

ACUTE ILLNESS MANAGEMENT BOOK

By Joseph Desiato MD

Community Pediatrics of Andover

Joseph Desiato MD

349 N. Main St.

Andover, Ma 01810

978-475-0300

If this is a life threatening event call 911.

Office phone number:

978-475-0300

Poison Control phone numbers:

1-800-222-1222

For Life Threatening Emergencies:

Dial 911

All information in this book is intended for informational purposes only. This is not a substitute for personal professional medical advice or treatment. Downloading this booklet does not establish a physician/patient relationship or any relationship with our staff. Please schedule an appointment with a physician to seek advice and treatment on a specific medical questions or conditions.

INITIAL REMARKS

While all children will become ill at some point or another, parents and older children and adolescents can help minimize some of the risk factors. Parents with children less than 4 months should attempt to decrease their risk of infections by limited exposure to sick people especially during the winter. If possible, this would include avoiding taking their infants to big enclosed places like malls, restaurants, department stores and supermarkets.

If possible, when children are placed in daycare consider a smaller daycare with a small number of children. If using a large commercial daycare, make sure the ratio of infants to care giver is no higher than 4 to 1, preferable 3 to 1. Toddlers should be separated from infants and older children. For toddlers the ratio should be no greater than 10 to 1.

Children should get regular check-ups and immunizations on time. Regular check-ups (Baby check/physicals) are scheduled as follows... a few days after discharge from the nursery, 2 weeks, 1 month, 2 months, 4 months, 6 months, 9 months, 12 months, 15 months, 18 months, 2 years and then **yearly physicals** after that. At the baby checks/physicals, a history is taken and an exam performed searching for acute or chronic problems in health, development or family issues. The object is to treat any problems that are occurring and to address problems before they develop.

Addressing problems before they develop include discussing issues of health from diet to safety to development issues to chronic medical problems. This encompasses screen labs at appropriate ages for illness (eg. anemia, lead poisoning in infant), screening questionnaires and the following growth graphs (for all ages). The physical also involves discussing and giving immunizations. While immunizations can occasionally have some minor side effects including fever, swelling at the site of the shot and short term irritability; Immunizations provide the most effective way of preventing many life threatening diseases including forms of meningitis, whooping cough and hepatitis.

One of the most avoidable dangers to children of all ages is smoking. The secondhand smoke infants and children inhale promote colds, ear infections, sinusitis, bronchitis and increases asthma attacks. Further, parents who smoke model this behavior to their children. This modeling promotes smoking in older children and

adolescents. Adolescents who smoke are subject to the same and even greater risks as previous noted.

Hand washing with soap and water or using Purell helps dramatically decrease the spread of disease. Please do this frequently and especially before pick up infants.

I tremendously enjoy taking care of children. I hope this acute illness book is helpful. If my staff or I can be of further help, please call.

Taking Your Child's Temperature

1. Always take your child's temperature when your child seems ill.
2. One may take the temperature axillary (under the arm) if the child is less than 8 years old, orally if older than 8 years old and rectally for infants less than 6 months. To take an axillary temperature, place glass thermometer in armpit and place arm at side, leave for 3 minutes then read. To take a rectal temperature, place lubricant on base of thermometer and insert 1/3 of the thermometer into the rectum, leave for 3 minutes. If using a digit thermometer just wait until it beeps instead of waiting 3 minutes. A Temporal Artery Thermometer temperature can be taken by moving the thermometer across the side of the forehead and can be used in babies/children over 6 month of age. The temperature reading is equivalent to a rectal temperature. A fever is ≥ 100 degrees axillary and ≥ 101 orally and ≥ 100.5 rectally.
3. When your child is ill he /she may not eat solids. Do not force your child to eat. It is important that he/she drinks fluids as much as can be tolerated. Small amounts of liquids frequently are less likely to cause nausea or vomiting. Using a straw to drink is often a treat, and encourages sipping. Experiment with different liquids and different flavors until you find one that the child will take and offer this to him/her frequently. The child will begin to eat solids again as he/she feels better.
4. If a child is given an antibiotic; please, finish the course of treatment even if the child feels better. Symptoms will improve long before the infection is eradicated.

BITES OR STINGS

Insect: Remove stinger, if present, with a scraping motion of the fingernail. Apply a cold compress.

Call the office if ...

1. Hives (a generalized raised red rash).
2. Mild difficult breathing or wheezing or "tightness " in chest, nose or throat.
3. Nausea or vomiting, and or collapse.

Call 911 if...

Severe difficulty breathing or collapse

Human or Animal: Wash with clean water and soap. (Follow **Cuts, Scrapes and Bleeding** instructions).

Call office if...

