

**SOUTH CENTRAL CHILD DEVELOPMENT, INC.
FAMILY HEALTH GUIDE**



Doctor: _____

Police: _____

Hospital: _____

Fire: _____

Dentist: _____

Poison Control Center: _____

IMMUNIZATIONS THROUGH CHILDHOOD

We are privileged to live in a time when our children can be immunized against a number of serious diseases. Many people wrongly believe that because immunizations have been available for a number of years, these illnesses are no longer a problem. The diseases continue to be active and responsible for deaths in this country, in part because millions of children have not been immunized. Immunizations are relatively simple to obtain compared with trying to avoid the exposure to these easily spread illnesses. Your physician or public health department will try to administer them according to a schedule similar to the one shown below. Immunizations against other illnesses may become available for general use. Other immunizations may be developed for those illnesses that are a serious risk for some or a particular group of children. There are some risks with immunizations. These are very minor in comparison to the problems caused by the actual illnesses. Parents should keep a record of each child's immunizations. This record will be helpful if your child changes physicians. In many areas, it is required to enter public school.

Recommended Immunization Schedule for Infants and Children

The following table shows the immunization schedule that is recommended for all children. It shows all the vaccinations that a child should receive, from the time of birth until the 16th birthday.

Vaccine	Months					Years	
	2	4	6	12-15	15	4-6	14-16a
DTP	X	X	X		X ^b	X	
OPV	X	X	X ^c			X	
MMR				X		X ^d	
Hib	X	X	X ^e	X			
Td							X
	Birth	1-2 mos	4 mos		6-18 mos		
	X	X			X		
Hep B	or						
		X	X		X		
Pneumococcal Conjugate	X	X	X	X			
Varicella				X		X	

- a. And every 10 years thereafter
- b. This dose of DTP can be given as early as 12 months, at the same visit as MMR and Hib vaccines, as long as it has been at least 6 months since the previous DTP dose. Some experts recommend this dose at 18 months.
- c. Some experts recommend this dose between 6 and 18 months.
- d. Some experts prefer to give this dose of MMR vaccine at entry to middle or junior high school.
- e. This does may not be required; depending on which Hib vaccine is used.

DPT is a three-in-one injection against Diphtheria, Tetanus and (whooping cough) Pertussis.

OPV is a polio vaccine (occasionally a third polio immunization is given at 6 months).

MMR is a three-in-one against Mumps, Measles and Rubella (German/three day measles).

HEPATITIS A VACCINE

WHAT YOU NEED TO KNOW BEFORE YOU OR YOUR CHILD GETS THE VACCINE

ABOUT THE DISEASE: Hepatitis A is a serious liver disease caused by the hepatitis A virus (HAV). HAV is found in the stool of persons with hepatitis A. The spread of HAV is usually by close personal contact and sometimes by eating food or drinking water containing HAV.

Hepatitis A can cause a wide variety of symptoms ranging from mild "flu-like" illness to more serious problems, such as yellowing of the eyes (jaundice), severe stomach pains, and diarrhea, that may require hospital admission.

A person who has hepatitis A can easily pass the disease to others within the same household. In some cases, hepatitis A causes death.

ABOUT HEPATITIS A VACCINE - BENEFITS OF THE VACCINE: Vaccination is the best way to protect against hepatitis A. People who get hepatitis A vaccine have protection for years against infection with HAV. The vaccine is made from a killed virus and is given as a shot in the muscle of the upper arm (deltoid). Before hepatitis A vaccine was available, only short-term protection could be achieved by giving immune globulin (also call "gamma globulin" or IG) (**See "About**

Immune Globulin [IG]"

HEPATITIS A VACCINE SCHEDULE: The dose and vaccination schedule vary according to age:

- For adults >18 years of age: two doses; 6-12 months apart.
- For children and adolescents 2-18 years of age; three doses; second dose one month from the first; third dose, 5-11 months after the second.
- Other vaccines may be given at the same time as hepatitis A vaccine.

WHY SHOULD YOU GET HEPATITIS A VACCINE?

- Persons 2 years of age and older traveling or working in countries with high rates of hepatitis A, such as those located in Central or South America, the Caribbean, Mexico, Asia (except Japan), Africa, and southern or eastern Europe.
- Persons who live in communities with high rates of hepatitis A; some examples include American Indian, Alaska Native, and Pacific Islander communities and selected religious communities.
- Men who have sex with men.
- Persons who use street drugs.
- Persons with chronic liver disease.

WHAT ARE THE RISKS FROM HEPATITIS A VACCINE? Hepatitis A vaccine is very safe. As with any medicine, there are very small risks that serious problems, even death, could occur after getting a vaccine. Most people who get hepatitis A vaccine have no problems from it.

Below is a list of problems that **MAY** occur after getting the vaccine.

Mild problems (that go away in 1-2 days)

- soreness or swelling where shot was given
- headache
- tiredness
- loss of appetite

Severe problems

- Serious allergic reaction

WHAT TO DO IF THERE IS A SERIOUS REACTION:

- Call a doctor or get the person to a doctor right away.
- Write down what happened and the date and time it happened and give this information to the doctor.
- Ask doctor, nurse, or health department to file a Vaccine Adverse Event Report (VAERS) form, or you can call 1-800-822-7967 (toll free).

PREGNANCY: Hepatitis A vaccine has not been evaluated in pregnancy. However, any risk for the fetus or for pregnant women is expected to be very low.

If you want to learn more, ask your doctor or nurse. She/he can give you the vaccine package insert or suggest other sources of information.

ABOUT IMMUNE GLOBULIN (IG)

Benefits

IG protects against HAV for 3-5 months, depending on dosage.

Schedule

Can be given before exposure to HAV or within 2 weeks after exposure.

Who should get IG?

- Persons who are exposed to HAV and can get IG within 2 weeks of that exposure.
- Travelers to areas with high rates of hepatitis A if they do not receive hepatitis A vaccine.

Risks: Rarely, swelling, hives, or allergic reaction.

HEPATITIS B VACCINE & HEPATITIS B IMMUNE GLOBULIN

WHAT YOU NEED TO KNOW BEFORE YOU OR YOUR CHILD GETS THE VACCINE

ABOUT THE HEPATITIS B VACCINE

RISKS OF THE DISEASE

Hepatitis B is a serious disease. The first stage of it may lead to:

- Loss of desire to eat
- Feeling tired
- Pains in muscles, joints, or stomach
- Diarrhea or vomiting
- Yellow skin or eyes
- Death

Long lasting infection with hepatitis B virus only:

- Destroy the liver (cirrhosis)
- Lead to liver cancer
- Cause death

Each year in the U.S:

- 150,000 people get hepatitis B
- More than 11,000 people have to stay in the hospital for care
- 4,000 - 5,000 people die from hepatitis B

HOW IT IS SPREAD? Hepatitis B virus is carried in the blood and body fluids of an infected person. It can pass through tiny breaks in the skin, mouth, vagina, or penis. A person can get infected in several ways, such as:

- During birth when the infected mother passes the virus to her baby
- By having sex with an infected person
- By being stuck with a used needle
- By sharing personal items, such as a razor or toothbrush

People can spread hepatitis B virus without even knowing they have it.

ABOUT THE VACCINE

Benefits of the vaccine: Vaccine is the best way to protect against hepatitis B.

Hepatitis B vaccine schedule: Most people should get 3 doses of hepatitis B vaccine. If you miss a dose or get behind schedule, get the next dose as soon as you can. There is no need to start over.

Other vaccines may be given at the same time as hepatitis B vaccine.

WHO SHOULD GET HEPATITIS VACCINE?

1. Most infants.
2. Children 10 years of age and younger whose parents are from parts of the world where hepatitis B is common.
3. Pre-teens and teens who did not get the vaccine already.
4. Adults at risk.

Ask your doctor or nurse if you should get the vaccine. Tell you doctor or nurse if the person getting the vaccine ever had a serious allergic reaction to the hepatitis B vaccine or common baker's yeast; and currently has a moderate or severe illness. If you are not sure, ask your doctor or nurse.

WHAT ARE THE RISKS FROM HEPATITIS B VACCINE? Hepatitis B vaccine is one of the safest vaccines. As with any medicine, there is a small risk that serious problems, even death, could occur after getting a vaccine. Getting the disease is much more likely to cause serious illness than getting the vaccine.

Mild problems

- Soreness where the shot is given
- Mild to moderate fever

Acetaminophen or ibuprofen (not aspirin) may be used to reduce fever and pain.

Severe problems

- Serious allergic reaction is very rare

What to do if there is a serious reaction

- Call your doctor or get the person to a doctor right away
- Ask your doctor, nurse, or health department to file a Vaccine Adverse Event Report form. To file a report yourself you can call 1-800-822-7967 (toll free).

If you want to learn more, ask your doctor or nurse. She/he can give you the vaccine package and insert or suggest other sources of information.

ABOUT HEPATITIS B IMMUNE GLOBULIN (HBIG)

Benefits: HBIG protects from hepatitis B virus infection for 1-3 months

Schedule: HBIG is given with the first hepatitis B vaccine dose to people who have recently been exposed to hepatitis B virus.

Who should get HBIG

- Newborns of women infected with hepatitis B virus
- Infants who never got the vaccine and whose parent or caregiver has hepatitis B
- People recently exposed to blood or body fluids that may contain hepatitis B virus
- People who recently had sex with someone with hepatitis B.

Risks: Swelling, hives, severe allergic reaction

HIB VACCINE

IMPORTANT INFORMATION ABOUT HAEMOPHILUS INFLUENZA TYPE b DISEASE AND HAEMOPHILUS b POLYSACCHARIDE VACCINE

PLEASE READ THIS CAREFULLY

WHAT IS HAEMOPHILUS INFLUENZA TYPE b DISEASE? Haemophilus influenzae type b (Haemophilus b) is a bacterium which can cause severe disease, especially in children less than 5 years of age. This bacterium does not cause the "flu" (Influenza). In the United States, Haemophilus b causes about 12,000 cases of meningitis (infection of the covering of the brain) each year, mostly in children under 5 years of age. About 1 child in every 20 with meningitis caused by Haemophilus b dies of it and about 1 out of 4 has permanent brain damage. Haemophilus b can also cause pneumonia and infections of other body systems such as blood, joints, bone, soft tissue, throat, and the covering of the heart. About 1 in every 200 children in the United States will have a moderate to severe disease caused by Haemophilus b before their fifth birthday. Severe Haemophilus b disease is most common in children between 6 months and 1 year of age, but almost 40 percent of severe disease occurs in children 18 months of age or older.

HAEMOPHILUS b POLYSACCHARIDE VACCINE: The Haemophilus b polysaccharide vaccine (Haemophilus b vaccine) is given by injection. Nearly 90 percent of children 24 months of age or older who receive the vaccine are protected for at least 1 1/2 years against the severe disease caused by Haemophilus b bacteria. The vaccine does not protect against ear infections caused by Haemophilus b bacteria. Also, the vaccine does not protect against meningitis caused by other bacteria. The vaccine will not cause Haemophilus disease.

WHO SHOULD RECEIVE THE HAEMOPHILUS b VACCINE? 1. All children 2 years of age should be immunized—nearly 90 percent of children who are immunized when 2 years of age or older are protected against the severe forms of the disease. Ideally, children should be immunized within 1 month following their second birthday. Protection lasts for a minimum of 1 1/2 years. 2. Children 1 1/2 to 2 years of age may be considered for immunization if they are in a high-risk group, such as those attending day-care facilities. The vaccine may not be as effective in children 1 1/2 to 2 years of age as in children 2 years of age or older, and therefore, it is not recommended routinely for this age group. However, because children who attend day-care facilities are more likely to develop severe Haemophilus b disease than those who do not, day-care attendees in this age group may be immunized.

DPT IMMUNIZATIONS

WHAT IS IT? DPT immunizations are a series of three-in-one injections given according to a recommended schedule to help protect your child against Diphtheria, Pertussis (whooping cough), and Tetanus. Immunizations help build up your child's bodily defenses against diseases without his/her having to experience these infections.

SIDE EFFECTS: Your child may experience some mild reaction during the first 24 hours after this injection. The reaction usually consists of fever, irritability, and loss of appetite. (These reactions seldom last longer than 36 hours.) Occasionally, there is some swelling and redness at the site of the injection.

WHAT CAN THE FAMILY DO? If your child seems to develop a mild reaction, many doctors advocate giving acetaminophen (the common aspirin substitute) in appropriate doses, according to weight or age.

WHEN TO CALL THE DOCTOR AGAIN? Call if your child's fever is greater than 102F (38.8C) or if fever persists more than 24 hours. Call also if your child develops other symptoms that concern you.

POLIO IMMUNIZATIONS

WHAT IS IT? Polio (OPV) is a disease. It can paralyze (make arms and legs unable to move) or even cause death. Polio vaccine can prevent polio. Before polio vaccine, thousands of our children got polio every year. Polio vaccine is helping to rid the world of polio. When that happens, no one will ever get polio again, and we will not need polio vaccine. There are two kinds of polio vaccine; IPV - inactivated polio vaccine, a shot and OPV - oral polio vaccine drops by mouth.

SIDE EFFECTS Almost all children who get a total of 4 doses of polio vaccine will be protected from polio. As with any medicine, vaccines carry a small amount of risk of serious harm, such as a severe allergic reaction (hives, difficulty breathing, shock) or even death. Most people have no problem from either IPV or OPV.

WHAT ARE THE COMPLICATIONS?

Risks of IPV: Mild soreness where the shot is given. Other disadvantages - Not as good as OPV protecting the community from polio outbreaks. Advantages - Cannot cause polio, and it is safer for immunizing people with immune system problems and people in close contact with them.

Risks of OPV: OPV has caused several cases of polio each year (about 1 case for every 2.4 million doses of vaccine). This can happen to children who get OPV or people who are in close contact with them. The risk of polio is higher with the first dose than with later doses.

Advantages - No shots, protects the community from polio outbreaks better than all IPV, better for people traveling to areas where polio is common.

The CDC recommended vaccine schedule greatly reduce the risk of children getting polio from the oral vaccine (OPV) by using IPV for the 1st and 2nd doses. Getting 2 shots of IPV first should protect most people from getting polio from the later doses of OPV. By using OPV for the 3rd and 4th doses it also protects the community from polio outbreaks, and it requires only 2 shots.

SOME CHILDREN SHOULD GET ONLY SHOTS AND SOME SHOULD GET ONLY DROPS

Do not use OPV drops if your child, you, or anyone who takes care of the child: 1) can't fight infections, 2) is taking long-term steroids, 3) has cancer, 4) has AIDS or HIV infection.

Tell your doctor or nurse if your child: 1) ever had a serious reaction after getting polio vaccine, or 2) now has a moderate or severe illness.

WHAT IF THERE IS A SERIOUS REACTION

What should I look for? (See above section "What are the risks and advantages of each vaccine" under "WHAT ARE THE COMPLICATIONS")

What should I do? 1) Call a doctor or get the person to a doctor right away, 2) tell your doctor what happened, the date and time it happened, and when the vaccination was given, 3) ask your doctor, nurse or health department to file a Vaccine Adverse Event Report System (VAERS) form, or call VAERS yourself at **1-800-822-7967**.

In the rare event that you or your child has a serious reaction to a vaccine, a federal program has been created to help you pay for the care of those who have been harmed. For details about the National Vaccine Injury Compensation Program, call **1-800-338-2382** or visit the program's website at <http://hrsa.dhhs.gov/bhpr/vicp>.

How can I learn more?

- As your doctor or nurse. She/he can give you the vaccine package insert or suggest other sources of information.
- Call your local or state health department's immunization program.
- Contact the Centers for Disease Control and Prevention (CDC)
Call **1-800-232-2522 (English)**
Call 1-800-232-0233 (Español)

Visit the National Immunization Program's website at <http://www.cdc.gov/nip>.

MMR IMMUNIZATIONS

WHAT IS IT? MMR immunization is a three-in-one injection given to help protect your child against Mumps, Measles, and Rubella (German/three-day measles). Immunizations help build up your child's bodily defenses against diseases without his/her experiencing these infections.

SIDE EFFECTS: Your child may experience a mild reaction a week or two weeks after this injection. The reaction usually consists of fever, irritability, and loss of appetite. Occasionally your child will also have a mild rash or some swelling of the glands of the face and neck (salivary glands and lymph nodes). These reactions are temporary (they seldom last longer than 48 hours) and usually do no harm. Some children, particularly the older child, may have some pain or stiffness in the joints. This side effect, which is mild, can occur from two to ten weeks after the shot and only lasts a few days.

WHAT ARE THE COMPLICATIONS? Only rarely are there complications to this immunization.

WHAT CAN THE FAMILY DO? If your child seems to develop a mild reaction, many doctors advocate giving acetaminophen (the common aspirin substitute) in appropriate doses according to weight or age.

WHEN TO CALL THE DOCTOR AGAIN? Call if your child's fever is greater than 102F (38C) or if fever persists more than 24 hours. Call also if your child develops other symptoms that concern you.

VARICELLA VACCINE **(CHICKEN POX VACCINE)**

ACIP Draft Recommendations

Why Get Vaccinated? Chickenpox (also called varicella) is a common childhood disease. It is usually mild, but it can be serious, especially in young infants and adults. The chickenpox virus can be spread from person to person through the air, or by contact with fluid from chickenpox blisters. It causes a rash, itching, fever and tiredness. It can lead to severe skin infection, scars, pneumonia, brain damage, or death. A person who has had chicken pox can get a painful rash called shingles years later. About 12,000 people are hospitalized for chickenpox each year in the United States as a result of chickenpox.

Chicken pox vaccine can prevent chickenpox. Most people who get chickenpox vaccine will not get chickenpox. But if someone who has been vaccinated does get chickenpox, it is usually very mild. They will have fewer spots, are less likely to have a fever, and will recover fast.

Who should get chickenpox vaccine and when? Children should get 1 dose of chickenpox vaccine between 12 and 18 months of age, or at any age after that if they have never had chickenpox. People who do not get the vaccine until 13 years of age or older should get **2 doses**, 4-8 weeks apart. Ask your doctor or nurse for details. Chickenpox vaccine may be given at the same time as any other vaccines.

Some people should not get chickenpox vaccine or should wait

- People should not get chickenpox vaccine if they have ever had a life-threatening allergic reaction to gelatin, the antibiotic neomycin, or (for those needing a second dose) a previous dose of chickenpox vaccine.
- People who are moderately or severely ill at the time the shot is scheduled should usually wait until they recover before getting chickenpox vaccine.
- Pregnant women should wait to get chickenpox vaccine until after they have given birth. Women should not get pregnant for 1 month after getting chickenpox vaccine.

