It is given for 6-8 weeks. Griseofulvin is best absorbed if taken with fatty foods like milk or ice cream. Antifungal creams are not effectiveAntifungal shampoo- using antifungal shampoo containing selenium sulfide (e.g. Selsun Blue) makes your child less contagious.

WHEN TO CALL:(Ringworm of the scalp cont.)

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

HEAD LICE

What are they?
-Nits (white eggs) that are firmly attached to hairs and are numerous
-1/16 inch long gray bugs (lice) that are difficult to see and move quickly
-Itchy scalp with a rash
-The favorite areas are the back of the neck and above the ears

CAUSE: Lice only infect human beings and anyone can be infected. They are not caused by lack of hygiene. Lice can be spread quickly through the use of hats, combs or brushes of infected persons. Having close contact with such a person may also spread lice. With effective treatment all lice and nits will be killed. However, lice are now becoming resistant to the regular anti-lice shampoo.
Do not mistake simple flakes of dandruff for nits. Nits are more adherent to the hair shafts.

WHAT TO DO:

Anti-lice shampoo: (e.g. Nix) this kills lice and nits.

Apply the anti-lice shampoo to the washed and toweled 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". To loosen the nits from the hair shaft, use a mixture of half vinegar and half water applied for 30 minutes under a towel wrap.

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

CLEANING THE HOUSE: **Vacuum your child's room. Soak your child's combs and brushes for about 1 hour in a solution made from anti-lice shampoo. 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.**

WHEN TO CALL: (Head Lice cont.)

During office hours:
-the rash 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

PINWORMS

What are they?
They are white, thin worms that are about ¼ inch long. They are usually seen in the anal and buttock area 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.

CAUSE: **Infection is caused by swallowing pinworm eggs. *No matter how clean you are your child can still get pinworms. Ten percent of us carry pinworms without symptoms.**

WHAT TO DO:

If your child complains of anal itching 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.

PREVENTION: (pinworms cont.)

1. **Have your child scrub their hands before meals and after each use of the toilet.**
2. **Vacuum or wet mop your child's room once a week because any eggs scattered on the floor are infectious for 1-2 weeks.**
3. **Machine wash your child's bedding or clothing at regular temperature. This will kill any eggs present.**

TREATMENT:

If worms are seen the doctor will prescribe a medication to kill the pinworms. This is generally not an emergency. Call during regular office hours for treatment.

WHEN TO CALL:

During office hours:
-the skin around the anus becomes red or painful (may be due to streptococcus bacteria and not pinworms)
-the anal itching is not resolved within 1 week after treatment
-you have other questions or concerns

FREQUENCY OF URINATION

What is it?

Your child suddenly starts urinating every 10-30 minutes and as often as 30-40 times a day. Small amounts of urine are passed each time without pain.

CAUSES: Frequency usually can be due to some emotional stress or can be due to urinary tract infection but that will likely include painful urination. Diabetics can present with frequency over a short period of time (one to two weeks). It is usually accompanied by increased thirst, increased appetite and weight loss. Try not to punish your child or tease as that may worsen the situation. The frequency is generally harmless and eventually resolves in a few weeks or months.

WHAT TO DO:

1. Bring a fresh urine specimen to the office during office hours to insure there are no other problems.
2. Reassure your child that they are physically healthy and that they need to learn to wait longer to urinate.
3. Help your child relax especially in a child over 8 years of age.
4. Try to figure out what may be stressing your child.
5. Ask the staff at your child's school or daycare to help reduce any tensions. These may include restrictions on bathroom use.
6. Try to ignore
7. Avoid bubble baths and other irritants like bath water containing hair shampoo, especially in girls.

WHEN TO CALL: (frequency cont.)

During office hours if:
-the frequency is not resolved in 1 month
-there's pain or burning with the frequency
-your child begins to wet his/herself during the day
-your child begins to drink excessive fluids
-you have other question or concerns

DYSURIA

What is it?

Burning or stinging when passing urine. Urgency and frequency may be present.

CAUSE: The most common cause in young girls is an irritation of the vulva and the opening of the urethra. This is caused by bubble baths, shampoo or soap that was left on the genital area. Occasionally, it is due to poor cleaning of the genital area after a bowel movement. This type of irritation occurs exclusively before puberty.

WHAT TO DO:

1. You should bring in a midstream, clean catch urine specimen to the office within one hour of voiding to make sure there is no infection.
2. Sitz baths with baking soda or vinegar should alleviate symptoms in 24-48 hours.
3. Lubricating the urethra with Vaseline after bathing or urinating will relieve much of the symptoms.

PREVENTION: (dysuria cont.)

1. Avoid bubble baths before puberty.
2. Avoid putting soap or shampoo into bath water (shampoo at end)
3. Teach your child to wipe herself correctly (front to back) especially after a bowel movement
4. Use cotton underwear

WHEN TO CALL:

Immediately if:
-the pain with urination becomes severe
-any abdominal pain occurs
-your child starts acting very sick

During office hours if:
-the pain continues for more than 24 hours after sitz baths
-your child develops a fever
-you have other questions or concerns

HEMATURIA (Blood in the urine)

What is it?