1. Unknown dog or cat or if it is a wild animal.
2. Increasing redness or pain at the site of the bite over the next 24 hours.

*Protection against tetanus should be considered whenever the skin is broken, if last tetanus vaccine was greater than 5 years ago.

BLEEDING (See **Cuts, Scrapes and Bleeding**)

BRUISES

Rest injured part. Apply cold compresses using cloth and crushed ice for 20 minutes (do not apply ice next to skin but rather with a barrier like a plastic bag). If skin is broken, treat as a cut.

BURNS AND SCALDS

***Burns to limited extent:** If caused by heat— Minor burns to extremities may be immersed in cold water. For minor burns on the trunk, apply an ice bag or cold wet pack. Cooling must be continued until pain disappears, sometimes 20-30 minutes. Non-adhesive dressings such as a Telfa pad should be used, if available. Do not break blisters.

If caused by chemicals— Wash burned area thoroughly with water for at least 30 minutes.

Call the office if...

1. Blistering.
2. Chemical burn.

Extensive Burns: Keep patient in flat position. Remove clothing from burned area. If adherent: however, leave alone. Cover with clean cloth. Keep patient warm. **Call 911.**

Note: Do not use ointments, greases, powder, etc. Electric burns with shock may require artificial respiration. Pull victim away with a non conductive material. Do not use bare hands.

Chickenpox (Varicella)

Chickenpox is a very contagious viral infection which usually lasts 5-7 days. The incubation period is 10-21 days from time of contact with a contagious person. Chickenpox is characterized by a rash of itchy, red bumps that develop into a clear then yellow-colored water blister. These blisters eventually scab over. Chickenpox is contagious from the day before the lesions break out until they are all scabbed over. Once all the blisters have crusted over, the child can go back to school. If you or your child has had chickenpox before, it is extremely unlikely that he/she will get it again. If your child has had the initial vaccine, their chance of getting Chickenpox is about 10% and the case is usually much milder. If your child has had the booster the chance of getting the Chickenpox is about 1-2%.

Treatment:

Since there is no cure for most viral infections, the disease must run its course. However, there are treatments that can be done to make your child more comfortable. The best treatment for itching is Benadryl plus a cool bath every few hour for the first few days. Fever and aches can be treated with Tylenol, (acetaminophen) or Motrin (ibuprofen) but avoid aspirin because of its association with Reye's syndrome following Chickenpox.

Call office...

If you think your child has Chickenpox.

COMMON COLD

A "cold" is an infection in the upper respiratory passages (nose and throat) caused by a virus.

The symptoms of a cold include one or more of the following: running or "stopped-up" nose, sore throat, hoarseness, "dry" cough (producing little or no "phlegm" or sputum), fatigue, and sometimes generalized aches.

Colds last from 3 to 14 days, usually with a gradual one to two day onset, followed by full-blown symptoms. Antibiotics including Penicillin are of no benefit in treating colds because they have no effect on any of the viruses that cause colds. Treatment, therefore, cannot be specific but only symptomatic. Treatment is aimed at reducing the intensity of the symptoms to make the patient more comfortable.

Young children can normally get up to 8-12 colds a year, while adolescents average 2-4 per year. In young children, these frequent colds are important in building future immunity. A cold may be caused by hundreds of different viruses. Infection by one gives only immunity to that one specific virus which still leaves us susceptible to any of the other viruses. This explains the "all winter cold" which is really one infection after another.

Crowding indoors results in easy spread of the different viruses. This is why colds are more common in the winter as well as the beginning of school when children are grouped together. For the same reason, colds are extremely common in nursery school and in large families. Young infants, even newborns, are not immune to colds.

There is no point in trying to keep a child with a cold in bed. It will not speed recovery and will only cause unhappiness for all. On the other hand, encourage rest from time to time. In nice weather, the child may even play outdoors.

Children's colds almost always seem worse at night. In daytime, the child swallows the secretions from his irritated nose without much difficulty. But in sleep, the secretions accumulate in the throat. This causes a gag or cough. Strange as it seems, coughing is a good thing in one sense, for it guards against aspirating mucus into the lungs. The spells of coughing may on occasion progress to retching, even vomiting. A humidifier (vaporizer) will help (preferable a cool mist). A certain amount of night-time disturbance, however, seems inevitable with colds.

When your child has a cold, their bowel movements may change. She/he may have less frequent stools because they are eating less. There is rarely a reason to treat this decrease in frequency of stools (See **Constipation**). Or the child may have softer or watery stool from the virus itself. If the stools should become diarrhea, manage the situation as you would in other cases of diarrhea (see **Vomiting and Diarrhea**).