- Some people should check with their doctor about whether they should get chickenpox vaccine, including anyone who: 1) has HIV/AIDS or another disease that affects the immune system, 2) is being treated with drugs that affect the immune system, such as steroids, for 2 weeks or longer, 3) has any kind of cancer, 4) is taking cancer treatment with x-rays or drugs.
- People who recently had a transfusion or were given other blood products should ask their doctor when they may get the chickenpox vaccine.

Ask your doctor or nurse for more information.

What are the risks from Chickenpox Vaccine? A vaccine, like any medicine, is capable of causing serious problems, such as severe allergic reactions. The risk of chickenpox vaccine causing serious harm or death is extremely small. Getting chickenpox vaccine is much safer than getting chickenpox disease. Most people who get the chickenpox vaccine do not have any problem.

Mild Problems

- Soreness or swelling where the shot was given (about 1 out of 5 children and up to 1 out of 3 adolescents and adults).
- Fever (1 person out of 10 or less).
- Mild rash, up to a month after vaccination (1 person out of 20 or less). It is possible for these people to infect other members of their household, but this is extremely rare.

Moderate Problems

- Seizure (jerking and staring) caused by fever (less than 1 person out of 1,000).

Severe Problems

- Pneumonia (very rare)
- Other serious problems, including severe brain reactions and low blood count, have been reported after chickenpox vaccination. These happen so rarely experts cannot tell whether they are caused by the vaccine or not. If they are, it is extremely rare.

What if there is a moderate or severe reaction: Any unusual condition, such as a serious allergic reaction, high fever or behavior changes. Signs of a serious allergic reaction can include difficulty breathing, hoarseness or wheezing, hives, paleness, weakness, a fast heartbeat or dizziness within a few minutes to a few hours after the shot. A high fever or seizure, if it occurs, would happen 1 to 6 weeks after the shot.

- Call a doctor, or get the person to a doctor right away.
- Tell your doctor what happened, the date and time it happened, and when the vaccination was given.
- Ask your doctor, nurse or health department to file a Vaccine Adverse Event Reporting System (VAERS) form, or call VAERS yourself at 1-500-822-7967.

The National Vaccine Injury Compensation Program: In the rare event that you or your child has a serious reaction to a vaccine, a federal program has been created to help you pay for the care of those who have been harmed. For details about the National Vaccine Injury Compensation Program, call 1-800-338-2382 or visit the program's website at 1-800-338-2382 or visit the program's website at <http://www.hrsa.dhhs.gov/bhprvicp>.

How can I learn more?

- Ask your doctor or nurse. They can give you the vaccine package insert or suggest other sources of information.
- Call your local or state health department's immunization program
- Contact the Centers for Disease Control and Prevention (CDC):
Call 1-800-232-2522 (English)
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Visit the National Immunization Program's website at <http://www.cdc.gov/nip>

PREVENTING ACCIDENTAL INGESTIONS AND POISONINGS

Poisonings are frequent occurrences (over two million accidental ingestions occur in the country each year). Children under the age of five are at greatest risk of an accidental ingestion. Children in this age group often eat or drink harmful things just because they are hungry or thirsty. Children this age do not recognize the danger of many potentially poisonous substances. There are many preventive measures that the family can take. An important aspect of poison prevention is education; teaching your child what things are dangerous to eat or drink. The remaining measures remove poisons from your child's environment or increase the difficulty your child might have in getting at these substances. If your child has already suffered an accidental ingestion, do not think that because this has happened once, it won't happen again. There is a 50 percent recurrence rate; that's

right; one out of two children will do it a second time. Whenever possible, avoid purchasing known poisons. If you must purchase potential poisons (over 250,000 products for use in and about the home are potentially lethal), be sure these products are in childproof containers. Many parents place an additional warning label on these products. The best is Mr. Yuk. (Mr. Yuk is the poison warning symbol of the National Poison Center Network.) Store these products out of your child's reach, preferably in cabinets which can be locked or have child safety-latches. Never store possible poisons in your child's bedroom play area, or in the kitchen where the poisons may be mistaken for possessions, play things, or food respectively. Medicines are the most frequent cause of fatal poisonings. All medicines should be considered dangerous. Never tell your child that medicine is candy, rather tell him/her that it is a medicine only to be taken when given by you. Never take medicines yourself while in your child's view. Request safety tops on all medications. Do not purchase the large economy-size medicine when the small package that is child-resistant is available. Medicines that are particularly dangerous include sleeping pills, sedatives, tranquilizers, aspirin, acetaminophen (the common aspirin substitute), iron tablets, and other iron-containing products. All medicines, whether prescription or non-prescription, should be considered dangerous. Medicines that are old, unused, or not needed should be discarded by flushing down the toilet. Never place the medicine in a trash container, which your child might get into. Similarly, try to avoid placing medicine in your purse, pocket, drawer, or other location your child explores. Detergents and cleaning agents are also very dangerous. Particularly dangerous in small amounts are liquid and granulated drain cleaners, lye, toilet bowl cleaners, dishwasher detergents, powdered bleach, and spot removers. Other cleaning agents may also be dangerous. It is important to teach your child this because many are pleasantly scented and pleasingly packaged. Other substances found around the house that are dangerous if swallowed include nail polish remover, insect sprays (insecticides), ant paste, roach pills, paints, shellac, varnish, paint thinner, turpentine, mineral spirits, weed killers (herbicides), gasoline, machine oil, kerosene, charcoal lighter and lighter fluid. Always keep these poisons in their original containers (never, never put poisons in food containers). Keep your supply of potentially poisonous substances minimal. When you are finished using a potential poison, dispose of the remainder and thoroughly rinse the container (remember, your child might get into the trash). Plant ingestions represent an increasing threat to children. Outdoor and indoor gardening are becoming more popular. In many areas, the most common group of poisonous substances ingested is plant materials. The children at greatest risk for these accidents are infants, and toddlers. The most common plant ingestion involves houseplants. Philodendrons, dumb cane (dieffenbachia), elephant's ear (colocasia), caladiums and other members of the arum plant family lead the list. Usually, ingestion of any part of these plants causes severe burning and swelling of the mouth, tongue and throat. Frequently, fatal plant ingestions involve the extremely dangerous poisons contained in many berries or seeds, such as castor bean, mistletoe berries, and the rosary pea. Your child should be taught not to ingest any plant material, particularly berries, seeds and mushrooms without first checking with you. If you are not sure about the potential danger a plant may have, contact your Poison Control Center. Many doctors recommend that you keep **syrup of ipecac** at home. It is available without a prescription in 1 ounce (30 milliliter bottles). Syrup of ipecac is used to induce vomiting; hence, "syrup of ipecac the poison retriever." It should never be given without medical advice, but when it is recommended, it is of most value when you have it at home ready for immediate use. If a poisoning occurs, contact your nearest Poison Control Center.

The phone number is **1-800-222-1222**. Also keep the number pasted on each telephone.

PREVENTING BURNS

Burns are a very common type of accident and can result in permanent disfigurement or death. Smoke detectors are inexpensive, life-saving devices that every home should have. It is important that your home have a chemical fire extinguisher. A good place to keep it is in the kitchen or another central location. Those who are old enough should know how to use an extinguisher. The family should be instructed as to what to do in a fire. Fire drills should be held, particularly if your child is old enough to understand their significance. Everyone should know how to leave various parts of the house, particularly the bedrooms. Most local fire departments will inspect your home and make recommendations about fire prevention. Electrical equipment is the source of many fires. Make sure electrical wiring is in good condition. Do not overload circuits. Remove all extension cords and sockets within your child's reach. Many children get hurt severely chewing through a cord. Cover all unused electrical outlets with special safety devices. Teach your children not to stick things in the electrical equipment around water. Unplug unused appliances and equipment. Space heaters, furnaces and hot vaporizers are particularly dangerous. Never let your child play with matches or fire. Explain the concept that heat causes burns and that fires are hot. Never leave your child alone where there is an open flame or fire. Fireworks are dangerous for children and adults. Flammable material such as oily rags, solvents, oil base paints, lighter fluid, kerosene and gasoline should be stored in metal containers or cabinets away from areas of heat and open flames. Cooking is a frequent cause of burns. When cooking, use back burners and turn pot handles toward the back so that things are out of your child's reach. Keep cords to electrical appliances, particularly frying devices and coffee urns, out of your child's reach. Teach your child to stay out of the kitchen during meal preparation and to stand clear of outdoor cooking facilities. Keep your child away when transporting hot liquids. Teach your children that these are hot and can hurt them. Keep the hot liquids away from your child's reach by such means as placing these in the center of the dinner table. Beware of an overhanging tablecloth which, when pulled, brings things from the center toward the edge. Caution your child and be careful with hot water from the faucet when washing or filling the tub. Clothing on which hot liquids spill should be removed immediately a cloth holds the heat. Never leave your child alone in the

tub where he/she can get scalded turning on the hot water or drown. Smoking is not good for your health for many reasons. It is also the most common cause of serious fires. Do not smoke in bed, when you have been drinking, taking sleeping pills or sedatives. In fact, consider quitting. Know how to call your fire department. Their phone number is 911. You and your older children should take first aid courses or read a first aid manual.

WHEN BURNS OCCUR

Minor burns can be treated at home. **FIRST AID FOR ALL BURNS IS IMMEDIATE APPLICATION OF COLD OR ICE WATER.** The minor burn can be treated with continued applications of cold compresses or by wrapping with gauze rolling that should be repeatedly moistened with ice water. If possible, immerse the burned area in cold water for several minutes. Do not apply butter or grease, for this has been found to be harmful. **The following types of burns should be seen by a doctor as soon as possible:**

1. Covering an area larger than a half dollar.
2. Covering an area larger than a dime on extremities or face.
3. On an infant or an elderly person.
4. Involving the eyes or eyelids.
5. Third degree burns where the skin looks charred, cooked, or very raw.

Do not apply ointment. Instead use cold compresses and transport immediately to an emergency care facility. Burned arms, legs, or face should be kept elevated above the level of the heart. For the minor burn that is being treated at home, cool compresses should be continued either until the pain is relieved for 1 hour. If the burn is in a location where it may be conveniently exposed to air, this will promote healing. If the location is one that can be easily injured or will be difficult to keep clean, apply a dressing. To dry burns, apply a dry dressing. Do not open blisters. These protect the burn site from infection. To wet burns; apply sterile petroleum jelly, antibiotic or other anti-infective ointment (iodine) to gauze and place over the burn. The dressing can be held in place with tape or by wrapping with a gauze-type rolling. Dressing should be changed daily or more frequently if oozing is extensive. It is normal for burns to ooze. If after 5 to 7 days there is no healing, the burns should be seen by a doctor. If pus, swelling, or surrounding redness occurs, a physician should examine the burn.

WATER SAFETY

Thousands of children die each year by drowning. This occurs most frequently in children one to four years old. Your children must be watched carefully when in or around water. A child who is in or even near water must be watched constantly. **DO NOT LEAVE YOUR CHILD ALONE FOR EVEN A BRIEF MOMENT.** Do not relinquish your supervision to another who has too many children to keep track of, even a lifeguard. A child who does not swim is in danger when he/she thinks a tube; raft or arm cuffs provide safety. Only a personal flotation device--a life jacket of appropriate size and meeting U.S. Coast Guard standards--provides such safety. Teach your child to stay away from water unless you are there to supervise. Many children even infants and toddlers can be taught water survival measures or how to swim. Courses are available in most communities. Young children who have been taught to swim still require close supervision because they are not responsible or mature; they still can be victims of accidents, and they lack natural water inhibitions. You and your older child should learn water safety, rescuing, and resuscitation. Courses in this area are available from your local Red Cross, at summer camps, and often-public pools. If you have a permanent swimming pool, fences should surround it four feet high. Gates should spring closed. Gate latches should not be operable by small children. Large temporary pools should be similarly protected. Even wading pools should be emptied when not in use. Doors from the home that open onto the pool should also have safety locks. When boating, properly sized life jackets should be worn at all times. Follow boating safety rules. Bathtubs, too, can be the scene of a drowning even when filled to a shallow level. Never leave your preschool child alone in the bathtub. If you must answer the phone or door, take the child out of the tub and with you. It would be better to take the phone off the hook and put a sign on the front door (e.g. "bathing the kids, come back in 15 minutes").

ASTHMA

WHAT IS IT? Asthma is a disease of the lungs in which there is reversible spasm of the muscles in the small branches of the bronchial tree, causing these airway tubes to narrow. The lining of these tubes swells and mucus production increases. This response is a result of over sensitivity or allergy.

WHAT ARE THE SYMPTOMS? One major symptom is a vibratory whistling sound called wheezing. It indicates that your child is having difficulty moving air in and out of the lungs. The other major symptom is shortness of breath and difficulty breathing. It is common for asthmatic children to breathe easily except during attacks.

HOW LONG DOES IT LAST? Most asthmatic children are controlled with a simple medical regime that your doctor will prescribe. Half of the children who have asthma will outgrow it. It is impossible to predict the length of time that your child will have asthma.

WHAT ARE THE COMPLICATIONS? When well controlled, as most asthmatics are, your child and you can live a happy, normal life. He/she may pursue most interests. Since asthma is largely reversible when well controlled, complications can be kept to a minimum. It is unusual for the asthmatic child to develop permanent lung-disabling complications such as emphysema.

HOW IS IT ACQUIRED? The tendency to develop an allergic illness like asthma runs in families.

WHAT HAS THE DOCTOR DONE? The doctor has recommended that your child take medications that will aid your child's breathing normally. These medicines are carefully adjusted to your child's needs and weight. Occasionally adjusting the dosage requires measuring the level of the medicine in the blood. ***STAY WITH THE PRESCRIBED DOSES. ALTERING THE DOSES SHOULD BE DONE ONLY AFTER CONSULTING THE DOCTOR.***

WHAT CAN THE FAMILY DO? The family can aid by helping to determine what the child is sensitive to. Then, these things should be removed from your child's environment, particularly the home and especially his/her room. If removal is not possible, limiting your child's exposure to the common causes will be helpful. Be aware that a number of situations commonly make asthma worse. These include cool damp weather, emotional upset or the presence of another illness such as a cold. Some children have asthma that becomes worse during exercise. Nevertheless, with medication most asthmatic children function normally at home and at school. It is important for teachers, particularly of physical education, to be aware of your child's condition and to be sensitive when your child is having difficulties. The school nurse should know what medicines your child takes. Aspirin and aspirin-containing products have been found to make some asthma worse and therefore should be avoided. You may give your child products that contain acetaminophen the common aspirin substitute. The presence of an asthmatic child may be trying for the entire family. It is best to try to treat your child normally. Do not be overprotective. Try to remain calm, especially during asthma attacks when your child may be frightened by his/her difficulty in breathing. Teach your child to tell you when he/she is having worsening of asthma such as wheezing or difficulty breathing. At the start of the attack, you should encourage your child to drink plenty of fluids, at least 8 ounces (240 milliliters) of water every hour that he/she is awake. Rest will be helpful. Carefully follow the medicine regimen your doctor has designed for just this situation. Do not use any other medicines.

FOOD ALLERGIES

WHAT IS IT? A food allergy is an over-sensitivity of the body to things taken by mouth. The most likely sources are milk, wheat, eggs, chocolate, nuts, spices, seafood's, citrus fruit, strawberries and tomatoes. Additionally, foods containing chemical additives and other substances, such as antibiotics, may cause your child to have an adverse reaction. There are many other single causes or combinations of foods that can offend.

WHAT ARE THE SYMPTOMS? Sensitivities to foods produce a variety of symptoms. Sometimes these symptoms may be vaguely related to the digestive tract. In infants, the common symptoms include vomiting, diarrhea, cramps, colic and irritability. Older children may experience runny or congested nose, asthma, rashes, headache, fatigue, irritability and/or personality problems.

HOW LONG DOES IT LAST? The duration of your child's sensitivity to specific foods is variable. It is quite common to have sensitivities develop and old ones disappear.

WHAT ARE THE COMPLICATIONS? A rare but very dangerous problem arises when fainting and unconsciousness occur from a shock reaction (anaphylaxis).

HOW COMMON IS IT? More than 10 percent of the population suffers from allergic illness.

HOW IS IT ACQUIRED? The tendency to have allergic illnesses runs in the families.

WHAT HAS THE DOCTOR DONE? It is difficult to identify specific causative agents when your child is already eating a variety of foods. Your doctor may recommend a diet that limits your child's exposure to the common allergy-causing foods.

WHAT CAN THE FAMILY DO? Future children should be breast fed because breast milk is the least allergy-producing food. For this child, an alternative formula may be recommended because cow's milk allergy is quite common. An alternative formula may be derived from soybeans or other protein sources.

The best treatment is to eliminate the offending foods from your child's diet. Try to identify these foods. This may not be easy. When introducing solid foods to babies, there are several measures, which should be followed to identify offending foods. ***INTRODUCE ONLY ONE NEW FOOD AT A TIME.*** Begin with a small amount and increase each day. Wait several days before introducing another new food. Use only pure foods, in other words, foods that contain a single ingredient. Discontinue foods, which are not well tolerated and discuss these with your child's doctor at the next visit.

BEE, WASP AND FIRE ANT STINGS OR BITES

WHAT IS IT? The sting or bite of these insects is accompanied by the injection of irritating venom. All of these are from the insect family Hymenoptera. Two to three percent of the population is overly sensitive to these stings.

WHAT ARE THE SYMPTOMS? It is normal for this type of sting or bite to cause pain and burning with local swelling, redness and itching. Usually, this is not a serious problem. The sensitive individual, however, may suffer a generalized reaction. There are several types of reactions including a rash, hives or generalized swelling. A more serious reaction causes difficult breathing and wheezing. A rare but very dangerous problem arises when fainting and unconsciousness occur from shock. Occasionally these stings may cause nausea, vomiting, diarrhea and abdominal cramps. Sometimes an individual may have a reaction days afterwards characterized by hives, fever, joint pains and swollen glands.

WHAT ARE THE COMPLICATIONS? It is not uncommon for the local site of the sting or bite to become infected and require special treatment--the more generalized reactions of sensitive individuals can be life threatening.