Hematuria is the appearance of blood in the urine. It is one of the most frightening signs that occur to parents and patients even though it may not be due to a serious disease. The presence of blood in the urine is in itself not painful.

The blood may originate from the kidney in which case it is generally brown or coca-cola colored or from the bladder and urethra in which case the urine is red or pink and may contain clots. Red urine does not necessarily mean that it contains blood. The urine may be colored red by substances other than blood. For example:

1. Dyes used for coloring candy
2. The natural occurring pigments of berries
3. Phenolphthalein, used in laxative preparations
4. Drugs such as antibiotics like methicillin.
5. *Newborns may have a pinkish color to their urine as a result of a large amount of uric acid excretion.

CAUSE: Since the most common cause of hematuria in children is a urinary tract infection, the first step is to check the urine for infection. You should bring to the office a midstream, clean-catch urine sample that is less than one hour old.
Other causes include:
-Viral illness like an adenovirus
-Complication of recent strep throat or impetigo
-Kidney stones
-Blunt injury to the abdomen
-Drugs like aspirin
-Sickle cell disease or trait
-Menstruation

WHEN TO CALL: (hematuria cont.)

Immediately if:
-there is a painful flank and abdominal pain
-back pain occurs
-it occurs 1-3 weeks after an episode of Strep throat or impetigo
-there is associated puffy eyelids, your child is passing only very small amounts of urine and has a headache.
-recent history of blunt injury to abdomen
-associated with rash especially on the legs or buttocks
-your child starts acting very sick

During office hours if:
-your child develops a fever
-your child has hematuria without the above association
-you have other questions or concerns

CUTS AND SCRATCHES

Cuts, which need stitches, are deep and leave the skin edges separated. Another general rule of thumb is that cuts need stitches if they are longer than ½ inch (1/4 inch on the face). 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. Generally, the 8 hours still allows plenty of time to repair the wound. Rushing to the emergency room is usually unnecessary. We are happy to repair most cuts in our office during regular hours. You may call us in the evening to find a referral for repair.

WHEN TO CALL:

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

During office hours if:
-your child has not had a Tetanus shot in more than 10 years (5 years for dirty cuts). Most children will have had several tetanus shots (DPT) during their first few years, including one at 4-5 years.
-the cut looks infected (yellow pus, spreading redness, red streaks)
-pain, redness or swelling increased after 48 hours

HOME CARE 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. Do **not** clean the wound with Peroxide.

SUNBURN

Symptoms of sunburn usually appear 2-4 hours after the sun has already done its damage. The peak symptoms of 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, this is a good time to teach your children to make a habit of using sunscreen and avoiding sun exposure during the peak hours of the day (generally from 10am to 3pm). 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 sunscreens, protective clothing and a hat with a brim if your infant must be outside during peak sun hours.

HOME TREATMENT FOR SUNBURN:
-acetaminophen or ibuprofen started early and continued for 48 hours can reduce discomfort
-nonprescription hydrocortisone creams or moisturizing creams applied three ties 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

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 of 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.

If a honeybee stung your child, you may see a small black stinger in the bite. Remove it by scraping it off. Applying ice may reduce the swelling. Use of an antihistamine (Benedryl) may also help limit swelling. You may give your child ibuprofen or Tylenol for pain.

WHEN TO CALL:

Immediately if:
-breathing or swallowing is difficult
-hives are present extensive hives are present
-there are 10 or more stings
-a sting occurs in the mouth

During office hours if:
-the swelling continues to spread after 24 hours
-you have other questions or concerns

ITCHY INSECT BITES (Mosquitoes etc.)

Bites from mosquitoes and other biting insects can cause itchy, red bumps, which can vary in size from a small dot to more than 1 inch. Mosquito bites near the eye can often cause a large swelling. Some children ten 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 calamine lotion or baking soda solution. If the itching is severe, a nonprescription hydrocortisone cream can be used. Benadryl (given by mouth) will help decrease the itching, but may make your child feel sleepy.

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.

TICK BITES

A tick is a small brown insect that attaches to the skin and suck 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. 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 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 a knife blade or 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.

*Lyme disease is **very rare** in Central and Southern Michigan. If your child was bit by a tick in Upper Michigan, in Lower Michigan (north of Traverse City) or out of state, Lyme disease may be a concern.

FUSSY BABY

Infants under four months of age often cry for what seems to be and extended period of time. It is necessary to call the office if:

1. The child is under 2 months of age and has a rectal temperature of >100.5
2. The child seems lethargic, pale or won't effectively nurse or is excessively regurgitating.
3. The child cries for longer than three hours with no response to comforting techniques.

THINGS TO THINK OF:

-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.)

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

COMFORTING TECHNIQUES: (fussy baby cont.)

1. Swaddling (inhibits innate startle responses)
2. Massage of the abdomen
3. Placement on your chest or in an infant swing
4. A stroller or car ride
5. Placement in a car seat on a running washing machine secured by attending parent
6. Holding as a football, face down while securely supported by hand on chest and on the back.
7. A pacifier
8. Singing
9. Gently humming in contact with baby's cheek
10. 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. However, we do not object to the use of Simethicone drops even though our optimism about its great success is small.