Children are most contagious from a cold just prior to symptoms begin and when they have a fever. If feeling well other than a runny nose and a cough, the child may go to school or daycare after they have been fever free for 24 hours.

TREATMENT

1. **Diet:** Accept the fact that there will be loss of appetite during a cold. Do not be concerned if your child shows little interest in eating. Appetite should return in a few days to about a week. Drinking is very important, so encourage fluids.
2. **Congestion and cough management:** If your child has only mild runny nose that is not bothering him/her, promote rest and encourage fluids. No medication or further treatment needs to be given. **If the patient has difficulty with the congestion and coughing, follow the instructions below:**

Infant-1 Year of Age

1. Patient should use a cool mist vaporizer or humidifier. Vaporizer only needs water. No medication is needed.
2. Allowing the child to sleep upright, in an infant car seat sometimes helps clear the congestion.
3. If the child is still having problems eating or sleeping use normal saline nose drops. Place 2-3 drops with an eyedropper into one nostril. Wait about 15 seconds and then suck out with a nasal bulb syringe. Repeat for other nostril. (Normal saline nose drops can be bought or made as follows...Boil water for 5 minutes and then let it cool. Pour into an 8 oz bottle add 1/4 oz a teaspoon of salt. And shake solution.)
4. Do not use medication unless directed by a doctor. Over the counter medicines are not effective and may not be safe in this age group.

Older than 1 year and less than 6 years:

1. Use a vaporizer or humidifier as above.
2. Patient older than 2 years old may try a teaspoon of Honey at bedtime. There are some studies that show this

helps somewhat with cough. Do not use medication unless directed by a doctor. Over the counter medicines are not effective and may not be safe in this age group.

For Children 6 years and older:

1. Use a vaporizer or humidifier as above.
2. Patient may also use Dimetapp, Claritin, Triaminic, Pediacare or Benadryl as per the directions or one may try a teaspoon of honey as above.

Call the office if...

1. The infant/child does not respond to the above treatment.
2. For fever not responding to fever instructions (see **Fever**).
3. Increasing pain in throat over 48 hours and or appearance of white spots on tonsils or other parts of throat.
4. Cough that is longer than the interims of not coughing, or one that produces thick yellow, green or gray phlegm. (sputum)
5. Shaking chills.
6. Chest pain.
7. Shortness of breath.
8. Earache.
9. Pain in the teeth or over sinuses.
10. Skin rashes.
11. Lethargy, to an unusual degree.
12. Irritability, to an unusual degree.
13. Cough persisting longer than 10 days and not improving.
14. Difficult or labored breathing between bouts of coughing.
15. Glands in the neck become large and tender.
16. Dusky blue or gray color develops in lips, nail beds, and/or skin.
17. Wheezing without history of asthma. (If asthmatic, treat with short-acting asthma medicine e.g. Albuterol).

CONJUNCTIVITIS (PINK EYE)

Conjunctivitis is diffuse redness of the sclera (the white part of the eye) with or without discharge. This is most commonly is caused by bacteria, viruses, allergies and chemical(ex chlorinated pools). If there is discharge, this is most likely bacterial. Most conjunctivitis will resolve in 3-4 days even if not treatment is given. The discharge and tears from the eyes are contagious, so most daycares, preschools and schools will want the child to be treated before returning. If the eyes are stuck shut from the discharge, use a warm, wet compress to remove the discharge. If itchy may use Benadryl or Claritin.

Call the office if...

1. Eye(s) are red and there is yellow or green d/c.
2. Eye(s) are red w/o discharge but last longer than 24 hours
3. Eye pain
4. Trauma to the eye
5. Patient wears contacts

CONSTIPATION

Constipation is the passing of hard stool. Hard stool looks like marbles or rocks. After the first week, soft but infrequent stools up to 1-2 times a week is normal especially if formula feeding. A common misconception is that formula containing iron causes constipation. However large quantities of whole milk (greater than 24 oz/day) in a young child over age one year may cause constipation and should not be given.

TREATMENT

3-6 months

Give 2-4 oz/day of full strength baby apple or prune juice

6-12 months

Give 4-6 oz/day of full strength baby apple or prune juice and increase the fruits and vegetables in the diet.

12 months-2 years

Increase the fruits and vegetables in the diet. May add 6 oz. of juice/day. If not helping then add Miralax ½ cap mixed in water each day and wean slowly when stools are soft.

2 years– adolescence

Increase the fruits and vegetables in the diet. If not helping add Miralax 1 cap mixed in water each day and wean when stools are soft.

Call office if ...

1. The infant is < 3 months.
2. The above regimen does not work after 7 days.
3. Blood in bowel movement.
4. Vomiting.
5. Stool in underwear of a full potty trained child.
6. Significant pain with bowel movement.