WHAT HAS THE DOCTOR DONE? The child who has suffered a generalized reaction usually receives some type of adrenalin and other medicines either by injection or orally to help control this reaction. Your doctor may recommend that you, or if your child is old enough, he or she learn to use an emergency adrenalin injection and medication kit. ***READ THE INSTRUCTIONS AND LEARN HOW TO USE THE KIT WHEN IT IS OBTAINED.*** In an emergency, the kit needs immediate use. Many sensitive individuals benefit from a course of shots to build a tolerance to these stings and bites.

WHAT CAN THE FAMILY DO? If a bee stings your child again, remove the stinger. This should be done using your fingers in a scooping or scraping motion rather than pinching, which often squeezes in more venom. Apply ice or ice water to the sting area.

Hot baths and showers can make the local itching your child suffers worse. Applying a paste of baking soda to the sting site often helps relieve discomfort. If your child has suffered a generalized reaction, she/he should wear an identification tag that indicates this allergic sensitivity.

Most important try to help your child avoid future stings. Clear nests from around the house. Do not plant flowers and flowering trees in the play yard. Your child should not walk barefoot or wear sandals. Dressing in bright colors should be avoided, as should fragrant powders, perfumes and sprays. Long sleeves and long pants make reaching the skin less likely.

WHEN TO CALL THE DOCTOR AGAIN? If your child suffers any of the following with insect stings, this should be considered a ***MEDICAL EMERGENCY***: shortness of breath, wheezing, hoarseness, swelling of the mouth, fainting, loss of consciousness, nausea, vomiting, abdominal pain or diarrhea. Use the kit and seek immediate medical attention. Most of these reactions become apparent within minutes, occasionally within hours, of a sting.

ECZEMA

WHAT IS IT? Eczema is an itchy rash that tends to be continuing and recurring. The cause is not known though it seems to be a sensitivity that is inherited like an allergy. In fact, eczema is often seen in children of families that have allergies and asthma.

WHAT ARE THE SYMPTOMS? These children have dry skin. The rash is made up of pink to red patches and occurs anywhere on the body. Infants most commonly get this on the face. On children, other common locations are behind the ears, on the neck or the creased skin areas over the joints. Your child may itch considerably. The skin can look thick and scaly. It can ooze fluid and form crusts. Your child does not spread these patches from place to place, nor to other people. Rather, they just occur.

HOW LONG DOES IT LAST? Eczema may last many weeks, months and even years. Sometimes it will go away entirely only to recur.

WHAT ARE THE COMPLICATIONS? Though eczema is not due to any germ, it is easy for infection to take hold in the sensitive skin. Occasionally, the repeated scratching can cause thickening of the skin.

WHAT HAS THE DOCTOR DONE? Often doctors will recommend a medication to be applied to the affected area to lessen the itching and redness. Follow the instructions carefully. Your child's doctor may recommend or prescribe a medicine to be taken by mouth to help reduce the itching. These antihistamines may alter your child's behavior, making him/her sleepy or irritable.

WHAT CAN THE FAMILY DO? Usually eczema cannot be cured. Often it can be controlled for periods of time. Bringing it under control will be trying for you and your child, who is uncomfortable, but the effort will be worthwhile. First, avoid things that are known to make it worse such as detergents and strong deodorant soaps, which remove the skin's natural oils. Since all soaps tend to dry the skin, bathing should be kept short with no playing in the tub. Hot water, itself, can make it worse. Prevent your child's skin from coming in contact with things which make itching or the rash worse. One such common irritant is wool in clothing and blankets. If you can identify a certain food that makes your child's symptoms worse, it should be removed from the diet. You must try to prevent infection from occurring in your child's sensitive skin. Keep his/her hands clean and fingernails short. Again, your doctor will want to see your child for routine monitoring of the problem. Call also if your child develops fever or the involved areas leak pus.

IMPETIGO

WHAT IS IT? Impetigo is a rash consisting of pus-producing sores on the skin. Bacteria infect these sores.

WHAT ARE THE SYMPTOMS? Impetigo sores are red spots, which can blister and ooze fluid that dries and forms yellowish crusts and scabs. Your child will find these sores itchy may scratch them and pick at the crusts and scabs.

HOW LONG DOES IT LAST? The sores of impetigo will improve in the first few days of treatment. After healing there may be some skin discoloration, which will lessen with time.

WHAT ARE THE COMPLICATIONS? Rarely, impetigo is associated with a serious kidney problem called glomerulonephritis.

HOW COMMON IS IT? Impetigo is a very common skin infection among children.

HOW IS IT ACQUIRED? Impetigo sores may contain certain bacteria that are contagious to an extent, being spread by direct contact. These sores can also spread from place to place on the same individual when the sores are open, weepy. When members of the family have recurrent and persistent impetigo, this may indicate that there is a carrier of these bacteria in the family.

WHAT HAS THE DOCTOR DONE? If your child has only a few sores, then your doctor may recommend an antibiotic ointment to be applied to the sores after each washing. This can usually be purchased without a prescription. Otherwise, the doctor usually recommends an antibiotic to be taken by mouth or given by injection. If an oral medicine is prescribed, the instructions should be followed as indicated on the bottle.

WHAT CAN THE FAMILY DO? Impetigo can be cleared only by vigorous treatment. Your doctor may suggest special soaps for your child to use in treatment and to control the spread of sores. The best treatment is to wash affected areas thoroughly with soap and water. Soaking or moistening with a washcloth followed by gentle scrubbing will help remove the crusts. This washing, soaking and scrubbing should be done three or four times a day. Scratching seems to promote the spread of impetigo. Therefore, keep your child's nails cut short. Clothing, washcloths and bedding should be washed daily.

WHEN TO CALL THE DOCTOR AGAIN? If there is no improvement after several days or if the impetigo is getting worse, call your doctor during regular office hours. If your child develops swelling of the face, darkening of urine, abdominal pain, or fever, call the office immediately.

BOILS

WHAT IS IT? Boils are pockets of pus (abscesses) in the skin, a result of bacterial infection.

WHAT ARE THE SYMPTOMS? Boils can vary in size. They usually begin as a small area of redness. As the infection progresses, pus collects; the area becomes warm to the touch and tender. As pus accumulates, the overlying skin may thin and eventually rupture. When the pus drains, the pain is usually relieved. These boils can occur singly or in groups and most commonly involve the hairy areas, which are subject to rubbing or pressure, such as the neck, underarms, groin and buttocks.

HOW LONG DOES IT LAST? Boils usually respond rapidly to treatment. However, it may take weeks for the skin surface to return to its normal appearance.

WHAT ARE THE COMPLICATIONS? Boils on the face can spread dangerously, but otherwise there are rarely serious complications.

HOW COMMON IS IT? Boils are quite common.

HOW IS IT ACQUIRED? Bacteria (usually of the staphylococcal family) cause boils by infecting deeper portions of the skin, often entering these areas along the hair shafts.

WHAT HAS THE DOCTOR DONE? If your child has fever, multiple boils anywhere, or even a singular boil on the face, your doctor probably has recommended treatment with an antibiotic. This may be given by injection or by mouth. If given by mouth, please follow the instructions on the bottle. Occasionally the doctor will surgically open the boil in the office to drain the pus. This is a procedure that should not be attempted at home.

WHAT CAN THE FAMILY DO? All members of the family should wash well with antibacterial soaps. This is particularly true for the child with the boils. Hot soaks are used to promote circulation in the area of the boils and will help bring the pus to the skin surface (point) and drain. It is best to use gauze pads soaked in hot (not boiling hot) water to apply gently as compresses for 15 minutes, four times a day, until the pus drains. If your child has fever, she/he can be made more comfortable by being given acetaminophen (the common aspirin substitute) in an appropriate dose for age.

WHEN TO CALL THE DOCTOR AGAIN? The doctor should be contacted if your child develops a fever or has boils on the face. Similarly, the doctor should be contacted if the area surrounding the boil becomes red, or if red streaks are noticed emanating from the boil.

HIVES

WHAT IS IT? Hives are a very common allergic reaction of the skin. The cause is often difficult to identify. Most commonly it is due to a particular food, medicine, insect sting, or substance that the skin has come in contact with. Often it is not rewarding to search endlessly for the cause.

WHAT ARE THE SYMPTOMS? Hives look like welts or red, blotchy, raised patches (wheals) that occur anywhere and may itch terribly.

HOW LONG DOES IT LAST? Hives can last a few minutes, hours or days. They come and go in different locations, singly or in groups, for as long as several weeks. Some children who are sensitive may get them frequently.

HOW COMMON IS IT? Most people experience hives on one or two occasions during their lives.

WHAT ARE THE COMPLICATIONS? Hives alone are not serious. However, it can be associated with swelling of the throat and mouth, difficult breathing or swallowing. ***THIS IS AN EMERGENCY.***

WHAT HAS THE DOCTOR DONE? Your doctor may have recommended or prescribed an antihistamine which your child can take orally. These medicines may alter your child's behavior making him/her irritable or sleepy. Severe hives may require additional medications and even injections. These medicines decrease the severity of the itching and the hives but do not eliminate the cause.

WHAT CAN THE FAMILY DO? Hives will almost always go away on their own. If the cause can be identified you should try to eliminate your child's exposure to it. A number of measures can be taken to not make the rash or itching worse. Do not allow your child to get overheated and sweaty. Eliminate hot baths and showers, and instead use lukewarm water. Do not give your child any medication without consulting your physician. Applying cold compresses to the affected areas may help itching.

WHEN TO CALL THE DOCTOR AGAIN? Call your doctor immediately if there is difficulty breathing or swallowing, wheezing, or swelling of the throat, mouth and lips.

POISON IVY, POISON OAK AND POISON SUMAC

WHAT IS IT? Poison ivy, poison oak or poison sumac is a rash on exposed parts of the body that come in contact with any part of these plants. It usually occurs in the spring and summer when children are outdoors, but can occur any time of the year. The rash occurs only in those people sensitive to an oily substance produced by members of the rhus plant family recently renamed the toxicodendron family. This sensitivity is a reaction by your child's body to previous exposure to this substance. The skin must usually be in contact with the oil for several hours to cause a reaction. The rash can begin up to several days after this contact.

WHAT ARE THE SYMPTOMS? The rash usually appears as clusters of small blisters or pimples on reddened skin. The blisters may leak a fluid, which can dry, and crust. Your child may be suffering intense itching and scratch constantly.

HOW LONG DOES IT LAST? Poison ivy, poison oak, or poison sumac rashes are usually present for several weeks.

WHAT ARE THE COMPLICATIONS? The areas involved can become infected with bacteria and leak pus.

HOW COMMON IS IT? These rashes are very common. Children who are sensitive may have it often and severely.

HOW IS IT ACQUIRED? Your child developed this rash because of contact with the rhus oil. This oil may be on any part of these plants and on mango skin or in mango soap. The oil, unless removed from the skin, can be spread to other areas on your child's skin or even to other individuals. However, fluids from the blisters will not cause spreading of the rash. Pets, clothing, or other outdoor equipment can have the rash on their hair or surfaces and consequently serve as a source of the rash. The smoke from burning trash (which has Rhus plants or parts) contains oil and can cause the skin reaction.

WHAT CAN THE FAMILY DO? The family should take measures to prevent the spread of the oil. Vigorous washing of your child's body with soap and water is of prime importance to remove all of the oily substance. The quicker the oil is washed from your child, the less will be absorbed, decreasing the amount and severity of the rash. Removing the oil will also prevent the spread of rash. These measures are particularly important if your child comes in contact again with these plants or the oil. Removal of the oil will not prevent occurrence of the rash in the areas already having sufficient contact. New rash can appear more than a week after initial contact. All clothing should be washed. Several measures may be taken to help relieve your child's itching discomfort. Moist, cold compresses can be applied to these affected areas to obtain relief. Cool baths or showers may also be temporarily helpful. Some physicians advocate a good hot shower or bath at bedtime, which temporarily makes the itching worse but in doing so, depletes your child's reaction. This may help provide a good night's sleep. Many people obtain relief from calamine lotion (which can occasionally cause a skin reaction of its own, making things worse). Keeping your child's fingernails short may lessen skin damage and spread of infection. Most importantly, teach your older children to recognize the plants of the rhus family. Teach them, too, to avoid these plants or places where they might grow. If your child is going camping or participating in other situations in which she/he might contact these plants, long pants and shirts will decrease the possibility of skin contact. These clothes should be removed and washed as soon thereafter as possible.

WHAT HAS THE DOCTOR DONE? Your doctor may have prescribed medicine to apply to the areas involved or a medicine to be taken by mouth to relieve the itching. Severe cases may require more individualized therapy.

RINGWORM OF THE BODY

WHAT IS IT? Ringworm is a skin infection caused by a fungus that can affect the scalp, skin, fingers, toenails, or feet.

WHO GETS RINGWORM? Anyone can get ringworm. Children may be more susceptible to certain varieties while adults may be more affected with other varieties.

HOW IS RINGWORM INFECTIONS SPREAD? Transmission of these fungal agents can occur by direct skin-to-skin contact with infected people or pets, or indirectly by contact with items such as barber clippers, hair from infected people, shower stalls or floors.

WHAT ARE THE SYMPTOMS OF RINGWORM INFECTIONS? Ringworm of the scalp usually begins as a small simple which becomes larger in size leaving scaly patches of temporary baldness. Infected hairs become brittle and break off easily. Occasionally, yellowish cuplike crusty areas are seen. With ringworm of the nails, the affected nails become thicker, discolored and brittle, or it will become chalky and disintegrate. Ringworm of the body appears as flat, spreading ring-shaped areas. The edge is reddish and may be either dry and scaly or moist and crusted. As it spreads, the center area clears and appears normal. Ringworm of the foot appears as a scaling or cracking of the skin especially between the toes.

HOW SOON DO SYMPTOMS APPEAR? The incubation period is unknown for most of these agents, however ringworm of the scalp is usually seen 10 to 14 days after contact and ringworm of the body is seen four to ten days after initial contact.

DOES INFECTION WITH RINGWORM MAKE A PERSON IMMUNE? Since so many species of fungus can cause ringworm, infection with one species will not make a person immune to future infections.

WHAT IS THE TREATMENT FOR RINGWORM INFECTIONS? Your doctor may prescribe a fungicidal material to swallow as tablets or powders that can be applied directly to the affected areas. Griseofulvin is commonly prescribed for treating fungus infections.

WHAT CAN BE DONE TO PREVENT THE SPREAD OF RINGWORM? Towels, hats and clothing of the infected individual should not be shared with others. Young children who are infected should minimize close contact with other children until effectively treated. When multiple cases occur, seek advice from your local health department.

LICE

WHAT IS IT? Pediculosis is an infection of the scalp or the other hairy areas. It is actually an infestation by a tiny insect called a louse (plural: lice). The louse bites the skin (bites are no larger than a pin point) and feeds on blood. There are three types of lice that affect humans; the head louse, the body louse and pubic louse. The scalp louse dies within two or three days after removal from the scalp. The other types can survive longer. The lice leave eggs that take two to three weeks to mature. Clusters of eggs (nits) are sticky and appear as tiny gray globs stuck to the hairs

WHAT ARE THE SYMPTOMS? Each bite is itchy. Your child may scratch incessantly. Often, if these bites become secondarily infected and leak pus, the surrounding skin becomes red and swollen.

HOW COMMON IS IT? Lice are very common because they are so easily spread.

HOW IS IT ACQUIRED? Though most often passed from one person to another, this insect is capable of living away from the warmth of the human body for short periods. The eggs, too, can survive for days without human contact, particularly the eggs of the body louse. Thus, eggs can be passed on clothes, bedding or bathroom equipment.

WHAT HAS THE DOCTOR DONE? The doctor has examined your child for lice and nits. Treatment is with a lotion, shampoo that your physician recommends, or prescribes. Be sure to follow the doctor's instructions exactly because most of these medicines are dangerous if improperly used.

WHAT CAN THE FAMILY DO? The nits need to be removed by combing the hair with a fine-toothed comb (available in many pharmacies for just this purpose). All bedding, clothes, combs and brushes must be hot washed the day of treatment. If the problem is body or pubic lice (often called "crabs"), the toilet should be thoroughly washed. Your child should be kept from school until treated to prevent spreading to others. If one member of the family is infected, the others should be careful because lice are easily passed.

WHEN TO CALL THE DOCTOR AGAIN? Call your doctor's office if the symptoms persist, if your child develops infected sores, or if the itching is disturbing his/her sleep. This can be done during regular office hours.

TICKS

WHAT IS IT? Ticks are tiny insects that bite into the skin to feed on blood. The tick has pinchers that are used to obtain a firm hold into the skin.

WHAT ARE THE SYMPTOMS? Tick bites may be particularly painful or itch.

HOW LONG DOES IT LAST? The tick may stay in place for many weeks. Even after it is removed, several weeks may pass before the skin returns to normal appearance.

WHAT ARE THE COMPLICATIONS? Occasionally tick bites become infected. In many regions of the country, ticks transmit serious illnesses.

HOW COMMON IS IT? Tick bites are quite common because ticks inhabit shrubs and grasses in most wood areas.

HOW IS IT ACQUIRED? The tick attaches to the clothing or skin of a passerby, pet, or wild animal.

WHAT CAN THE FAMILY DO? Most importantly, try to prevent future bites. Your child should be encouraged to wear long pants, boots and long-sleeved shirts. Though the ticks may attach to clothing, they can often be prevented from creeping to the skin by taping the ankles and wrists tightly and dusting these areas and the waist with flowers of sulfa (a powder available at most drug stores) or applying insect repellent. After your child has been in the area where ticks might have been encountered, his/her skin, particularly the hairy areas, should be examined for the presence of ticks. If there are ticks in your area, then examine your child nightly. The earlier the skin is examined for ticks, the easier their removal. It is easiest just to brush them off if they have not attached to the body. The clothes should be washed in hot water. Pets should also be checked. Once the pinchers are locked in, simply pulling at the tick can cause the body to break off from the head, leaving it and the pinchers embedded in the skin. It is best to try to aggravate the tick into letting go. This is usually done by applying alcohol, oil or a coat of petroleum jelly (which prevents breathing and after 15 to 30 minutes, causes the tick to lose his grip) or

touching the body of the tick with a hot pin. As the tick loosens his grip, gentle traction with a twisting motion may make removal of the intact tick possible.

WHEN TO CALL THE DOCTOR AGAIN? The doctor should be contacted if your child develops headache, fever, rash or other symptoms that concern you.

LYME DISEASE

WHAT IS IT? Acute illness as a result of a deer tick bite.