VOMITING & DIARRHEA

DIARRHEA:

Most diarrhea illnesses are caused by infections. More commonly, episodic diarrhea is caused by viruses for which there are no specific treatment that will lessen the duration of the illness. Children under three will often get Rotavirus in the months of January through April. Adenoviral diarrhea effects all ages and can occur throughout the year. Both can have vomiting as a component. Less commonly, bacteria (Salmonella, Shigella, E. Coli, Camphylobacter) can cause diarrhea. Generally, bacterial diarrhea is more toxic and often bloody. It is often from food poisoning **and this constitutes an emergency contact with our office**. Low- grade diarrhea (>3 stools per day) for >10 days may be a parasite requiring anti-parasitic treatment. The cramping of diarrhea is best managed by having the child sit on the toilet and allow gas/stool to be expelled.

*Diarrhea medications are generally not helpful and are not routinely recommended. Diarrhea will ultimately resolve on it's own.

VOMITING:

When vomiting is pernicious (multiple episodes in a short period of time) it is best to let the body and bowel rest for 3-6 hours. At any age (including teens and adults) the only re-hydrating solution recommended is an oral re-hydration solution like Pedialyte. Other liquids, like Gatorade, do not have adequate sodium and bicarbonate and are not generally recommended. Start with small volumes (1tsp. to 1 ounce) given relatively frequently (every 15-20 minutes.) If this amount stays down then you may increase the volume slightly. A dehydrating child will not turn Pedialyte down. If the child does not like the taste, they generally are not too dehydrated. Once vomiting has resolved, it is prudent to reintroduce bland solids (soups, toast, cereals) relatively soon (within 12-24 hours).

CONSTIPATION:

What is it?
Constipation generally refers to stools that are hard or difficult to pass.

Infants very commonly will not have stools daily, particularly those that are breast-fed. This does not constitute true constipation. However, if a child seems uncomfortable, rectal stimulation with a thermometer or a glycerin suppository is sometimes helpful. Grunting from a baby does not usually mean constipation. It is what they do to keep from spitting up.

WHAT TO DO: (constipation cont.)

If an infant has exceptionally hard stools, initial treatment might consist of prune juice (2-4oz.) or a mild stool softener. Older babies will tolerate Colace, Metamucil, or Milk of Magnesia orally (1-2 tsp. a day). In infants one tsp. of Maltsupex a day is an expensive treatment but very effective. In toddler years and older, stools that are large, hard and causing pain on passage can be effectively expelled with a Dulcolax suppository or a Fleets' enema. If an older child continues to have intermittent abdominal pain and "skid marks" in their underwear, they likely have chronic constipation and an appointment should be made. If a child at any age appears ill, loses appetite, has fever, has pain with urination, or is vomiting, they are **not** suffering from constipation.

ABDOMINAL PAIN:

There are many causes of abdominal pain. The two most common causes are diarrhea and constipation. Please refer to those sections.

WHEN TO CALL:

Immediately if:

-there are bloody stools or urine
-child is pale or sick looking
-child doubles over in pain when forced to walk
-child has pain that migrates away from the belly button, especially that which is in the back below the ribs or the lower abdomen on right or left side.
-child has pain in the testicles
-child has a bulge in the groin area
-child is unable to urinate or has frequent urination or painful urination
-child has had a recent blow or injury to the abdomen followed by vomiting and/or persistent pain
-child has persistent loss of appetite

*There is generally no specific medication that will alleviate abdominal pain. Usually, medications to relieve pain including antacids and histamine blockers (like Tagamet or Pepcid AC) are acceptable in older children if no other signs are present.

HEAD INJURIES

A child may develop signs from a head injury hours to days after the injury occurs.

WHEN TO CALL:

- Persistent vomiting: In many cases a child will vomit once or twice after a head injury. If the vomiting occurs more than twice or should it resume after it had ceased, notify us.

- Excessive drowsiness: Your child may be very tired from the experience following his/her head injury. However, you should be able to arouse the child as you would normally from a deep sleep.

- Eye problems: If one pupil (dark center of the eye) seems larger than the other, or the eyes do not move together appropriately, or if your child complains of "seeing double" notify us.

- Unsteady walking or difficult movements: Notify us if your child has any weakness, paralysis of an arm or leg, or coordination problems like stumbling.

- Confusion or memory loss.

- Bleeding or unusual drainage from ears or nose.

- Severe, persistent headache: which is not relieved by rest, ice, acetaminophen products or other typical relief practices and lasting more than 24 hours.

- Occurrence of a seizure or convulsion.

- Personality changes such as excessive irritability, striking out, aggressive behavior etc.

WHAT TO DO: (head injury cont.)

Avoid all sedatives and narcotics. Aspirin, Tylenol, Liquiprin, Tempra (acetaminophen products) may be given to relieve a headache. Keep the child on a clear liquid diet for the first 12 to 24 hours after a head injury in case the child vomits.

Check your child each hour for 4 hours after the head injury. Then check your child every 4 hours for a total of 24 hours. If your child has a loss of consciousness you should call the office.