CONVULSIONS (SEIZURES)

Lay on side. Loosen garments at neck and waist. If fever, apply cold cloth to head. Most seizures are less than 1 minute in duration. When the child stops seizing, the child is usually very sleepy and breathing fine. Please **call the office** at that point.

Call 911 if...

1. If first time seizure and lasting longer than 1 minute or are multiple or are associated with trauma.
2. If history of seizures and this seizure is much different or much severe than typical.

CROUP

Definition:

Croup is a form of laryngitis or inflammation of the vocal cords and surrounding windpipe. It is commonly found in children 3 months to 4 years as part of a cold. Croup usually occurs in the late fall, winter, or early spring. The inflammation and swelling can cause difficulty in breathing.

Symptoms:

The onset is usually sudden. The child wakes up at night with a hard, “seal-like” barking cough. It may occasionally be accompanied by wheezing and sometimes a fever. The symptoms will usually return less severely for the next night or two with recovery in the daytime.

Waking up at night and having this cough and difficulty catching one’s breath is very frightening for the child.

Home Treatment:

1. Take the child outside or to an open window. Cool air will reduce the swelling of the larynx; thereby, reducing the symptoms.
2. Calm the child by having the child sit on your lap and telling a story, singing, reading a favorite book, etc.

3. Meanwhile, turn on the hot water in the bathroom shower and close the door to steam up the room. If the cool mist is ineffective, take the child into the bathroom to the warm mist and calm as above. When the child is calm and breathing better put the child to bed in a room with a cool mist vaporizer. Most children will settle down after treatments. Open the bedroom window to allow some cool air in (even in the winter!) Cool air prevents swelling. Follow up with office in the morning.

Call the office if:

1. If the treatments haven't worked after 20 minutes.
2. The child is having difficulty swallowing or has unexpected drooling.
3. Has persistent difficulty breathing.
4. The child's lips or skin appear blue.
5. If the child has an accompanying fever that does not respond to fever instructions (see **Fever**).

CUTS, SCRAPES AND BLEEDING

Small: Wash with clean, cold water and soap. Apply an antiseptic cream (e.g. Bacitracin or Neosporin). Then cover with a sterile gauze dressing.

Large: Apply pressure. Press firmly until bleeding stops. If an extremity, raise the bleeding part higher than the rest of the body. When bleeding stops follow **small cut** instructions.

Call office if...

1. Bleeding does not stop in 10 minutes.
 2. You think the cut might/will need stitches.
- Note:** If either occurs, **Do NOT** use iodine or other antiseptic before talking to a physician.

DIAPER RASH

Diaper rash is most commonly caused by irritation of the skin from stool and urine. In order to prevent this, always wipe the area when changing the diaper with a Baby Wipe or water to remove the residue urine/and or stool that will remain on the skin. If the skin is red or slightly abraded, apply a generous amount of diaper cream with Zinc Oxide (ex. Generic Zinc Oxide cream, Desitin or Balmex). Apply at each diaper change until rash has resolved.

Call the office if...

1. Diaper rash is not better in 5 days.
2. Persistent bleeding from rash.

DIARRHEA (SEE VOMITING AND DIARRHEA)

EAR INFECTIONS

Ear infections are usually of two types. The most common is a middle ear infection (otitis media). Middle ear infections usually occur in children younger than 8 years old and are associated with colds. The second type is external ear infections (Otitis Externa or "Swimmer Ear") which are usually associated with children over 5 or 6 years old that have been swimming a lot during the hot, humid time of summer.

Middle ear infections are secondary infections from colds or prolonged allergies that cause fluid in the middle ear secondary to plugging of the Eustachian tube. Middle ear infections occur more frequently in infants and smaller children, because they have smaller and more horizontal Eustachian tubes. These tubes link the middle ear with the back of the throat. These tubes normally act as a safety valve to drain the middle ear. If during a cold or allergy symptoms, the adenoids of the other tissue around the tubes enlarge or the lining of the tubes themselves swell. Then, this causes blockage and stagnation of fluid in the middle ear. The fluid often has bacteria. Ideal conditions now exist for bacteria to grow and pressure to build up. This is what causes a middle ear infection and the pain is caused by the inflammation and pressure build up against the eardrum.

Symptoms:

Small children are usually irritable and pull at the ears; older children feel fullness in the ears, experience hearing loss or earache. Fever may or may not be present. Discharge or leakage from the ear usually means that the eardrum has torn under pressure from an infection. The discharge does not mean a more serious or dangerous infection. You can think of the tearing of the eardrum as the opening of a safety valve which relieved the build-up of excess pressure. Children usually have less pain after the pressure is relieved. The tears are usually quite small and heal rapidly.