WHAT ARE THE SYMPTOMS? Usually a rash at the bite site. It may appear within days or weeks of the bite. It may spread to 5" - 7" across. Fever, headache, weakness, joint, and muscle pain similar to "flu" pain. Late stages may cause arthritis, numbness, memory loss, problems seeing or hearing, high fever and stiff neck.

WHAT HAS THE DOCTOR DONE? The physician will prescribe treatment after diagnosing Lyme's Disease.

WHAT CAN THE FAMILY DO? Follow the treatment prescribed by the family physician.

WHEN TO CALL THE DOCTOR AGAIN? Follow the physician orders and call as indicated by the physician.

RED BUGS OR CHIGGERS

WHAT IS IT? Chiggers are a rash caused by tiny insects that feed in the skin. The chigger is a type of mite that is red, hence its common name.

WHAT ARE THE SYMPTOMS? The bites are extremely itchy because of an irritating chemical produced by the mite. They begin as tiny red spots on the skin several hours after contact with the chiggers. The most common areas involved are those not covered with clothing. The tiny red spots enlarge considerably into red bumps as the chemical irritation continues.

WHAT ARE THE COMPLICATIONS? Occasionally, these bites become infected. Frequently, males will have marked but harmless swelling of the genitals from multiple bites.

HOW LONG DOES IT LAST? The rash itches intensely for the first few days; however, in the succeeding weeks, the itching decreases in severity.

HOW COMMON IS IT? Chiggers are quite common.

HOW IS IT ACQUIRED? Chiggers inhabit grasses and shrubs, waiting for an opportunity to latch on to skin and clothing.

WHAT HAS THE DOCTOR DONE? The doctor may have prescribed or recommended a lotion or shampoo that will kill the chigger. For severe itching, an antihistamine is often recommended. This medicine may alter your child's behavior, making him/her irritable and sleepy.

WHAT CAN THE FAMILY DO? It is best to try and prevent future chigger bites. Your child should be encouraged to wear long-sleeved shirts, long pants and boots. The red bugs can often be prevented from creeping to the skin by taping the clothing at the ankles and wrists tightly and dusting these areas and the waist with flowers of sulfa (a powder available at most drug stores) or applying insect repellent. These measures may help to prevent contact of the chiggers with your child's skin. Applying cold compresses to the affected areas may help your child's itching. His/her nails should be cut short to prevent scratching that might damage the skin and increase the likelihood of infection.

WHEN TO CALL THE DOCTOR AGAIN? The doctor should be contacted during office hours if the area involved becomes infected or if the child's itching is disturbing his/her sleep habits.

SCABIES OR SEVEN-YEAR ITCH

WHAT IS IT? Scabies is a rash that is produced by a tiny insect. It is actually an infestation by the scabies mite that feeds on and burrows into the skin, laying eggs. The actual mite is pinpoint in size.

WHAT ARE THE SYMPTOMS? The scabies mite releases materials into the skin, which cause extreme itching, particularly at night. Your child may scratch incessantly. Though appearing as tiny bites or blisters, areas involved subsequently become red and swollen. Scabies can occur anywhere but commonly involves the areas between the fingers, around the nipples and other creased areas such as the wrists and genitals.

HOW LONG DOES IT LAST? If left untreated, scabies may last many weeks. However, after treatment, improvement in symptoms is noted within a few days. Even after the insects are killed, the rash may take several weeks to subside completely.

WHAT ARE THE COMPLICATIONS? Occasionally, the bites or scratches become infected.

HOW COMMON IS IT? Scabies is very common.

HOW IS IT ACQUIRED? Scabies may be passed from one person to another by skin to skin contact or from clothes, bedding or linens.

WHAT HAS THE DOCTOR DONE? The doctor may have scraped your child's skin to examine it under the microscope for the scabies mite or eggs. Sometimes this is not necessary. For the itching an antihistamine may be prescribed or recommended. This medication may alter your child's behavior, making him/her sleepy or irritable.

WHAT CAN THE FAMILY DO? Your child's clothing, bedding, and linen should be thoroughly washed in hot water. The doctor will recommend or prescribe a shampoo or lotion to be applied to all the skin from the neck down. This treatment is often recommended for other members of the family whether or not they are developing similar symptoms. This medication should be used only as directed. If applied too frequently, it can be extremely dangerous. Your child will benefit from measures to relieve the itching. Cool compresses or soaks will be helpful. Your child's nails should be cut short to prevent damage from scratching and infection.

WHEN TO CALL THE DOCTOR AGAIN? Contact the office if the treatment has not resolved the problem. Also, call if your child's itching is not well controlled or if it keeps him/her awake at night.

CONSTIPATION IN CHILDREN

WHAT IS IT? Constipation is the occurrence of hard-formed stools that are difficult for your child to pass.

WHAT ARE THE SYMPTOMS? Constipation may cause your child to strain when going to the bathroom.

HOW LONG DOES IT LAST? Constipation is a temporary problem.

WHAT ARE THE COMPLICATIONS? Constipation is rarely serious. Therefore, you as parents should not become overly concerned with your child's bowel function.

HOW COMMON IS IT? Constipation is quite common. Often, irregular or infrequent bowel movements are confused with constipation, but the latter indicates nothing more serious than your child being too busy to go the bathroom.

WHAT CAN THE FAMILY DO? It is easy to treat your child's constipation by modifying his/her diet. You should not give enemas or use laxatives. Try to provide your children with a well-balanced diet that includes foods, which provide bulk (material that is not digested and thereby helps wastes to pass through the bowels easily and rapidly). Foods providing bulk include fruits, vegetables, and particularly bran and bran products. Add a tablespoon of pure bran to your child's morning cereal or switch him/her to high bulk cereal. Examine the labels on bran-containing cereals to see just how much bulk is provided. Certain fruits and juices have a laxative property. These include prunes and prune juice, figs, dates, and raisins. In fact constipation often resolves by just giving your child plenty of liquids. Children should be taught to respond to the "urge to go".

WHEN TO CALL THE DOCTOR AGAIN? If the problem continues, call the office during regular hours.

STOMACH VIRUS IN CHILDREN

(Gastroenteritis)

WHAT IS IT? Gastroenteritis is an infection of the digestive tract. Most commonly this infection is caused by a virus, hence the name stomach virus.

WHAT ARE THE SYMPTOMS? The child with a stomach virus is irritable. She/he may initially vomit everything eaten. Diarrhea may begin gradually or suddenly and the stools may vary from loose to very watery in consistency, with frequency varying from one or two movements per day to many more.

HOW LONG DOES IT LAST? Gastroenteritis usually lasts three to five days and occasionally longer.

WHAT ARE THE COMPLICATIONS? Persistent vomiting and/or diarrhea can cause dehydration, a potentially dangerous complication. Because of temporary damage to the cells that line the intestines and help digest foods, your child with diarrhea may not be able to tolerate certain foods, even after the stomach virus has run its course. One such temporary intolerance is to lactose, the sugar in cow's milk. Another temporary intolerance is to gluten, a protein in cereals.

HOW COMMON IS IT? Stomach virus is very common among children.

WHAT HAS THE DOCTOR DONE? Most likely your doctor has not recommended any medicines for your child's stomach virus. This is because those medicines, which are sometimes used in adults, do not work in children and are quite dangerous. Children with severe vomiting or diarrhea and evidence of dehydration may have to be hospitalized to receive fluids.

WHAT CAN THE FAMILY DO? The best treatment for vomiting is to give your child nothing by mouth. This will give the stomach and upper intestine a rest. Then begin with a small amount (one teaspoon) of clear liquids every 15 minutes. The best liquid is one that gives sugar and replaces salts that have been lost; Gatorade is a good choice of beverage. Other helpful liquids include sodas (allowed to become flat), clear broth, sweet tea, jello water (gelatin dessert made with 1 1/2 times the recommended water), and Popsicles. Gradually increase the amount your child takes. When vomiting has not recurred for 24 hours you may begin reintroducing small amounts of solid foods. Start with mashed rice or rice cereal, mashed potatoes, bananas or applesauce. Try to record how much liquid your child takes each time. If vomiting recurs, return to the above procedure. Diarrhea is treated similarly with clear liquids. As the diarrhea decreases in frequency and amount, you may begin to add the same bland foods discussed above. Often the bowel will not tolerate cow's milk or milk products for several days. Do not give milk until the diarrhea is completely resolved, which may take a week. Keep your child on clear fluids and then slowly reintroduce milk. If your child does have a problem with milk after a week, consult the doctor again.

WHEN TO CALL THE DOCTOR AGAIN? Your doctor should be contacted if there is no improvement after 24 hours. If the temperature remains over 103F (39.4C) or there is blood in the diarrhea or vomited material, the physician should also be called. If your child is developing signs of dehydration, such as sunken eyes, dry skin or mouth, urinating less, or making dark, yellow urine, then contact your doctor immediately. Also, contact the doctor immediately if your child is exceedingly drowsy or listless, refuses to eat or drink. If your child remains playful and continues to take fluids you can manage this wellness at home. But because this type of illness is deceptively dangerous you should contact your child's physician daily until improvement is obvious.

PINWORMS

WHAT IS IT? Pinworms are a common digestive tract infestation among children.

WHAT ARE THE SYMPTOMS? The child with pinworms may have itching of the rectal area, usually at night. This may make him/her irritable and sleepy during the day. ***IT IS UNCOMMON FOR PINWORMS TO CAUSE OTHER SYMPTOMS.***

HOW LONG DOES IT LAST? Pinworms are usually eliminated completely from your child's digestive tract once she/he has received the complete treatment recommended by your physician. This does not prevent reinfections.

WHAT ARE THE COMPLICATIONS? Severe scratching may cause skin damage and secondary bacterial infections. Occasionally pinworms migrate into the female genital tract causing an irritation of this area.

HOW COMMON IS IT? Pinworms are a very common infection among young children.

HOW IS IT ACQUIRED? Eggs spread pinworms from human to human. The female worm crawls out of the rectum at night and lays eggs on the nearby skin. These eggs get to the mouth by fingers that touch the skin (particularly the rectum when scratching), bed linens, or night clothing. Swallowed eggs develop into adult worms in two to four weeks. Adults are threadlike, being from 2 to 12 mm or 1/10 to 1 inch in length. The worms may best be seen at night after your child has been asleep for at least an hour. Shine a flashlight on the rectal area. When the worms are not seen it may be necessary to examine your child for eggs. Pressing the sticky surface of cellophane tape against the rectum and the surrounding skin several times does this. The best time to use the tape is first thing in the morning. The tape will be examined at the doctor's office under the microscope in order to see the eggs.

WHAT CAN THE FAMILY DO? Pinworms are best treated by the medication your doctor prescribes. Often all members of the household will be given medicine to take on the same day. Also on that day, wash all nightclothes and bed linens. Toys that are often taken to bed should be cleaned also. Everyone should bathe thoroughly and trim the fingernails. Some

medications have to be repeated. Your doctor may recommend checking for pinworms again with flashlight or scotch tape. Remember, pinworms can be brought back into the home from sources outside. Encourage your children to wash their hands after moving their bowels.

WHEN TO CALL THE DOCTOR AGAIN? If you suspect that your child has again developed pinworms, call the office during regular hours.

FEVER IN CHILDREN SIX MONTHS AND OLDER

Fever is an elevation of your child's temperature beyond normal. Normal temperature is orally 98.6 F or 37C and rectally 99.2 F or 37.3C. A fever is seldom significant if it cannot be felt by hand. But you cannot accurately tell the extent of fever by touch. Therefore check your child's temperature with a thermometer. Fever is a symptom of an illness, most commonly an infection. Fever in babies under six months of age can be an indication of a serious illness and your child's doctor should be contacted promptly. Fever represents your child's immune defenses, responding to the illness. Consequently, a fever often needs reduction solely for your child's comfort. Fevers themselves usually are not harmful (they do not cause brain damage). Reducing the fever alone does not eliminate its cause. The cause of the fever must be determined and treated appropriately. However, it is important to keep the fever within reasonable limits, particularly if it exceeds 102F or 38.8C, which becomes quite uncomfortable for your child. A number of simple measures may be taken to help control a fever. You should dress your child lightly to allow the body heat to escape. It is a misconception to bundle the child to cause the fever to burn out. Keep the room temperature cool. Encourage your child to drink plenty of liquids, particularly cool fluids such as favorite juices or sodas. Bathing your child in lukewarm water is more comfortable to the child than sponging or rubbing with alcohol. (Alcohol fumes can be dangerous.) Immerse as much of the body, except the head, in the bath as possible. (Cold-water enemas can be dangerous and should not be used unless recommended specifically by the doctor). You should use acetaminophen (the common aspirin substitute) in doses appropriate for your child's weight or age. These should be used every four to six hours if the temperature rises above 102 F (38.8C) orally or 102.6 (39.2C) rectally. The table below lists the common medicines available to reduce fever and the dosage for the various ages. These medicines and the above measures only help reduce a fever. Often these do not bring the temperature to normal. These measures do not prevent the temperature from rising again. You should contact your doctor if your child appears severely ill and/or has alarming symptoms other than fever. If the cause of your child's fever is apparent, such as a cold, it is not necessary to call the doctor. However, if your child's condition worsens or does not improve your doctor should be contacted. If the fever lasts more than 24 hours without apparent cause or if you are unable to reduce fever below 104 F (40.0C) orally, 104.6 F (40.3 C) rectally, your doctor should also be promptly contacted.

TAKING YOUR CHILD'S TEMPERATURE

When your child seems ill, she/he also may have a fever. A fever is seldom significant if it cannot be felt by the hand. But you cannot accurately tell severity by touch. Therefore, your child's temperature must be checked with a thermometer. Fahrenheit (F) is the temperature scale that has been used for many years in the United States. This is the scale in which water freezes at 32 degrees and boils as 212 degrees. Centigrade (C) is the metric temperature scale being adopted by federal mandate. In this scale, water freezes at 0 and boils at 100 degrees. Thermometers using either are suitable for measuring body temperature. The normal average temperature is 98.6 F (37 C) orally or 99.2 F (37.3 C) rectally. Rectal temperature is usually slightly higher than oral temperature. Additionally, oral temperature may vary with the food your child eats or drinks or the manner in which she/he is breathing. Temperature varies over the day and evening. It is normally not constant. Hence, the average temperature is just that, only an average. The body temperature will vary depending upon the weather or the amount of your child's activity. Hot weather and vigorous exercise increase the temperature. Slight changes in your child's temperature should not be considered important or a cause for concern. The quality of the thermometer used in taking your child's temperature can affect the accuracy of the measurement. Therefore, to measure your child's temperature, use the same thermometer each time. For infants and children, a rectal has a short, round bulb. Vigorously shake the thermometer to move the mercury towards the bulb. The thermometer tip should be lubricated with petroleum jelly or water-soluble lubricant. Your child should be placed on the stomach. In this prone position, you can keep a hand on his/her bottom to limit struggling. Spread the cheeks with the hand being kept on the bottom and then insert the thermometer 1 inch (2 1/2 cm) into the rectum. The most accurate temperature can be obtained by leaving the thermometer in place for a full 3 minutes. Remove the thermometer and read the temperature. If you child's doctor specifically requests it, keep a written record of your child's temperature. Such a record can be quite helpful to the physician. When calling the doctor, have the most recent temperature handy. Remember, the general picture presented by repeated temperature readings is usually more significant than individual readings of slight variation.

FEBRILE CONVULSIONS

WHAT IS IT? Febrile convulsion is an uncontrolled movement of the limbs, and general shaking brought on by either a high fever or a rapid rise in temperature. Sometimes this may occur at the start of a fever as well as during a fever. If your child is older, there may be other causes for the convulsion.

HOW LONG DOES IT LAST? Usually febrile convulsions are short, lasting only minutes, though they may seem much longer. After a convulsion it is normal for your child to be tired and sleepy.

WHAT ARE THE COMPLICATIONS? Febrile convulsions are not dangerous as long as your child is protected from injuring himself/herself during it. Brain damage usually does not occur. Having a febrile convulsion does not mean that your child has epilepsy.

HOW COMMON IS IT? Most commonly, febrile convulsions occur from ages six months to three years. Febrile convulsions occur in 3 to 5 percent of children in this age group. Some families are more prone to febrile convulsions than others.

WHAT HAS THE DOCTOR DONE? Some doctors recommend the use of special medicines that may help prevent future febrile convulsions. Your child's doctor will give specific instructions about the medicines. Doctors do this because once a child has had a febrile convulsion; there is a greater likelihood that this will happen again with a rapidly rising or high fever. Most commonly, however, febrile convulsions do not recur. It is usually necessary for your doctor to recheck the child periodically. If placed on continuous medicines it will be necessary to monitor the blood levels of the medicine. The doses of any medicine must be changed, as your child grows older. Many doctors will obtain a brain wave study (electroencephalogram) when a child has a febrile convulsion. This test is quite helpful and does not hurt your child.

WHAT CAN THE FAMILY DO? The entire family should learn what to do during a convulsion. Prevent the convulsing child from hurting himself/herself. Prevent the child from falling or place him/her on the floor away from objects that might cause injury. It is not otherwise necessary to restrain your child. Do not place any object in his/her mouth (tongues may be bitten but they are not swallowed). It is important to control your child's fever. Acetaminophen should be given in doses appropriate for age or weight. Encourage your child to drink plenty of liquids including favorite juices, sodas, and soups. Keep your child lightly dressed to allow heat to escape and keep the room temperature cool, about 68 to 70 F (20 to 22 C). Bathing in lukewarm water is more comfortable than sponging and will help reduce the fever.

WHEN TO CALL THE DOCTOR AGAIN? Your doctor will want to be promptly contacted if another convulsion occurs, for examination and possibly to perform further tests.

COMMON COLD

WHAT IS IT? The common cold is an infection of the nose and throat. Some 120 different viruses can cause colds. At present no medications are available that cure these colds.

WHAT ARE THE SYMPTOMS? There are a number of symptoms caused by cold viruses, including running or stuffed nose, sneezing, sore throat, cough, hoarseness, fever, feeling tired (lethargy), and loss of appetite.

HOW LONG DOES IT LAST? Most colds are self-limiting. The average cold lasts 2 to 14 days, but improvement is noted after the first few days.

WHAT ARE THE COMPLICATIONS? Cold viruses can lower resistance to infections from bacteria that can cause pneumonia and infections of the bronchial tree, sinuses, or ears.

HOW COMMON IS IT? Some children seem more likely than others to get colds. The average child has 3 to 10 colds each year and as many as 100 by age 10. Colds are more common in the winter because of the increased exposure to others with colds that occurs indoors. Children who live in a home where there are one or more smokers often have three times as many upper respiratory infections as other children. They inhale what the smoker does not and thus overload the respiratory system's ability to handle infections.

HOW IS IT ACQUIRED? Colds are spread from one person to another. The virus is transmitted by droplets sprayed in the air from the nose with sneezes or from the mouth with coughs.

WHAT CAN THE FAMILY DO? There is no specific therapy for colds. To protect others keep your child home until symptoms subside and normal activities are resumed. Encourage large amounts of fluids, particularly favorite juices, soft drinks, gelatin desserts, Popsicles, and soups. Extra fluids help replace the water lost with a fever. A well-balanced diet helps, but do not force eating; a lack of appetite is common with illness. Encourage your child to get rest and plenty of sleep. Quiet play, even outside the house, will not be harmful. The fever should be treated with acetaminophen (the common aspirin substitute) in appropriate dosage for weight and age. Tepid baths also help absorb extra heat and are not as uncomfortable as

sponging. In the winter, the indoor heat and fever may dry and irritate the nose and throat. Keep the room temperature between 68 and 70 F (20 to 21 C). Moistening the air in the bedroom will help. This is best accomplished with a cool-mist humidifier, which is inexpensive and considerably less dangerous than a hot vaporizer. Young infants may need gentle suction with a rubber bulb aspirator to clear the nose, especially before eating or sleeping. This can be purchased at any drug store. When using, squeeze the bulb before inserting into the nostril so that mucus will be sucked out, not pushed in. Most children gain little from the oral medicines that shrink the nasal passages and dry mucus but do not affect the cold virus. Additionally, these medicines may alter your child's behavior, making him/her irritable or sleepy. Medicines, which suppress coughing, are harmful (because the cough helps to clear breathing passages) and should only be used if the cough prevents your child from sleeping. Chest rubs have little or no value. Many doctors recommend saltwater (saline) nose drops. These should be made fresh daily by adding 1/2 teaspoon of table salt to 8 ounces (240 milliliters) of water. Put 2 to 4 drops in each nostril just prior to feeding your infant and suction the drops and moistened mucus out with the rubber bulb aspirator. Commercial nose drops should never be used in infants or toddlers. In older children these drops often aggravate congestions if used for longer than three days. After three days, throw the drops or spray away.

SORE THROAT AND TONSILLITIS

WHAT IS IT? Sore throat (pharyngitis) is an infection of the throat. Viruses cause most of these infections. There are no medicines available which cure these viruses. Some sore throats are caused by specific dangerous bacteria called Strep (short for group A beta-hemolytic Streptococcus). This bacterium can only be identified by making a culture from a swabbing of the throat. Strep is easily treated with an antibiotic, usually penicillin, in which case another antibiotic will be used.

WHAT ARE THE SYMPTOMS? Usually the throat is sore and your child may have some fever. Occasionally there is hoarseness and a headache. When the tonsils are involved, your child may complain of difficulty swallowing. There may also be some gagging and vomiting. Often the glands (lymph nodes) in the neck are swollen and tender.

HOW LONG DOES IT LAST? Most viral infections are self-limiting. Those due to Strep respond rapidly to antibiotic therapy. Sore throats are not serious, only the complications.

WHAT ARE THE COMPLICATIONS? Viruses can lower resistance to infections from bacteria that can spread and cause pneumonia and infections of the bronchial tree, sinuses or ears. Strep when untreated, can sometimes lead to development of rheumatic fever. This is a very serious illness.

HOW COMMON IS IT? Sore throats are extremely common. Some children seem to have tonsillitis more frequently than others. These children usually respond rapidly to treatment. Unless considerable school is missed, surgical removal of the tonsils (tonsillectomy) is probably not needed.

HOW IS IT ACQUIRED? These illnesses are spread by close contact with others who have similar infections. Some children and adults do carry the Strep bacteria in the throat or nasal passages all the time. The "Strep carriers" only get sore throats when the infection flares, but they may be a source of infections for others.

WHAT HAS THE DOCTOR DONE? Many doctors will await the results of throat culture, unless a child appears very sick, before prescribing an antibiotic, which might not be needed. If the antibiotic is to be given by mouth this will usually be for a full 10 days, even if your child appears much better before it is used up. This is to help prevent complications. The antibiotic may also be given by injection, which also lasts 10 days. If injected, your child may complain of soreness at the site, and if injected in the leg, your child may limp temporarily.

WHAT CAN THE FAMILY DO? There is no specific therapy for viral sore throats. To protect others keep your child home until symptoms subside and normal activities are resumed. The irritated sore throat may be soothed with liquids or gargles. Warm salt-water gargles may offer the older child some relief from pain. Commercial gargles and lozenges are generally useless and expensive. Acetaminophen (the common aspirin substitute) can be given to relieve the discomfort of fever in doses appropriate for weight or age. Either of these medicines will also help relieve throat soreness and headache. Plenty of liquids should be encouraged. Extra fluids help replace the water lost with a fever. When tonsillitis is present it may be difficult to swallow solid foods in a regular diet; extra nutritious liquids, such as milk shakes and soups, should be given.

WHEN TO CALL THE DOCTOR AGAIN? The doctor will want to recheck your child if there is no improvement. Call the doctor if your child seems worse or has other symptoms that concern you.

STREP THROAT

WHAT IS IT? Round, gram-positive bacteria.

WHAT ARE THE SYMPTOMS? Sore throat, possible difficulty swallowing, fever, nausea, vomiting and abdominal pain are common, also headache. Tonsils are typically enlarged and bright red, developing patches of white or yellow exudate.

WHAT ARE THE COMPLICATIONS? Some children develop a rash twelve hours to two days later. Cervical lymph node infection, otitis media, sinusitis, and acute rheumatic fever are possible.

WHAT HAS THE DOCTOR DONE? Throat culture and ordering oral antibiotic therapy for ten days.

WHAT CAN THE FAMILY DO? Complete full ten-day antibiotic therapy compliance.

WHEN TO CALL THE DOCTOR AGAIN? If symptoms reoccur, or for the recheck at end of ten days antibiotics per physician order.

BRONCHITIS

WHAT IS IT? Bronchitis is an infection of the larger air passages within the chest. Either viruses or bacteria may cause this infection. At present there are no medications that cure viral infections. However, against bacteria, antibiotics are very effective.

WHAT ARE THE SYMPTOMS? A child with bronchitis usually has a considerable dry hacking cough. The coughing can make your child's chest quite sore and when the mucus is thick, cause gagging and vomiting. Often there is fever and irritability. Sometimes you can hear vibratory whistling sounds (wheezes) when you listen to his/her breathing.

HOW LONG DOES IT LAST? Bronchitis may last for days or weeks depending upon the cause and severity of infection. Often, even after the infection is gone, the child may have irritation that causes him/her to cough.

WHAT ARE THE COMPLICATIONS? There are usually no serious complications from bronchitis.

HOW COMMON IS IT? Bronchitis is common. Often, it may follow a cold. Children who live in a home where there are one or more smokers often have three times as many upper respiratory infections as other children. They inhale what the smoker does not and this overloads the respiratory system's ability to handle infections.

HOW IS IT ACQUIRED? Some children have frequent episodes of bronchitis. This is true for allergic children, those in areas high in air pollution, including those in homes of parents who smoke. It also seems to be more common in the winter when the heat at home keeps the air dry while outside the air is very cold.

WHAT HAS THE DOCTOR DONE? If the doctor suspects a bacterial cause, an antibiotic may be prescribed to be given by mouth, or he may administer one by injection. If by mouth, follow the instructions on the bottle.

WHAT CAN THE FAMILY DO? There are no specific medicines for the common viral-type bronchitis. Your child will benefit greatly from moistening the air in the bedroom. This is best accomplished with a cool-mist humidifier, which is inexpensive and considerably less dangerous than a hot vaporizer. Encourage your child to drink plenty of liquids, particularly favorite juices and soups. Coughing is the way the lungs rid themselves of the thick, infected mucus. Cough suppressant should not be used unless the child's cough is extremely bad and interferes with his/her sleep. Your child may obtain some soothing relief to the throat (which may also decrease coughing) from sucking a mixture of honey and lemon juice.

WHEN TO CALL THE DOCTOR AGAIN? The physician should be contacted if your child develops chest pain, coughs up blood, or becomes short of breath. Call also if the temperature remains above 102 F (38.8 C) despite measures to reduce the fever. Call, too, if there is no improvement after several full days of treatment.

COLD SORES OR FEVER BLISTERS

WHAT IS IT? Cold sores (Herpes simplex) are a viral infection in the mouth, which produces painful sores and blisters. The first time this occurs in the child it often involves the whole mouth, with sores on the lips, gums, tongue, inside of the cheeks, roof of the mouth, or throat. There may be high fever, increased drooling, bad breath, irritability, and swollen glands (lymph nodes) in the neck. Because of the pain your child may not eat and may drink little fluid. This initial involvement often lasts 4 to 10 days but then appears to go away. Nevertheless, the virus is carried in the mouth for life, usually in an inactive form.

The virus can, however, become active and sores recur. Usually the recurrence involves only a small portion of the mouth, lips, or face and is painful. These sores can be present for several weeks. Fever, irritability, or difficulty eating does not accompany the recurrence

HOW IS IT ACQUIRED? The virus is initially passed from one person to another by direct contact, mouth to mouth. No one knows what causes the virus to become active again after the initial episode. Sometime this occurs with colds or fevers, hence without any apparent reason. As with other viruses, at present there are no medications that affect herpes simplex.

WHAT CAN THE FAMILY DO? A child experiencing the first episode of herpes simplex (called herpes stomatitis) is usually quite miserable. Your child won't eat because of the pain. Encourage his/her favorite cool liquids such as milk shakes, soft drinks or Popsicles. Acetaminophen (the common aspirin substitute) in the appropriate dosage for weight or age will help with the fever and the pain. If your child's lips seem to be dry and cracking, coat them with a lubricant such as petroleum jelly or mineral oil. Recurring sores may be minimally affected by a number of widely promoted over-the-counter preparations.

WHEN TO CALL THE DOCTOR AGAIN? If signs of dehydration develop, such as sunken eyes, dry skin or mouth, less urinating or less wet diapers, or if your child is exceedingly drowsy or listless, call the doctor promptly. If your child will continue to take fluids, it is best to manage this illness at home.

MUMPS

WHAT IS IT? Mumps is a viral infection affecting the glands that produce saliva.

WHAT ARE THE SYMPTOMS? There are a number of salivary glands on either side of the face around the jaw. The main gland (parotid gland) is in the area where the jawbone meets the earlobe. These glands swell and cause your child pain, particularly while trying to chew or swallow. Sometimes there is a period of several days prior to the swelling when your child has fever, headaches, and weakness, particularly in the neck muscles.

HOW LONG DOES IT LAST? The swelling usually lasts 3 to 10 days.

WHAT ARE THE COMPLICATIONS? The mumps virus can also affect other glands such as the testes or the ovaries in adolescents or adults. Rarely does this cause complete sterility. Mumps can cause other rare but serious problems.

HOW COMMON IS IT? Despite the availability of a vaccine, mumps remains quite common because many children are not receiving their routine immunizations.

HOW IS IT ACQUIRED? Being in close contact easily spreads mumps with someone who is in the stage of swollen glands. It usually takes 2 to 3 weeks after being exposed for the mumps to show. Once your child has had the mumps, it seldom recurs. There are other diseases, which can cause swelling of the salivary glands similar to that with mumps. These diseases do not give immunity to mumps. Again, there is a vaccine available and if given before exposure, it will prevent your child from having mumps.

HOW LONG IS YOUR CHILD CONTAGIOUS? The child with mumps is usually contagious from a few days before the swelling to several days after the swelling has subsided.

WHAT HAS THE DOCTOR DONE? Your doctor has diagnosed mumps. This is often difficult because a number of other illnesses cause similar swelling of the face and neck. Keep your child away from other people until the swelling goes away.

WHAT CAN THE FAMILY DO? There are no medications that affect viral infections. However, your child will benefit from a number of supportive measures. Encourage a regular diet, but if chewing is too painful, do not force eating. The acid tartness of citrus juices often hurts the glands so give other types of nourishing fluids such as milk shakes and soups. Give acetaminophen (the common aspirin substitute) in appropriate dosages for age and weight to make the child with a fever more comfortable. Rest will be helpful to your child.

WHEN TO CALL THE DOCTOR AGAIN? Contact your physician if your child develops pain or swelling in the testicles or lower abdomen, headache unrelieved by acetaminophen, abdominal pain, convulsion, extreme drowsiness, difficulty hearing, visual problems, or if temperature is greater than 104 F (40C). Your other concerns, too, should be discussed with your physician

MEASLES (Rubeola)

WHAT IS IT? Measles is an illness with a rash. A virus causes it.

WHAT ARE THE SYMPTOMS? The first 3 to 5 days (prodromal phase) there is no rash but instead the child seems to have a cold with fever, cough, runny nose, and red eyes. The eyes may be bothered by bright light. As your child gets worse, his/her appetite is lost; coughing becomes more severe; there are also swollen glands (lymph nodes) and hardness in neck. The rash begins on the face and neck and spreads over the entire body. It starts as tiny pink spots that get darker and bigger as it spreads during the succeeding days. The fever stays high and your child may be quite sick. As the rash begins to fade, after several days, your child will improve.

WHAT ARE THE COMPLICATIONS? Measles can cause other problems including making it easier for additional infections to develop in your child by lowering his/her resistance.

HOW COMMON IS IT? Despite the availability of measles immunization, this remains a common illness because many children are not being immunized.

HOW IS IT ACQUIRED? Measles is easily spread by even brief contact with someone who has the cold symptoms or rash. The virus is transmitted by droplets sprayed in the air from the nose by sneezes or from the mouth by cough. The child who is exposed will develop symptoms 1 1/2 to 2 weeks after the initial contact. Having this disease usually confers lifelong immunity to the child (she/he will not have it again). Measles vaccine given at age 15 months also imparts this immunity.

HOW LONG IS YOUR CHILD CONTAGIOUS? Usually the child with measles is only contagious from the prodrome until five days after the rash has appeared.

WHAT CAN THE FAMILY DO? Measles is particularly dangerous to very young, sick, or debilitated children. If your child came in contact with any people prior to the rash, you should notify them that they were exposed to measles. As with all viruses, there is no medicine that affects measles. Keep your child away from others until the fever is gone. The rash may take 7 to 10 days to fade. A well-balanced diet is always helpful to your child's health. If your child does not want to eat, encourage plenty of fluids, particularly favorite fruits and juices. To make your child more comfortable the fever should be treated with acetaminophen (the common aspirin substitute) in appropriate dosages for age and weight. Bathing in a lukewarm tub will also help reduce the fever. Dress your child lightly. Moistening the air in the bedroom will help the cough. This is best accomplished by using a cool-mist humidifier, which is inexpensive and considerably less dangerous than a hot vaporizer. If your child's eyes are sensitive to light, darken the room and discourage all close eye activity that is uncomfortable.

WHEN TO CALL THE DOCTOR AGAIN? The doctor should be contacted if your child begins to complain of ear pain, coughing becomes severe, the child develops extreme tiredness, the neck becomes stiff, or she/he has convulsions.

GERMAN MEASLES (Three-Day Measles or Rubella)

WHAT IS IT? Rubella is a viral disease characterized by slight fever, rash and swollen glands. Most cases are mild.

WHO GETS RUBELLA? In unvaccinated populations, rubella is primarily a childhood disease. Where children are well immunized, adolescent and adult infections become more evident. Rubella occurs more frequently in winter and spring.

HOW IS RUBELLA SPREAD? Rubella is spread by direct contact with nasal or throat secretions of infected individuals.

WHAT ARE THE SYMPTOMS OF RUBELLA? Rubella is a mild illness that may present few or no symptoms. Symptoms may include a rash, slight fever, joint aches, headache, discomfort, runny nose and reddened eyes. The lymph nodes just behind the ears and at the back of the neck may swell causing some soreness and/or pain. The rash, which may be itchy, first appears on the face and progresses from head to foot, lasting about three days. As many as half of all rubella cases occur without a rash.

HOW SOON DO SYMPTOMS APPEAR? The incubation period for rubella is 12-23 days; in most cases, symptoms appear within 16-18 days.

WHEN AND HOW LONG IS A PERSON ABLE TO SPREAD RUBELLA? Rubella may be transmitted from seven days before to seven days after rash onset.

DOES PAST INFECTION WITH RUBELLA MAKE A PERSON IMMUNE? Yes. Immunity acquired after contracting the disease is usually permanent.

WHAT IS THE VACCINE FOR RUBELLA? Rubella vaccine is given on or after a child's first birthday, but is recommended at 15 months of age when given in combination with measles vaccine. The vaccine can be given alone or in a one-shot combination vaccine that protects against measles and rubella (MR) or measles, mumps and rubella (MMR).

WHAT CAN BE THE EFFECT OF NOT BEING IMMUNIZED AGAINST RUBELLA?

Rubella infection is dangerous because of its ability to damage an unborn baby. Infection of a pregnant woman may result in a miscarriage, stillbirth or the birth of an infant with abnormalities, which may include deafness, cataracts, heart defects, liver and spleen damage and mental retardation. Congenital rubella syndrome (CRS) occurs among at least 25 percent of infants born to women who have had rubella during the first trimester of pregnancy.

WHAT CAN BE DONE TO PREVENT THE SPREAD OF RUBELLA?

Maintaining high levels of rubella immunizations in the community is critical to controlling the spread. Control of the spread of rubella is needed primarily to prevent the birth defects caused by CRS. Therefore, women of childbearing age should have their immunity determined and receive rubella vaccine if needed. Infected children should not attend school during their infectious period.

ROSEOLA

WHAT IS IT? Roseola is an illness with a rash. It is caused by the roseola virus.

WHAT ARE THE SYMPTOMS? The first 3 to 4 days, the child with roseola will have a very high fever, often from 103 to 105F (39.4 to 40.5C). Often there will be no other sign of illness. Then a pink rash appears on the chest and back as the fever falls. The rash then spreads to the arms and only some- what to the legs and face. The rash usually disappears within two days as your child makes a rapid recovery. Usually the child with roseola does not behave like she/he is very ill.

WHAT ARE THE COMPLICATIONS? Occasionally, during the initial few days of high fever, convulsions can occur. Otherwise, there are no serious complications.

HOW COMMON IS IT? Roseola is quite common among children between the ages of six months and three years.

HOW IS IT ACQUIRED? Roseola is easily spread by close contact with an individual while the fever or rash is present. After exposure, it may take 1 to 2 1/2 weeks for the illness to begin.