External ear infections can give similar symptoms as above. Except, external ear infections are rarely associated with fever, are usually very painful when the ear lobe is tugged on and are associated with summertime swimming. Whereas, middle ear infections are not.

The symptoms of an ear infection may be similar to other illnesses like a simple cold, abrasion inside the ear canal, teething in an infant, or referred pain from a sore throat. The exact diagnosis can be made only by a trained physician who actually views the structures with an Otoscope.

If a child develops ear pain, the most important initial treatment is pain relief (see initial treatment below). If this is truly a middle or external ear infection, antibiotics will usually be necessary. However, antibiotics will not solve the acute pain or fever. Therefore, if the pain occurs in the evening or the middle of the night; Ibuprofen or Acetaminophen is the treatment, not antibiotics!!!!!!! The child can be seen in walk-in at Community Pediatrics the following day or with coverage if on a weekend that Community Pediatrics of Andover is not on call.

Initial Treatment for Pain or Fever:

1. For the pain or fever treat with Ibuprofen (preferred) or Acetaminophen (See tables under **Fever** for dosage).
2. You may also use an electric heating pad set on "low" to the area around the ear to provide comfort.

Subsequent Treatment:

If your child is diagnosed with an ear infection, the child usually will feel much better within 72 hours. Nevertheless, it is important that the child finishes the antibiotic as prescribed. Many of us taking medicine or giving it to children tend to slack off when the symptoms disappear. Remember, the antibiotics are aimed not at the symptoms, but at the underlying infection. The infection may remain active for several days after the disappearance of symptoms. Stopping the antibiotic before it is complete may only result in a recurrence of the infection.

After a number of ear infections ventilation tube (PE tubes) may be suggested. PE tubes may have to be inserted into the ear drums for drainage by an ENT specialist. These tubes allow drainage and eliminate the temporary hearing loss from fluid build-up.

Remember: Effectively treated childhood ear infections, even if recurrent, do not cause deafness or permanent hearing loss.

Call the office if...

1. Fever does not respond to Ibuprofen or Acetaminophen.
2. Severe headaches or pain of the ear which persists despite initial treatment above.
3. Increasing swelling around ear.
4. Convulsions.
5. Dizziness.
6. Drainage from the ear.

EYES (FOREIGN BODIES)

To remove foreign bodies resting in the eye surface, irrigate with water. Immediate and abundant flushing out with water is procedure for chemical splashed in eyes. Irrigate the eye for 15 minutes. Never put eye drops or ointment in the eye without consulting us.

Call the office if...

1. After 15 minutes, the above is ineffective.
2. The child still feels like there is something in the eye.
3. Call is the foreign body in sticking in the eye

FAINTING AND UNCONSCIOUSNESS

Fainting is common in adolescents especially females. It occurs when standing quickly or for a long time especially in warm conditions or if one is ill and has not been drinking much fluid. Keep the child flat except elevate the child's legs. The patient usually will regain consciousness within 10-15 seconds. After a few minutes, the patient can be given fluids and usually recovers fully.

Call the office if...

1. Persistent headache.
2. Persistent vomiting.
3. Persistently dizzy.
4. Repeated episodes of fainting within 24 hours.

Call 911 if...

1. The child does wake up after 1 minute.
2. Is unconscious for any other reason and does not wake up within 1 minute.

FEVER

A fever is a temperature elevated above the normal range. A fever is a temperature of greater than ≥ 101 degrees orally, ≥ 100.5 degrees rectally or using a Temporal Artery Thermometer or ≥ 100 degrees under the arm. (For instructions on taking temperatures see **TAKING YOUR CHILD TEMPERATURE** at the beginning of the Acute Illness Management Book). Fever is a part of the body's response to an illness. Most fever in infants and children are caused by viral illnesses and can be managed at home.

Treatment of fever should depend upon what other complaints are present. A fever without change in appetite, activity or in sleeping behavior needs only the additions of fluids to the diet. When behavior or daily routine seems changed by the fever, reducing fever with medicine is indicated to restore normal behavior.

Ibuprofen (Advil, Motrin) is preferred in children over the age of 6 months. Acetaminophen (Tylenol) is also acceptable. (See dosage chart). Aspirin should no longer be used because of the possible association with Reye's syndrome. Sponge baths are generally not helpful. They only make the child cold and more uncomfortable.

Call the office if..