WHAT CAN THE FAMILY DO? As with all viruses, there are no medicines that affect roseola. Your child should be kept away from others until the fever and rash are gone. A well-balanced diet is always helpful for your child's health. When the fever is present, plenty of fluids should be encouraged, including favorite soups and juices. Extra fluids help compensate for the extra water your child loses with a fever. Give acetaminophen (the common aspirin substitute) in appropriate dosages for weight and age to help reduce the temperature. Lukewarm tub baths will also keep your child's fever down. Dress your child lightly. This allows heat to escape from the body.

WHEN TO CALL THE DOCTOR AGAIN? Usually the child with roseola makes a complete recovery. However, if convulsions occur, your doctor should be contacted immediately.

CHICKEN POX

WHAT IS IT? Chicken pox is an illness that can give rash and a fever. It is caused by the varicella zoster virus.

WHAT ARE THE SYMPTOMS? Prior to the occurrence of the rash, for a day or so there will be fever, tiredness (achy), cranky, weakness, and loss of appetite. Then the rash begins as individual red pimples (pox) that appear like tiny blisters as they fill with fluids. These burst and scabs form. The pox will continue to form in crops for the next 3 to 4 days. These pox can be anywhere on the body, including the mouth, penis, and vagina. Many cases are quite mild. In other cases the fever will be high and your child will continue to be quite ill until most of the sores have formed crusts. Usually the chickenpoxes itch severely. Usually after 3 to 5 days the child will start to feel better and seem normal again.

WHAT ARE THE COMPLICATIONS? The most common complication is for the pox to become infected, developing redness and leaking pus. There are other more serious complications of chicken pox, but these are rare. Chicken pox may be a very serious illness if it occurs in sickly or debilitated children or adults. Chicken pox may pose a threat to the fetus within

pregnant women, causing defects in the unborn child.

HOW COMMON IS IT? Chicken pox is a common illness of childhood.

HOW IS IT ACQUIRED? Chicken pox is easily spread through the air when an infected person coughs or sneezes. After exposure, it may take 1 1/2 to 3 weeks for it to occur. Once your child has had chicken pox, she/he usually develops lifelong immunity.

HOW LONG IS YOUR CHILD CONTAGIOUS? The child with chickenpox has been contagious from two days prior to the onset of the rash until poxes have stopped appearing.

WHAT HAS THE DOCTOR DONE? Often your doctor will prescribe medicine, usually an antihistamine, to be taken for the itching. Antihistamines may alter your child's behavior, making him/her irritable or sleepy.

WHAT CAN THE FAMILY DO? As with all viruses, there is no medicine that can affect chicken pox. Keep your child away from others until the scabs fall off. This saves considerable social stigma and embarrassment from peers. (Most schools will require children to stay home until the scabs are gone). Give your child acetaminophen (the common aspirin substitute) for fever in appropriate dosages for weight and age. A well-balanced diet is important for your child's health. If there are poxes in the mouth, eating may be difficult. Encourage plenty of fluids, such as favorite juices and soups. Your child may experience some severe itching. Some relief may be obtained from bathing your child in a cornstarch or baking soda bath three times a day (1 cup of cornstarch or 1 cup of baking soda to a tub of water). Many children obtain relief from calamine lotion. (If calamine lotion makes your child worse, she/he is probably sensitive to it). It is important to keep the scabs from getting infected. They should not be rubbed or scrubbed off. Your child may be given soft gloves, mittens, or bulky socks to be worn on the hands. Fingernails should be cut short to prevent your child from infecting sores and removing scabs.

WHEN TO CALL THE DOCTOR AGAIN? Call the doctor's office if your child's sores begin to leak pus or the area surrounding them becomes swollen, indicating that bacterial infection has developed.

CAN CHICKEN POX BE AVOIDED? If your child has not yet had chicken pox, ask your doctor for important information about the chicken pox vaccine.

REYE'S SYNDROME

WHAT IS IT? Is a disease in which a viral illness is followed by an acute toxic phase. It is a disease specific to children, ranging from birth through age nineteen.

WHAT ARE THE SYMPTOMS? In the older child, symptoms first start one to three weeks after the onset of a respiratory tract infection. After seeming to recover, the child develops recurrent vomiting, which lasts one to two days. Vomiting may cause dehydration. Other symptoms are lethargy, agitation and anorexia, followed by confusion and slight combativeness. Infants differ in that gastroenteritis is commonly the first illness and the second illness is marked by rapid breathing, respiratory distress and seizures.

WHAT HAS THE DOCTOR DONE? The doctor orders blood tests and a lumbar puncture and probably hospitalization. Medical treatment is dependent on how far along the illness is. Your child may be in intensive care with many tubes and machines.

WHAT CAN THE FAMILY DO? Learn about Reye's syndrome - signs and symptoms and disease progression. Learn the importance of using non-aspirin products with children.

SHINGLES

WHAT IS IT? Zoster is caused by the same virus as chicken pox; it represents a reactivation of the virus in a person who had a first attack previously.

WHAT ARE THE SYMPTOMS? Consists of a group of itching or painful blisters along a peripheral nerve or occasionally elsewhere.

WHAT ARE THE COMPLICATIONS? Possible skin infection.

WHAT HAS THE DOCTOR DONE? Treatment is symptomatic - dry skin lesions and/or treat pain.

WHAT CAN THE FAMILY DO? Keep child from itching/scratching. Watch for possible signs of infection.

WHEN TO CALL THE DOCTOR AGAIN? If lesions don't appear to dry, pain persists, new outbreak of lesions or possible signs of infection.

WHOOPING COUGH

WHAT IS IT? Whooping cough (pertussis) is an illness with a characteristic cough that is caused by a particular bacteria (*Bordetella pertussis*).

WHAT ARE THE SYMPTOMS? Whooping cough has three phases. During the first week, pertussis appears like a cold (the first phase) in which your child will have a mild fever, slight cough, runny nose, sneezing, headaches, tiredness (lethargy), and loss of appetite. But the cough lingers on for a second week and then gets worse (the beginning of the second phase). Your child will have bad coughing spells that may last so long that your child will whoop air in trying to catch his/her breath. Your child may get red in the face, drool considerably and have gagging, choking, and vomiting with coughing spells. Often your child will be exhausted from the effort of coughing and breathing. After a few weeks the cough decreases (the third phase). It may take four weeks or more for the cough to go away entirely.

HOW LONG DOES IT LAST? Whooping cough may last six weeks or longer.

WHAT ARE THE COMPLICATIONS? Whooping cough sometimes causes other problems, such as ear infections and pneumonia.

HOW COMMON IS IT? Pertussis, though infrequent, still occurs despite the availability of immunizations against it.

HOW IS IT ACQUIRED? Pertussis is easily spread to close contacts until the cough has stopped. It will come on 1 to 2 weeks after exposure. It is particularly dangerous to children less than one year of age. People who have been exposed to your child should be notified. Infants who have been exposed may benefit from a shot that can make this illness less severe. There is a vaccine, given three times in the first year of life and as a booster twice before beginning public school, that will prevent infants and children from getting pertussis (this is the "p" part of the DPT shot series). Sometimes those children who have received the series of shots will still get whooping cough, but it is not as severe, though they may have a persistent cough.

HOW LONG IS YOUR CHILD CONTAGIOUS? Again, your child can spread this infection to others until the cough has stopped or treatment has been completed. Keep your child away from other people to prevent spread and reduce his/her chance of catching a secondary infection.

WHAT CAN THE FAMILY DO? Most medicines will not affect the course of this disease. Cough medicines usually do not work. Your child will benefit from moist air in the bedroom. This is best accomplished with a cool-mist humidifier, which is inexpensive and considerably safer than a hot vaporizer. Cool air also seems to help. In the winter try to keep the heat down so that the room temperature will stay between 68 to 70F (20 to 21 C). Bed rest in a quiet place should be encouraged as excitement can cause coughing spells. Sudden changes in temperature or strong fumes, including cigarette smoke, can make the coughing worse. A well-balanced diet is always beneficial. However, if there is vomiting, the child may benefit from small frequent feedings. Plenty of nutritious fluids, such as favorite juices, milk shakes, and soups should be encouraged. To make the child with fever more comfortable give acetaminophen (the common aspirin substitute) in appropriate dosages for age and weight. Your doctor will tell you when to bring your child back to the office.

WHEN TO CALL THE DOCTOR AGAIN? If your child has difficulty breathing, call the doctor immediately. Call also if your child has repeated vomiting and is unable to keep down liquids.

MONO

WHAT IS IT? Mononucleosis is an infection caused by a virus.

WHAT ARE THE SYMPTOMS? The severity of the symptoms that a child experiences from infectious mononucleosis varies. Young children tend to be least affected while older children particularly adolescents, have more severe symptoms. There is usually fever, sore throat, and swollen glands (lymph nodes) in the neck. Your child may experience some loss of appetite, fatigue easily, and be extremely tired. Some children with mono will have a rash.

HOW LONG DOES IT LAST? Mononucleosis usually lasts 4 to 8 weeks in the older child or adolescent. The course is

usually much shorter in younger children.

WHAT ARE THE COMPLICATIONS? There are rarely any serious complications from mononucleosis. Just as this infection usually causes swollen glands it also causes enlargement of the spleen (these organs are part of the immune system which help your child's body fight infections). The child with an enlarged spleen should avoid contact sports--they could cause serious injury to this fragile abdominal organ.

HOW COMMON IS IT? Mononucleosis is most common among adolescents. However, it can occur in younger children.

HOW IS IT ACQUIRED? This infection is acquired by close contact with others who are infected. At one time it was thought to be passed only by direct contact, such as mouth to mouth, which resulted in its commonly being called the kissing disease. Again, direct contact is not the only way in which this illness can be spread. Strangely enough, even with direct contact mono is not consistently acquired. The child exposed to mono may begin to develop symptoms from 1 1/2 to 8 weeks after exposure. Once your child has had mono, she/he will maintain lifelong immunity.

HOW LONG IS YOUR CHILD CONTAGIOUS? Your child is probably contagious as long as symptoms persist. Isolation is not necessary because mono is only randomly contagious.

WHAT HAS THE DOCTOR DONE? Often the doctor will have laboratory tests performed on your child's blood to be certain of the diagnosis. There are no medications, which can cure this viral infection.

WHAT CAN THE FAMILY DO? It is most important that the child with mono get the rest that his/her body requires. In other words, if your child is trying to maintain a usual level of activity but is extremely tired, then more rest is needed. For the adolescent this may require restricting activities and missing a number of days of school. The child who is running a fever can be made more comfortable with acetaminophen (the common aspirin substitute) in appropriate dosages for weight or age. Give your child plenty of nutritious liquids, particularly if she/he is not eating well. Fluids help replace the extra water lost with the fever. Your child may benefit from gargling to ease the irritation of the throat (one teaspoon of salt in 8 ounces, or 240 milliliters, of water).

WHEN TO CALL THE DOCTOR AGAIN? The doctor should see your child again if there has been no improvement. Call the physician also if there are other symptoms that concern you.

MIDDLE EAR INFECTION

WHAT IS IT? Otitis media is an infection of the portion of the ear behind the drum--the middle ear. This infection often follows the common cold, sinus trouble, sore throats, and tonsillitis, all of which can extend to the middle ear via the tube connecting it to the back of the throat (eustachian tube). Inflammation and swelling of the eustachian tube itself causes fluid to accumulate and does not allow fluid drainage from the middle ear; consequently, pressure builds up behind the drum.

WHAT ARE THE SYMPTOMS? Young children do not localize pain well and may just manifest a fever and/or be irritable. Occasionally there will be vomiting and diarrhea. Older children may complain of pain in the region of the ear, hearing loss (usually temporary), or just pull at the ears. Other ear diseases can cause similar symptoms.

HOW LONG DOES IT LAST? Most acute otitis media infections respond rapidly to treatment, for the most part showing considerable improvement during the initial week.

WHAT ARE THE COMPLICATIONS? When adequately treated, middle ear infections rarely cause permanent damage. Sometimes, fluid will continue to accumulate in the middle ear even after the infection has cleared. This fluid accumulation may require additional medical treatment and occasionally, surgical drainage. Occasionally, build-up of fluid and pressure can cause rupture (perforation) of the eardrum (tympanic membrane). The eardrum usually heals quickly within the next few weeks without permanent damage or hearing loss. The doctor should watch the healing process closely. Rarely do more serious complications occur.

HOW COMMON IS IT? Middle ear infections are quite common in infants and young children because of the immature anatomy of the eustachian tubes. Some children seem prone to otitis media more than others.

WHAT HAS THE DOCTOR DONE? Some physicians use anesthetic drips to soothe the painful eardrum. Your doctor will prescribe an antibiotic either by injection or by mouth. If by mouth, bring the bottle with you on the next visit. Your child should be given the entire course of antibiotics prescribed. Many doctors use oral decongestants which help keep the eustachian tube open, relieving the pressure in the ear. Occasionally the eardrum must be opened to drain pus.

WHAT CAN THE FAMILY DO? Initial treatment usually includes a medicine to relieve the pain and help control the fever, such as acetaminophen (the common aspirin substitute). If the eardrum is perforated your child should not swim until the doctor says so.

WAXY EARS

WHAT IS IT? Earwax (cerumen) is produced to protect the ear. It is made by tiny glands in the ear canal. Some patients have glands, which naturally produce too much wax. Others, because of improper care of the ears, irritate these glands causing excessive wax to be made. Other people have narrow or bent canals, which cause wax to accumulate.

WHAT ARE THE SYMPTOMS? When blocking is complete, your child may complain of hearing loss, ringing or just a feeling of fullness and discomfort. Water can mix with the earwax or get trapped behind it after swimming or showering and cause similar complaints.

WHAT HAS THE DOCTOR DONE? If the wax is impacted or blocking the canal for any of the above reasons, your doctor will remove it by either irrigating it with warm tap water or directly using special instruments. Sometimes wax is so dry that it needs to be softened for removal so as not to cause pain; your doctor will recommend certain drops to use for several days before removal.

WHAT CAN THE FAMILY DO? For most people wax need not be removed. Cleaning can be performed in the outer ear using nothing smaller than a washcloth covering a finger. Flushing, eardrops, or cotton swabs can cause damage to the protective wax layer, push wax further in the ear, or damage the skin itself, and therefore should be done only if and as recommended by your physician.

WHEN TO CALL THE DOCTOR AGAIN? Call the office if your child continues to complain of hearing loss, ringing, or discomfort.

CONJUNCTIVITIS

(Pink Eye)

WHAT IS IT? Conjunctivitis is an inflammation in the eye that makes the white portion of the eyes (conjunctiva) look pink and bloodshot. Mild cases accompany nose colds and are caused by viruses. This type of conjunctivitis usually lasts only a few days, disappearing with the cold. There are other causes including more serious bacterial infections, irritants, or allergic reactions.

WHAT ARE THE SYMPTOMS? In addition to the "pinkness," there is excessive tearing of the eyes. Pus may collect in the corners and dry along the edge of the lids as crusts. Occasionally there will be swelling of the lids or itching.

HOW LONG DOES IT LAST? Most bacterial types respond rapidly to treatment. Conjunctivitis that is caused by irritants responds rapidly to removal of the irritant. Those caused by allergic reactions can often be controlled but may be chronic and recurrent.

WHAT ARE THE COMPLICATIONS? Usually there are no serious or permanent complications.

HOW COMMON IS IT? Conjunctivitis is the most common eye disease.

WHAT HAS THE DOCTOR DONE? For the conjunctivitis, which is caused by an infection, the physician will usually prescribe eye drops or eye ointments. To select the type of medication, it may be necessary to culture the pus or look at it under the microscope. For many children, when only one eye is involved, the doctor will recommend treating both eyes to protect the uninvolved eye. Other causes will require different treatments.

WHAT CAN THE FAMILY DO? Instruct your child to wash his/her hands well; this may help prevent spread to the other eye or other persons.

WHEN TO CALL THE DOCTOR AGAIN? Call the doctor if the conjunctivitis persists after treatment or if it becomes worse.

STY

WHAT IS IT? Sty is an infection of the tiny glands at the base of the eyelashes. It is caused by bacteria rubbed on the surface of the lids that subsequently infect the glands.

WHAT ARE THE SYMPTOMS? The infected areas become swollen, red, and painful. Eventually, like a pimple, the sty may come to a head and burst open. This release of pus relieves the symptoms and over the following day the lid returns to normal. Sometimes the leaking pus can infect other portions of the lid causing more sties.

WHAT ARE THE COMPLICATIONS? Rarely are there serious complications.

HOW COMMON IS IT? Sties are quite common among young children.

WHAT HAS THE DOCTOR DONE? Often the doctor will prescribe a special eye ointment to kill the bacteria and prevent the spread of the infection. Occasionally the doctor will open the sty in the office. Never attempt to open a sty at home; invariably the sharp object ends up in the eye. Your doctor will instruct you on care of the opened sty.

WHAT CAN THE FAMILY DO? Warm moist compresses applied for 15 minutes, four times daily, will help bring the sty to a point from which the pus will leak out. Many young children will not cooperate with the use of warm compresses. Try to keep your child from rubbing the sty with his/her hands or spreading the pus that is leaking.

AIDS

WHAT IS IT? The cause of Acquired Immunodeficiency Syndrome (AIDS) is advanced infection with the Human Immunodeficiency Virus (HIV). HIV infection causes progressive damage to the immune system leaving the host susceptible to a number of infections and cancers resulting in AIDS.

WHO GETS AIDS? Anyone can get AIDS. AIDS cases have been reported from all age groups, all races, in virtually every country in the world. Behaviors, which place a person at high risk for HIV infection, include:

- * unprotected sex, particularly anal sex and/or sex with multiple partners
- * needle sharing among injectable drug users.

People at risk for HIV transmission include infants born to infected mothers and people whose job places them in contact with blood or other body fluids such as health, emergency, and public safety workers. Transfusion/transplant recipients have a very small risk of infection. Blood and tissues to be used for transplants have been screened for HIV since 1985. Since screening of blood and tissues began, the risk of HIV infection from the sources has been virtually eliminated.

WHAT ARE THE SYMPTOMS OF AIDS? AIDS is a condition that leaves a person open to a number of different infections and cancers. There are nearly thirty indicator diseases of AIDS which each has their own symptoms. Some of the diseases seen in AIDS patients are: Pneumocystitis, carinii pneumonia which affects breathing and often results in death, a skin cancer called Kaposi's Sarcoma, and Cytomegalovirus retinitis, a virus that causes loss of vision. People with AIDS may have a number of digestive problems leading to a dramatic weight loss called Wasting syndrome.

HOW SOON DO SYMPTOMS APPEAR? People infected with HIV may be free of clinical signs or symptoms for many months to years before the opportunistic infections and clinic symptoms of AIDS appear. As the immune system becomes more dysfunctional, more AIDS diseases develop and the severity of the diseases may increase. Fifty percent of the people infected with HIV will develop the opportunistic infections and clinical symptoms characteristic of AIDS within 10 years of infection of HIV. The fatality rate of AIDS is very high; even with medical therapy, 80-90% of the patients with AIDS have died within 3-5 years after diagnosis with AIDS.

HOW LONG IS A PERSON ABLE TO SPREAD HIV? A person can spread the virus immediately after becoming infected with HIV. After becoming infected, a person is considered infected for the rest of their life.

WHAT IS THE TREATMENT FOR AIDS? There is no known cure or vaccine to prevent infection at this time. There are a number of drug treatments available to the numerous diseases of AIDS.

HOW CAN AIDS BE PREVENTED? Abstinence from sex and drugs is the surest way. Limit your number of sex partners, use a condom, don't have sex with someone with AIDS or HIV infection, don't share needles, and use protective equipment if employed in a health, emergency, or public safety occupation.

NOSEBLEEDS

WHAT IS IT? Nosebleeds occur most commonly as a result of an injury, such as from picking, when the child has a cold, or other trauma. Injury can also occur from objects being inserted into the nose. Excessive drying of the inner surface of the nose may also cause bleeding. Drying is common in the winter from the heat at home. Fever, colds, and allergies also tend to

dry the nose. The most common area to bleed is in the inside of the front of the nose rather than the higher backing portions.

WHAT ARE THE SYMPTOMS? Though the bleeding is most commonly from the nostrils, often blood may drip from the back of the nose into the throat and be swallowed. This blood may be vomited up or can be retained in the bowels and may be passed as dark, tarry stools.

HOW LONG DOES IT LAST? Most nosebleeds respond rapidly to the measures discussed below.

HOW COMMON IS IT? Nosebleeds are quite common during childhood.

WHAT HAS THE DOCTOR DONE? The doctor has thoroughly examined your child's nose to make certain there are no foreign bodies. If bleeding is persistent, the doctor may prescribe lubricating ointment to be applied to the inside of the nostrils several times each day for several weeks. Occasionally cautery (electrical or chemical coagulation) of the bleeding blood vessels may be necessary.

WHAT CAN THE FAMILY DO? Remain calm and try to calm your child. Sit your child up and lean him/her forward so blood does not go down the throat. Often just treating the nose gently by not blowing or rubbing it will be sufficient to stop the bleeding. Touch a handkerchief to the nostril to catch the drip. If the bleeding continues use the thumb and forefinger to apply pressure as a gentle pinch to the wide portion of the nose for five minutes by the clock. This should be sufficient time to permit clotting to occur. While pinching the nose instruct the child to breathe through the mouth. An ice pack may be placed over the bridge of the nose to aid in stopping the bleeding. Once bleeding has stopped, crusting of blood will remain. Lubricate the crust with petroleum jelly or unscented cold cream by gently using a cotton swab or let the older child do this using the tip of his/her finger rather than picking. Be gentle. Explain to your child that picking the crust can start the bleeding again.

WHEN TO CALL THE DOCTOR AGAIN? If bleeding persists or if it continues to recur your child should be re-evaluated by the physician.

FIFTH DISEASE

(ERYTHEMA INFECTIOSUM, PARVOVIRUS B19 INFECTIONS)

WHAT IS FIFTH DISEASE? Fifth disease is a viral infection that often affects red blood cells. It is caused by a human parvovirus (B19). For many years, fifth disease was viewed as an unimportant rash illness of children. Recently, studies have shown that the virus may be responsible for serious complications in certain individuals.

WHO GETS FIFTH DISEASE? Anyone can be infected, but the disease seems to occur more often in elementary school-age children.

HOW IS THE VIRUS SPREAD? The virus is spread by exposure to airborne droplets from the nose and throat of infected people.

WHAT ARE THE SYMPTOMS AND WHEN DO THEY APPEAR? One to two weeks after exposure, some children will experience a low-grade fever and tiredness. By the third week, a red rash generally appears on the cheeks giving a slapped face appearance. The rash may then extend to the body and tends to face and reappear. Sometimes, the rash is lacy in appearance and may be itchy. Some children may have vague signs of illness or no symptoms at all.

WHEN AND FOR HOW LONG IS A PERSON ABLE TO SPREAD THE DISEASE?

People with fifth disease appear to be contagious during the week prior to the appearance of the rash. By the time the rash is evident, the person is probably beyond the contagious period.

HOW IS FIFTH DISEASE DIAGNOSED? In most cases, the disease is diagnosed based on the appearance of typical symptoms. A specific blood test to confirm the diagnosis has recently been developed but is not widely available.

DOES PAST INFECTION WITH THE VIRUS MAKE A PERSON IMMUNE?

It is thought that people who have been previously infected acquire long-term or lifelong immunity. Studies have shown that approximately 50 percent of adults are immune to parvovirus B19.

WHAT IS THE TREATMENT? At this time, there is no specific treatment.

WHAT ARE THE COMPLICATIONS ASSOCIATED WITH FIFTH DISEASE?

While most women infected during pregnancy will not be affected, some studies have shown that parvovirus B19 may infect the fetus and increase the risk of miscarriage within the first 18 weeks of pregnancy. In people with chronic red blood cell disorders, such as sickle-cell disease, infection may result in severe anemia. Infection has also been associated with arthritis in adults.

WHAT CAN BE DONE TO PREVENT THE SPREAD OF FIFTH DISEASE?

Measures to effectively control fifth disease have not been developed yet. During outbreaks in schools, pregnant school employees and people with chronic red blood cell disorders should consult their physician for advice.

WHERE CAN I CALL FOR ADDITIONAL INFORMATION REGARDING FIFTH DISEASE AND PREGNANCY?

In addition to your doctor, information can be obtained from the South Dakota Department of Health at 1-800-592-1861.

TMJ

(Temporomandibular Joint and Craniomandibular Disorders)

The term "*craniomandibular disorder*" is synonymous with the older term "*TMJ disorders*" and is defined by the American Academy of Craniomandibular Disorders as "A collective term embracing a number of clinical problems that involve the masticatory musculature, the temporomandibular joint, or both."

Craniomandibular disorders have been identified as a major cause of nondental pain in the face and head region. In the past, craniomandibular disorders were viewed as a single entity or syndrome. Current information supports the view of craniomandibular disorders as a group of related but separate, distinct disorders. The most common presenting symptoms are facial pain, jaw pain, ear pain and headache.

The pain and headache associated with a craniomandibular disorder is located in the muscles of the face and neck, the ears, the jaw joints, and the jaws. The pain increases with chewing or any jaw movement, and the pain is often accompanied by fatigue in the facial muscles during chewing. Pain may also be referred to the neck, shoulders and upper extremities.

In most instances, the pain and headaches associated with craniomandibular disorders are mild, self-limiting, and easily managed by standard treatments. However, a small number of patients will be resistant to treatment and develop chronic pain. When coping mechanisms break down, patients may become depressed, anxious, and focused on the impact of the pain. This results in the patient becoming emotionally and physically disabled.

Chronic craniomandibular pain is often associated with contributing factors that potentiate and perpetuate the pain. Factors contributing to the development of chronic pain can range from structural problems within the temporomandibular joint to significant emotional psychosocial factors that enhance the perception of continuous pain and result in chronic pain behavior.

Chronic Headaches

Chronic headache is one of the most common symptoms of craniomandibular pain disorders. The headaches of craniomandibular disorders mimic migraine and sinus headaches. They are most often located in the temple, eye, cheekbone, and base of the skull.

Headaches are a significant health problem. It is well known that headaches are a major cause of suffering and absenteeism from work and school in the United States. In addition, it has been estimated that one in three persons suffers from severe headache at some stage of their life. Various studies have shown that 30-50% of the populations exhibit signs and symptoms of craniomandibular disorders. Because of these facts, craniomandibular disorders should be considered in the differential diagnosis of any chronic headache evaluation and the patients should be screened for its existence. However, it is important to emphasize that headaches should not be considered a craniomandibular disorder unless the headache is clearly related to clinical signs and symptoms that involve jaw and jaw joint function.

ANEMIA

Childhood is a time of rapid growth and change. Sometimes children, due to poor diet, low iron stores at birth, or blood loss, become anemic. This means that their blood does not have enough iron and the oxygen carrying concentration of their blood has lowered - red blood cells or hemoglobin.

It is more common to see in ages between six months and three years, and during the adolescent growth spurt, however it is also found in school age as well. Symptoms children may exhibit are pallor, fatigue, listlessness, constipation, anorexia, or headache. Or they may not show any symptoms at all.

The incidence of iron deficiency anemia may be prevented or greatly reduced through proper diet. Foods high in iron should

be present in the dietary intake and also vitamin C for the body's absorption of the iron. Good food sources from infant iron-fortified formula and cereals to the following list:

Meat - Beef, chicken, fish, lamb, liver, pork, turkey, veal.

Chili - With or without beans

Pork and beans - with molasses

Spaghetti - with meatballs and tomato sauce

Egg yolks

Whole or enriched grains, iron-fortified cereals

Fruits - apricots (dried or cooked), dates, prunes, peaches (dried or cooked), raisins, watermelon

Beans - black, cowpea, goabean, kidney, lima, navy, mung

Soybean - tofu, curd cheese, curd sheet, miso, paste

Green leafy vegetables - beet greens, brussel sprouts, cabbage, collard greens, dandelion greens, kale, lettuce (butterhead and loose leaf), mustard greens, spinach, swiss chard, turnip greens

Vegetables - asparagus (canned), broccoli, carrots (canned), beans (green and yellow canned), peas, sweet potato, tomato (canned), winter squash

Also regular well baby and well child checks by your physician will help determine what Hemoglobin level your child has. Your WIC program can also provide you with screening results and assistance.

COMMON VIRAL RESPIRATORY DISEASES **(INFLUENZA, RSV, PARAINFLUENZA, ADENOVIRUSES)**

WHAT ARE COMMON VIRAL RESPIRATORY DISEASES? Common viral respiratory diseases are illnesses caused by a variety of viruses that have similar traits and affect the upper respiratory tract. The viruses involved may be the influenza viruses, respiratory syncytial virus (RSV), parainfluenza viruses, or respiratory adenoviruses.

HOW IS THE RESPIRATORY VIRUSES SPREAD? The viruses are spread directly by droplets coughed or sneezed into the air which are then inhaled, or indirectly by contaminated hands, handkerchiefs, toys, etc. which come in contact with the nose or eyes.

WHAT ARE THE SYMPTOMS? Common viral respiratory diseases can be characterized by fever and one or more cold symptoms such as chills, headache, body ache, weakness, and loss of appetite. Infants may experience vomiting and diarrhea. Infection with viruses in the respiratory tract can cause complications such as tonsillitis, laryngitis, bronchitis, and pneumonia.

Some of the viruses can cause more severe illness or more commonly affect certain age groups. RSV is the most common cause of respiratory tract illness in children under 2 years of age; it is the major cause of bronchiolitis, pneumonia, croup, bronchitis, and otitis media.

The influenza viruses are highly contagious and can cause large epidemics. Influenza can cause severe complications in the elderly and chronically ill, and is associated with excess mortality among those persons.

Parainfluenza viruses are the major cause of croup in young children and can cause bronchitis, pneumonia, and bronchiolitis.

Adenoviruses invade primarily the respiratory and gastrointestinal tracts, and the conjunctiva of the eyes. The adenoviruses can cause a variety of illnesses from pharyngitis to pneumonia, conjunctivitis, and diarrhea.

HOW SOON AFTER EXPOSURE DO SYMPTOMS APPEAR? Symptoms can appear from 1-10 days after exposure to the viruses.

WHAT IS THE TREATMENT FOR COMMON RESPIRATORY VIRAL DISEASE?

Infection without complications will usually subside in 2-5 days. Bacterial complications such as otitis media, pneumonia, and sinusitis may require antibiotics. Children with RSV may be given ribavirin. Amantadine is effective in the treatment of influenza A, but not B. Both amantadine and ribavirin are antiviral agents and must be administered **early** in the infection to be effective.

HOW CAN INFECTION WITH COMMON VIRAL RESPIRATORY DISEASES BE PREVENTED? Good personal hygiene, such as covering the mouth when coughing and sneezing, sanitary disposal of discharges from mouth and nose, and frequent hand washing will help prevent transmission.

Vaccines for influenza are developed each year in accordance to the three predominant subtypes anticipated. It is difficult to construct a vaccine for a constantly changing virus. Currently available vaccines do, however, significantly reduce the risk of

influenza infection and are specifically recommended each year for people who are at greatest risk for life threatening complications (the elderly and all person with chronic underlying health conditions of the heart, lungs, or kidneys).

Adenovirus vaccines are effective against some types of adenoviruses. Because of the major disruption and economic impact of epidemics in military recruits, vaccines are targeted at this group but are not recommended for the general population.

ROTAVIRUS VACCINE

WHAT IS ROTAVIRUS? Rotavirus is a virus (germ) that causes severe diarrhea, often with vomiting. Rotavirus affects mostly babies and young children. Rotavirus is not the only cause of severe diarrhea, but it is the most common. Rotavirus infection strikes most children by the time they are 3 years old. In the United States, over 500,000 of these children are taken to a doctor or emergency room every year and about 50,000 are hospitalized. About 20 children a year die from rotavirus diarrhea in the US. The disease usually occurs between November and May, depending on the part of the country. Your child can get rotavirus infection by being around children who are already infected.

ROTAVIRUS VACCINE A vaccine has been developed that helps protect children against rotavirus infection. This vaccine is swallowed, not given as a shot. Rotavirus will not prevent all cases of diarrhea or vomiting - only those caused by rotavirus. There are many other causes of diarrhea.

About 50% - 70% of children who get rotavirus vaccine will not get rotavirus diarrhea at all. But more important, about 70% - 90% of vaccinated children will not get severe rotavirus diarrhea, even if they get a mild case. Vaccinated children are much less likely to go the doctor or hospital than unvaccinated children who get the disease.

WHO SHOULD GET ROTAVIRUS VACCINE AND WHEN?

Children should get three doses of rotavirus vaccine

- One dose at 2 months of age
- One dose at 4 months of age
- One dose at 6 months of age

Catch up: If your child misses a dose or gets behind schedule, get the next dose as soon as you can. There is no need to start over. However, children should not get rotavirus vaccine after their first birthday. A child who has not gotten the first dose by seven months should not get the vaccine.

Note: Children who are born during the summer or fall may need to get rotavirus vaccine at slightly younger ages than usual to be sure they are protected during the winter rotavirus season. Your doctor or nurse can give you details.

SOME BABIES SHOULD NOT GET ROTAVIRUS VACCINE OR SHOULD WAIT

- Babies who have passed their first birthday should not get rotavirus vaccine.
- Babies 7 months of age or older who have not gotten at least one dose of rotavirus vaccine should not get the vaccine.
- Babies who have ever had a **serious** allergic reaction to a previous dose of rotavirus vaccine should not get another dose. Babies, who have ever had a serious allergic reaction to certain antibiotics, or to monosodium glutamate, should not get the vaccine.
- Babies with certain diseases of the stomach or intestines should not get rotavirus vaccine.
- For babies with ongoing diarrhea, check with their doctor about whether they should get rotavirus vaccine.
- For babies who are unable to fight serious infections because of:
 - * HIV/AIDS, or any other disease that affects the immune system
 - * treatment with drugs such as long-term steroids
 - * any kind of cancer
 - * cancer treatment with x-rays or drugsshould check with their doctor about whether they should get rotavirus vaccine.
- Babies who are moderately or severely ill at the time the vaccination is scheduled should usually wait until they recover before getting rotavirus vaccine.
- If your baby was premature, check with your doctor before getting rotavirus vaccine.
- **Ask your doctor or nurse for details.**

WHAT ARE THE RISKS FROM ROTAVIRUS VACCINE? A vaccine, like any medicine, is capable of causing serious problems, such as severe allergic reactions. The risk of vaccine causing serious harm, or death, is extremely small. In studies that have been done so far rotavirus vaccine has been associated only with mild problems. The risk from rotavirus vaccine is much smaller than the risk from the disease. Most babies who get rotavirus do not have any problems with it.

Mild Problems

- mild fever (over 100 degrees F); up to 15% of children getting the vaccine
- moderate fever (over 102 degrees F); about 1% of children
- less appetite, tiredness, fussiness

If these problems happen, it is usually 3-5 days after vaccination.

WHAT IF THERE IS A MODERATE OR SEVERE REACTION? *What should I look for?* Any unusual condition, such as a high fever or behavior changes. Signs of a serious allergic reaction can include difficulty breathing, hoarseness or wheezing, hives, paleness, weakness, a fast heartbeat or dizziness, occurring within a few minutes to a few hours after the vaccination. A high fever or seizure, should it occur, would be within a week after the vaccination.

What should I do?

- Call a doctor, or get the person to a doctor right away
- Tell your doctor what happened, the date and time it happened, and when the vaccination was given
- Ask your doctor, nurse or health department to file a Vaccine Adverse Event Reporting System (VAERS) form, or call VAERS yourself at 1-800-822-7967.

HOW CAN I LEARN MORE?

- Ask your doctor or nurse. They can give you the vaccine package insert or suggest other sources of information.
- Call your local or state health department
- Contact the Centers for Disease Control and Prevention (CDC):
 - * Call 1-800-232-2522 (English)
 - * Call 1-800-232-0233 (Española)
 - * Visit the National Immunization Program's website at <http://www.cdc.gov/nip>

HAND, FOOT AND MOUTH DISEASE

WHAT IS HAND, FOOT AND MOUTH DISEASE? Hand, foot and mouth disease is a viral illness caused by several different viruses from the enterovirus group that inhabit the human intestinal tract. Man is the only known source for this illness. Foot and mouth disease of cattle, sheep and swine is not communicable to man.

WHO GETS HAND, FOOT AND MOUTH DISEASE? Anyone can get hand, foot and mouth disease. Man is the only known source for these viruses. Because there are several different viruses that cause the same syndrome, seemingly, a person can get the illness more than once.