1. **Infants with fever younger than 4 months.**
2. Fever longer than 24 hours if less than 12 months or longer than 2 days if greater than 12 months.
3. Neck stiffness with irritability.
4. Irritability which does not improve with lowering of the fever.
5. Sore throats lasting longer than 24 hours.
6. If constant coughing, or wheezing or difficulty breathing.
7. Persistent vomiting.
8. Bloody diarrhea.
9. Joint or extremity swelling.
10. Pain or blood in the urine.
11. Very lethargic.
12. Refuses to drink.

ACETAMINOPHEN DOSAGE (FOR FEVER AND PAIN)

Child's weight more than (lb)	7	14	21	28	42	56	84	112	lb
Total amount (mg)	40	80	120	160	240	325	480	650	mg
Drops 80 mg/dropper	1/2	1	1 1/2	2	3	—	—	—	dropper
Syrup 160 mg/5cc (1tsp)	—	1/2	3/4	1	1 1/2	2	3	4	tsp
Chewable 80 mg tabs	—	—	1 1/2	2	3	4	6	8	tabs
Chewable 160 mg tabs	—	—	—	1	1 1/2	2	3	4	tabs
Adult 325 mg tabs	—	—	—	—	—	1	1 1/2	2	tabs

Dosage: Above dose is given every 4-6 hours as needed. Adult dose is 650 mg.

IBUPROFEN DOSE (FOR FEVER AND PAIN)

Child's weight more than (lb)	12	18	24	36	48	60	72	96	lb
Total amount (mg)	50	75	100	150	200	250	300	400	mg
Drops (ml)	1.25	1.875	2.5	—	—	—	—	—	ml
Syrup 100 mg/5cc (1tsp)	1/2	3/4	1	1 1/2	2	2 1/2	3	4	tsp
Chewable 50 mg tabs	—	—	2	3	4	5	6	8	tabs
Jr- Strength 100 mg tabs	—	—	1	1 1/2	2	2 1/2	3	4	tabs
Adult 200 mg tabs	—	—	—	—	1	1	1 1/2	2	tabs

Dosage: Ibuprofen dose is every 6-8 hours as needed.

Adult dose is 400 mg (a physician may prescribe a larger dose).

Note: Don't use Ibuprofen < 6months of age (Safety not yet established).

FRACTURES AND SPRAINS

Any obvious misalignment of an injured extremity usually means a fracture. If a fracture of the neck or back is suspected, **DO NOT** move the person.

Swelling and pain without misalignment can be sprain or fracture. Elevate injured part. Apply cold compresses for 20 minutes.

Call office if...

1. After 20 minutes, there still is persistent, significant pain.
2. Inability to use extremity after 20 minutes.
3. Extremity looks misaligned.
4. Child has not improved by the next day.

Call 911 if...

1. Suspect back or neck fracture.
2. Bone protruding through the skin.

HEAD INJURIES

Every child strikes his head at some time or other. These injuries are part of growing up. They are usually not serious. The danger signs that indicate that a head injury may be serious are listed below. How the child is acting is more important than a skull x-ray since we are interested in the brain, not the brain's covering.

Treatment:

1. If there is no break in the skin, just swelling at the site of the injury, apply cold compresses for 15-20 minutes.
2. If bleeding is present, apply pressure with clean sterile gauze to stop bleeding.

If the child is playing normally in a few minutes after the injury, this is a good sign that the injury was probably not serious. However, the child should still be carefully observed.

Call the office if...

1. There is loss of consciousness at the time of the injury or at any time thereafter.
2. You are unable to arouse the child from sleep. You may allow the child to sleep after the injury but check frequently to make sure that you can arouse. Check at least every one to two hours during the day and two to three times during the night.
3. There is persistent vomiting. (Many children vomit immediately from fright, but the vomiting does not persist).
4. Inability to move a limb.
5. Oozing of blood or watery fluid from the ears or nose.
6. Persistent dizziness for one hour after injury.
7. Persistent headache lasting over one hour.
8. Severe headache with activity or that wakes from sleep.
9. Pale color that does not return to normal in a short time.
10. The swelling on the head continues to increase in size and /or becomes a large soft lump.
11. Continued bleeding for 10 minutes.
12. The child has a convulsion or fainting episode.

Hives

Hives are typically red raised, blotchy rash that may be different sizes sometimes with a white center. They are typically different sizes and usually are bigger than a dime to several inches in diameter. Hives are almost always itchy and tend to come and go with or without treatment. Hives commonly occur as a reaction to medication or foods or viral induced and occasionally can be related to detergent or soap. Often no cause is found. Hives can come and go for a day or days or sometimes weeks. It will usually improve in about 45 minutes with a dose of

Benadryl.

Treatment:

Benadryl to start but can use every 6 hours if needed. (*Dosage* 12.5 mg -1 teaspoon if child 20 pounds, 1.5 teaspoons if 30-40 pounds, 25 mg or 2 teaspoons if 50-70 pounds and 25-50 mg if 100 pounds or greater). Because Benadryl can make one tired or very occasionally hyperactive, so after the initial dose is effective use a longer acting antihistamine instead for example Claritin. (*Dosage* 5mg or 1 teaspoon once a day for 20-40 pounds, and 10 mg for >40 lb once a day. Treat for 1 week.

Call office if...

1. Rash does not resolve with the Benadryl.
2. In on any medication.
3. Has in the last hour eaten any nuts or shellfish (e.g. shrimp or lobster)
4. The child is wheezing or is persistently vomiting.

PINK EYE (SEE CONJUNCTIVITIS)

POISONINGS

Call Poison control at once.

**Poison Control phone numbers:
1-800-222-1222**

Follow poison controls advice. If asked to go to the hospital, follow up with Community Pediatrics of Andover when feasible.

SEIZURES (see CONVULSIONS)

SLIVERS

Wash with clean water and soap. Most slivers will come out if given a few days to a week. If painful, remove with tweezers or forceps. Wash again and cover with antiseptic ointment (e.g. Bacitracin or Neosporin Ointment.)

Call office if...

1. The area is getting more red or tender over the next few days
2. Sliver still remains after a few weeks.

SORE THROATS

Sore throats are usually caused by a virus. Antibiotics won't cure a virus, but symptomatic treatment may help. (see treatment).

Sometimes a sore throat is caused by bacteria called Beta Hemolytic Streptococcus Group A. This is called "strep throat". Strep throat is usually present with a fever greater than 101 degrees orally or 100.5 degrees axillary (under the arm), headache, fatigue, loss of appetite, red throat with or without white blotches and swollen glands. This infection rarely occurs in children less than 2 years of age.

Since most sore throats look the same, the fastest way to check for a "strep throat" is to do a "strep screen". The strep screen is a 5 minute test that is performed in the office. If the screen is negative, we will send a throat culture. If the strep screen is positive, an antibiotic may be prescribed at that time. Occasionally based on symptoms, exam and exposure, an antibiotic may be prescribed while the throat culture is pending even if the screen is negative.

A throat culture is more sensitive to picking up Beta Hemolytic Streptococcus Group A than the screen though the strep screen is accurate 90% of the time or more. If the screen is negative, a throat culture will be sent and read by the lab in 48 hours. If the culture is positive, you will be called and an antibiotic will be given at that time.

Occasionally, adolescents develop a unique viral infection called Mononucleosis. This manifests as an extremely painful sore throat, severe fatigue (often sleeping 12-15 hours a day), and glands in the neck are often very big. The liver and spleen can sometimes be enlarged. This almost always requires very close contact with another adolescent that has Mononucleosis. Some of you may know this by the term, "The Kissing Disease" which exemplifies the close contact. This infection usually requires only supportive treatment for a sore throat; antibiotics do not help. Occasionally, short term steroids are prescribed after the patient has been examined.

Treatment for Sore Throat

1. Take Ibuprofen (preferred) or Acetaminophen (See tables under **Fever**) as directed to relieve pain and/or fever.
2. Drink plenty of fluids.
3. If older than 5 years, the child may have throat lozenges or lifesavers for symptomatic relief.
4. Humidified air—try a vaporizer or humidifier.

Call the office if...

1. The sore throat last more than 3 days.
2. Persistent fever with sore throat for > 24 hours.
3. Sibling or close friend diagnosed with strep throat within the last week.
4. Pain occurs with just opening the mouth.
5. Unable to drink.
6. Large painful glands in the neck below angle of the jaw.
7. On antibiotics and the sore throat symptoms are not better in 3 days.

Remember:

If your child has been diagnosed with **strep throat**...

1. "Strep Throat" is contagious until the patient has taken antibiotics for 24 hours. The child can return to school after an antibiotic have been taken for 24 hours and does not have a fever.
2. In most cases, the patient will feel well after a day or two. It is **important** that the patient continues the medication as prescribed for the full course even if symptoms disappear.
3. To protect others in the family, precautions must be followed to make sure they have no contact with the bacteria from the child's sputum or discharge from the nose. This includes no sharing cups, drinks or food, and no kissing for 48 hours after starting the medicine. **Call my office**, if other siblings develop symptoms. **Do not give medication intended for this patient to another family member!** Although strep throat is contagious, other family members will not necessarily get it. Some people are quite resistant to the bacteria. It is best to keep an eye on them and call if any symptoms develop.

SPRAINS (See FRACTURES AND SPRAINS)

VOMITING AND DIARRHEA

Most vomiting and diarrhea are due to a viral illness. The key goal is keep the child hydrated. The child may not eat well, but should continue to drink to maintain good hydration. Dietary treatment usually is all that is needed.

Dehydration manifests first with no tears when crying. Then, the inside of the mouth becomes dry (minimal saliva). Followed by no urine for 8 hours in a child less than 1 year or no urine for 12 hours in an older child. This is then followed by significant lethargy (not moving very much and/or interacting with parents).

Treatment of Vomiting:

The most important point is to keep the child well hydrated. This is done with **FLUIDS ONLY** as described below. As noted, **NO** solid should be given initially, because this will worsen the vomiting.

For Infant and Children <24 Month

Pedialyte (a commercially prepared sugar, electrolyte solution) should be used as below. Breastfeeding infants may continue to breastfeed—otherwise avoid milk or formula.

For Children \geq 24 Months

You use other fluids (use flat soda never diet soda, 1/3 strength diluted juice, popsicles, Gatorade, or diluted broth). Older children can chew on ice chips.

First Hour:

Give sips slowly. Approximately 1 tablespoon every 15-30 minutes-No more.

Second Hour:

Increase to 2 tablespoons (1 ounce) every 15-20 minutes.

Subsequently: Continue to increase by 1-2 oz an hour

If there is no vomiting for 6 hours, the diet can be expanded with soft bland foods (examples are crackers, noodles, toast, applesauce, bananas, and infant rice cereal). **Avoid** milk and other dairy products for 72 hours except in infants less than 6 months old. If vomiting occurs begin therapy all over again.

Treatment of Vomiting and Diarrhea

Use vomiting therapy until vomiting has subsided. Then use diarrhea therapy.

Treatment for Diarrhea without Vomiting**For infants <12 months**

If using a milk based formula (e.g. Similac with Iron, Advanced Enfamil with Iron, Lipil, Carnation Good Start or others) change to a soy formula (e.g. Isomil, Prosobee) until diarrhea has resolved for 3 days, then the formula can be changed back to the original milk based formula. If breast feeding or using soy formula (e.g. Isomil, Prosobee) or a protein hydrolyzed (eg Alimentum, Nutramagen or Progestamil) just continue feeds. The child may eat their regular diet except for juice.

For children 12 months and older

Use flat soda (never diet soda), 1/3 strength diluted juice, popsicles, Gatorade, or similar liquid.

The child may eat a regular diet but **no** dairy products (milk, ice-cream, yogurt, cheese etc.) or full strength juice until the child is free of diarrhea for 3 days.

Call the office if...

1. If less than 12 months and vomits 6 times or for 6 hours
2. If 12 months or older and vomits 8 times or for 8 hours.
3. If less than 12 months and refuses to drink for 6 hours.
4. If 12 months or more and refuse to drink for 8 hours.
5. If less than 12 months and diarrhea last longer than 48 hours.
6. If 12 months or greater and diarrhea last longer than 4 days.
7. Diarrhea >10 times/day.
8. Vomits blood.
9. Bloody diarrhea.
10. Has abdominal pain constantly for 2 hours or more.
11. Seems confused or delirious.
12. Has a stiff neck.
13. Has had a recent head injury.
14. Appears dehydrated (see below).

Signs of Dehydration

1. No tears.
2. Dry inside of mouth.
3. No wet diaper or urination for 8 hours in a baby less than 12 months.
4. No wet diaper or urination for 12 hours in a child 12 months or older.

5. Significant lethargy (not moving very much and/or interacting with parents).

WHEEZING

Wheezing is a whistling sound heard on breathing out. It occurs when there is an inflammation and spasm in the lower airway (below the vocal cords). This sound differs from the raspy sound that is heard from congestion in the nose and upper airway.

Wheezing can occur with a croup, bronchiolitis, bronchitis and pneumonia. Repeated episodes of wheezing are consistent with a diagnosis of asthma.

If your child has a history of asthma and starts wheezing, the child should be started on short acting medicine (e.g. Albuterol) that has been prescribed. The inhaled steroids and Singular medicines are helpful to prevent asthma, but do little to resolve an acute attack.

Please call office, if wheezing occurs and ...

1. Baby is less than 12 months of age.
2. First episode of wheezing ever.
2. Fever (see **Fever**).
3. Breathing faster than normal.
4. Vomiting.
5. Unable to drink.
6. Trouble breathing (nasal flaring or skin is pulling in between or below rib cage or rapid breathing).
7. Wheezing that is unresponsive to the short acting medicine (e.g. Albuterol) or the medicine only stops wheezing for a few hours.
8. Wheezing last longer than 3-4 days or having to use Albuterol or short acting medicine every 4 hours for 24 hours for a known asthmatic.

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