HOW IS THE VIRUS SPREAD? By direct contact with nose and throat discharges and feces of infected persons. Virus is also present in the blister-like lesions.

WHAT ARE THE SYMPTOMS OF HAND, FOOT AND MOUTH DISEASE? Some persons experience sudden onset of fever and sore throat along with small, discrete grayish-white lesions ("sores"). These lesions may be present on any of the soft tissue inside the mouth. Some persons experience lesions that are raised and/or blister-like on the body, most notably the palms, fingers and the soles of the feet. These lesions may persist for 7-10 days.

HOW SOON AFTER EXPOSURE DO SYMPTOMS APPEAR? Usually lesions appear 3-5 days after exposure.

HOW LONG CAN THE INFECTED PERSON CARRY THE VIRUS? A person can be considered infectious during the time symptoms are present. These viruses inhabit the human intestinal tract and may persist in stool for several weeks, even after symptoms disappear.

HOW IS IT DIAGNOSED? Diagnosis is based mainly on clinical symptoms. Viruses may be isolated from lesions, nasopharyngeal, or stool specimens. Since many viruses may produce the same syndrome, these tests are not routinely done.

WHAT IS THE TREATMENT FOR HAND, FOOT AND MOUTH DISEASE? There is no specific treatment. Viral illness in general is self-limiting, meaning; you will get over the illness without outside influence. These are some medications available to temporarily ease the discomfort from the lesions. Complications are rare and there are no fatalities associated with this disease.

WHAT PRECAUTIONS SHOULD THE INFECTED PERSON FOLLOW? Reduce person-to-person contact where practicable, such as avoiding crowded gatherings or poorly ventilated areas. Good personal hygiene is important in preventing

spread - especially hand washing after passing stool, contact with nose and throat discharges, or articles soiled therewith.

HANTAVIRUS

WHAT IS HANTAVIRUS? Hantavirus is a potentially deadly disease caused by a virus carried by rodents. Hantavirus can cause hantavirus pulmonary syndrome (HPS) which causes the lungs to fill with fluid and can cause respiratory failure. The hantavirus was first detected in 1993 in the four corners area of the southwestern United States. There have been 156 cases of hantavirus reported in the United States from 1993 through January 1997.

WHO GETS HANTAVIRUS? You can be young or old, male or female, any race, living almost anywhere to be exposed to the hantavirus. Anything that puts you in contact with rodent droppings, urine, or nesting materials is a risk for HPS.

WHAT ARE THE SYMPTOMS OF HANTAVIRUS INFECTION? If a person is infected with hantavirus, symptoms will appear within two weeks of exposure. Early symptoms are fatigue, fever (101-104), and muscle aches. About half of the people infected with hantavirus will also develop headaches, dizziness, chills, and gastrointestinal problems such as nausea, vomiting, diarrhea, and abdominal pain. Later symptoms include coughing and shortness of breath.

If you have been around rodents and have symptoms of fever, deep muscle aches and severe shortness of breath, see your doctor immediately. Be sure to tell your doctor that you have been around rodents - this will alert your doctor to look closely for any rodent-carried disease such as HPS.

HOW IS HANTAVIRUS SPREAD? Hantavirus infection is a serious, life-threatening illness caused by breathing in the hantavirus. The virus is shed by infected rodents in their urine, droppings and saliva. When fresh rodent droppings, or nesting materials are stirred up, tiny dust particles containing the virus get into the air, which can be inhaled. You cannot get hantavirus from another person.

WHAT IS THE TREATMENT FOR HANTAVIRUS INFECTION? There is no specific treatment for hantavirus pulmonary syndrome. If the symptoms are recognized early, the patient should be taken to an intensive care unit. The earlier the patient is brought into intensive care the better. In intensive care, patients are intubated and given oxygen to help them through the period of severe respiratory distress.

HOW DO I PREVENT HANTAVIRUS PULMONARY SYNDROME? Eliminate or minimize contact with rodents in the home and especially when cleaning outbuildings. Construction or utility workers who work in crawl spaces may be at risk and campers and hikers should try to avoid rodent infested areas.

Indoors:

1. Seal all entry holes 1/4 inch or larger (the size of a dime) with steel wool, cement, wire screen, or other patching materials.
2. Keep a clean home, especially the kitchen. Wash dishes, clean counters and floor, keep food covered in rodent-proof containers.
3. Keep a tight-fitting lid on garbage; discard uneaten pet food at the end of the day.
4. Set and keep spring-loaded rodent traps near baseboards because rodents tend to run along walls and tight spaces rather than out in the open. Before setting trap, treat area with flea killer.
5. Set EPA - approved rodenticide with bait under plywood or plastic shelter along baseboards. Follow product instructions carefully, since rodenticides are poisonous to pets and people, too.

Outdoors:

1. Clear brush, grass and junk from around the house to eliminate a source of nesting materials.
2. Use metal flashing 12" above to 6" down into the ground around the base of wooden, earthen, or adobe homes to provide a strong barrier.
3. If possible, locate hay, woodpiles and garbage cans 100 feet or more from the house and elevate at least 12" off the ground.
4. Trap or poison rodents outdoors too. Just be sure to keep poisons out of the reach of children or pets.

Clean-Up

1. When going into cabins or other outbuildings that may be infested, open them up and air them out before cleaning for at least 30 minutes.
2. Wear latex rubber gloves. Don't stir up dust. Thoroughly wet contaminated areas with detergent, general-purpose disinfectant, or 10% household bleach solution (3 Tbsp per gallon of water). Once everything is wet, mop or sponge up.

3. Spray dead rodents with disinfectant or bleach solution, then double bag along with all cleaning materials, and dispose.
4. Disinfect gloves before taking them off with disinfectant or soap and water. After taking off gloves, thoroughly wash hands.
5. For heavy rodent infestations, seek help from professional exterminators.

RABIES

WHAT IS RABIES? Rabies is a viral disease affecting the central nervous system. It is transmitted from infected mammals to man and is invariably fatal once symptoms appear. Fortunately, only a few cases are reported each year in the United States.

WHO GETS RABIES? All warm-blooded mammals including man are susceptible to rabies.

HOW IS RABIES SPREAD? Rabies is almost always contacted by exposure to a rabid animal. The exposure is usually through a bite but scratches and saliva contact with broken skin are also possible routes.

WHAT ARE THE SYMPTOMS OF RABIES? Early symptoms include irritability, headache, fever and sometimes itching or pain at the site of exposure. The disease progresses to paralysis, spasms of the throat muscles, convulsions, delirium and death.

HOW SOON AFTER EXPOSURE DO SYMPTOMS OCCUR? The incubation period is variable but is normally two to eight weeks. Incubation periods of over one year have been reported.

WHEN AND HOW LONG IS A PERSON ABLE TO SPREAD RABIES? Person to person transmission is extremely rare, however, precautions should be taken to prevent exposure to the saliva of the diseased person.

WHAT IS THE TREATMENT FOR RABIES? Treatment requires prompt scrubbing of the bite site, followed by the administration of rabies immune globulin (dosage dependent on weight) and five doses of human diploid cell rabies vaccine administered in the arm on days 0, 3, 7, 14 and 28 after exposure.

WHAT HAPPENS IF RABIES EXPOSURE GOES UNTREATED? Exposure of man to a rabid animal does not always result in rabies. If preventative treatment is obtained promptly following a rabies exposure, most cases of rabies will be prevented. Untreated cases will invariably result in death.

WHAT CAN BE DONE TO PREVENT THE SPREAD OF RABIES? Exposure to rabies may be minimized by removing all stray dogs and cats, having all pets vaccinated and staying away from all wild animals especially those acting abnormally.

RHEUMATIC FEVER

WHAT IS RHEUMATIC FEVER? Rheumatic fever is a delayed consequence of an untreated upper respiratory infection with group A streptococci (streptococcal pharyngitis or “strep throat”). The disease can cause serious, debilitating damage to the heart and involve other tissues.

WHO GETS RHEUMATIC FEVER? A small percentage, probably less than 0.3 percent, of all people who have streptococcal pharyngitis will develop acute rheumatic fever.

WHAT ARE THE SYMPTOMS OF RHEUMATIC FEVER? Initially, rheumatic fever is acute. The major symptoms of rheumatic fever are: carditis, polyarthritis, chorea, subcutaneous nodules, and a rash called erythema marginatum.

Carditis is the most significant manifestation of rheumatic fever because it may cause permanent organ damage or death. Carditis is frequently mild or streptococcal infection appears to cause tissue degeneration, most frequently heart valve tissue, and subsequently, cardiac disability or death.

Polyarthritis is arthritis in a number of joints at a time. Chorea is a neurologic syndrome that may appear after a latent period of several months. Chorea is seen as rapid, purposeless, involuntary movements in the extremities and the face. Subcutaneous nodules are firm, painless lesions that occur over bony surfaces just under the skin. Erythema marginatum is a rash that appears mostly on the trunk and extremities.

HOW SOON AFTER EXPOSURE DO SYMPTOMS APPEAR? The peak age of incidence for rheumatic fever is 5 to 15 years, but cases do occur in adults. Acute rheumatic fever is rare in children less than 4 years of age. This is a latent period of

1 to 5 weeks (average 19 days) between streptococcal pharyngitis and the initial episode of acute rheumatic fever. The average duration of an attack of acute rheumatic fever is 3 months or longer. After the acute attack has subsided, many people are left with damaged heart valves (rheumatic heart disease). Some people will have recurrent acute attacks or rheumatic fever, frequently causing more damage to the heart valves.

HOW IS IT DIAGNOSED? May be difficult to diagnose. There are no specific laboratory tests to diagnose acute rheumatic fever. In general, rheumatic fever can be diagnosed with documentation of a recent infection with group A streptococcal infection and observation of one or more of the major symptoms (described above).

WHAT IS THE TREATMENT FOR RHEUMATIC FEVER? Antibiotics will not modify an acute rheumatic fever attack nor affect the subsequent development of carditis. However, a recommended regiment of antibiotics prescribed for treatment of streptococcal pharyngitis is recommended to eradicate any group A streptococci remaining in the patient, and in part, to prevent spread of the organism to close contacts.

WHAT PRECAUTIONS SHOULD THE PERSON TAKE WHO HAS HAD RHEUMATIC FEVER? Those people who have already suffered a rheumatic fever attack are extremely susceptible to recurrence if they are again infected with group A streptococci. Patients who have experienced a documented acute rheumatic fever attack should receive continuous antibiotic prophylaxis to prevent streptococcal infections at least until reaching adulthood or at least 5 years after their most recent attack. Patients whose acute rheumatic fever attack has left them with damaged heart tissue may need lifelong antibiotic prophylaxis. Invasive dental or surgical procedures may require additional antibiotic prophylaxis for patients with rheumatic valvular heart disease.

HOW CAN RHEUMATIC FEVER BE PREVENTED? Prevention of rheumatic fever involves prompt, accurate diagnosis and effective treatment of streptococcal pharyngitis especially in school-aged children and others who live in crowded conditions such as the military and large households.

ROCKY MOUNTAIN SPOTTED FEVER

WHAT IS ROCKY MOUNTAIN SPOTTED FEVER? Rocky mountain spotted fever (RMSF) is a disease caused by a rickettsial organism transmitted to humans by the bite of an infected American dog tick, *Dermacentor variabilis*, and frequently by other tick species.

WHO GETS RMSF? In the eastern United States, children are affected most frequently, while in the western United States, disease incidence is highest among adult males. Disease incidence is directly related to the exposure to tick-infested habitats or to infested pets.

HOW IS RMSF SPREAD? RMSF is spread by the bite of an infected tick (the American dog tick, the lone-star tick or the wood tick), or by contamination of the skin with tick blood or feces. Person to person spread of RMSF does not occur.

WHAT ARE THE SYMPTOMS OF RMSF? RMSF is characterized by a sudden onset of moderate to high fever (which can last for two or three weeks), severe headache, fatigue, deep muscle pain, chills, and rash. The rash begins on the legs or arms may include the soles of the feet or palms of the hands and may spread rapidly to the trunk or rest of the body.

HOW SOON DO SYMPTOMS APPEAR? Symptoms usually appear within two weeks of the bite of an infected tick.

DOES PAST INFECTION WITH RMSF MAKE A PERSON IMMUNE? One attack probably provides permanent immunity.

WHAT IS THE TREATMENT FOR RMSF? Certain antibiotics such as tetracycline or chloramphenicol may be effective in treating the disease.

WHAT CAN BE DONE TO PREVENT THE SPREAD OF RMSF? Frequent checking of clothing and skin when in infested areas is extremely useful in reducing potential incidence of disease. Tick repellents applied to legs and clothing may be helpful to prevent tick attachment. Due to the nature of American dog ticks, local populations may be effectively controlled with applications of pesticides to vegetation along trails; mowing grass frequently in yard and outside fences also helps to reduce tick populations.

HOW SHOULD A TICK BE REMOVED? To remove an attached tick, grasp with tweezers or forceps as close as possible to attachment (skin) site, and pull upward and out with a firm and steady pressure. If tweezers are not available, use fingers shielded with tissue paper or rubber gloves. Do not handle with bare hands. Be careful not to squeeze, crush or puncture the

body of the tick, which may contain infectious fluids. After removing the tick, thoroughly disinfect the bite site and wash hands. See or call a physician if there is concern about incomplete tick removal. It is important that a tick be removed as soon as it is discovered. Check after every two or three hours of outdoor activity for ticks attached to clothing or skin. If removal occurs within three hours after attachment, the risk of tick-borne infection is reduced.

SWIMMER'S ITCH

WHAT IS SWIMMER'S ITCH? Swimmer's itch is a skin rash caused by certain parasites of birds and mammals. These parasites are released from infected snails and migrate through waters including those used for recreational swimming.

WHO GETS SWIMMER'S ITCH? People who swim or wade in infected water may experience this itching rash. All groups and both sexes can be involved, but children are most infected due to their habits of swimming or wading in the water and playing on the beach as the water evaporates from the skin.

HOW IS SWIMMER'S ITCH SPREAD? The victim may get the infection by swimming or wading in infested water and then allowing water to evaporate off the skin rather than regularly drying the skin with a towel. Person to person spread does not occur.

WHAT ARE THE SYMPTOMS OF SWIMMER'S ITCH? Whenever infested water is allowed to evaporate off the skin, an initial tingling sensation may be felt associated with the penetration of the parasite into the skin. The itching will subside for 10-15 hours and may then become extremely intense. This itching stage usually disappears within a week.

HOW SOON DO THE SYMPTOMS BEGIN? A victim's exposure to infested water may not result in the itchy rash. Repeated exposure increases a person's sensitivity to the parasite and increases the likelihood of rash development. Symptoms may appear within one to two hours of exposure.

WHAT IS THE TREATMENT FOR SWIMMER'S ITCH? While all cases do not require treatment, some people may seek relief by applying specific skin lotions or creams to minimize the itching.

WHAT CAN BE DONE TO PREVENT THE SPREAD OF SWIMMER'S ITCH?

Toweling off after swimming or wading in infested water can be very helpful in preventing rash development. Copper sulfate or copper materials can be applied by boat around popular bathing areas. If properly timed, these applications may prevent the annual migration of infested snails into swimming areas.

TUBERCULOSIS

WHAT IS TUBERCULOSIS? Tuberculosis is a bacterial disease usually affecting the lungs (pulmonary TB). Other parts of the body can also be affected. For example: lymph nodes, kidneys, bones, joints, etc. (extrapulmonary TB).

WHO GETS TUBERCULOSIS? Tuberculosis can affect anyone of any age. Most often, it is associated with older people who have had previous tuberculosis exposure. Immunocomprised individuals such as those with AIDS (or those with the human immunodeficiency virus - HIV) are at increased risk.

HOW IS TUBERCULOSIS SPREAD? Tuberculosis is spread through the air. When a person with infectious tuberculosis coughs or sneezes the bacteria gets into the air. Prolonged exposure to the tuberculosis organisms is normally necessary for infection to occur. Only persons with TB in the lungs are infectious.

WHAT IS THE DIFFERENCE BETWEEN TUBERCULOSIS INFECTION AND TUBERCULOSIS DISEASE?

Tuberculosis infection may result after close contact with a person who has pulmonary tuberculosis disease. Tuberculosis infection is determined by a significant reaction to a TB skin test, absence of symptoms of tuberculosis, and a normal chest x-ray. Persons with TB are not infectious. Tuberculosis disease is characterized by the appearance of symptoms, an abnormal chest x-ray (if pulmonary TB), and significant lab findings.

WHAT ARE THE SYMPTOMS OF TUBERCULOSIS? The symptoms of pulmonary TB include a low-grade fever, night sweats, fatigue, weight loss and a persistent cough. Some people may not have obvious symptoms.

HOW SOON DO SYMPTOMS APPEAR? Symptoms may occur as early as several weeks after infection, or it could take many years before a person would develop TB disease. The period of time for greatest risk of developing TB disease is within the first two years after infection.

WHEN AND HOW LONG IS A PERSON ABLE TO SPREAD TUBERCULOSIS? A person with pulmonary TB disease may remain contagious until he/she has been on appropriate treatment for several weeks. However, a person with TB infection cannot spread the disease to others.

WHAT IS THE TREATMENT FOR TUBERCULOSIS? People with TB disease are prescribed multiple drug therapy for at least six weeks. Persons newly identified with TB infection can also be treated (usually with one drug) to prevent developing disease at some time later.

WHAT CAN BE DONE TO PREVENT THE SPREAD OF TUBERCULOSIS? The most important way to stop the spread of tuberculosis is to promptly identify and treat active cases and to preventively treat TB infections.

BEDWETTING

WHAT IS IT? Nocturnal enuresis is irregular nighttime loss of urine in the child beyond the age of bladder control. This is usually involuntary.

HOW LONG DOES IT LAST? Statistically, as a child gets older, bedwetting becomes less of a problem.

HOW COMMON IS IT? Bedwetting is very common. In fact, 75 percent of all 3 1/2-year-olds wet the bed. Therefore it should not be considered abnormal until age 5. Nevertheless, 15 percent of 5-year-olds wet their beds. It is interesting to note that 5 percent of 10-year-olds and 1 percent of those 15 and older also wet the bed. Most children train themselves when they are ready. Even when there is good control, it is not unusual for a child to occasionally wet at night

HOW IS IT ACQUIRED? There are a number of reasons why bedwetting may occur in children over five. This may be related to the maturity and capacity of the bladder. Sometimes it is related to your child's living situation and emotions. Often, wetting the bed is a method for a child to gain parental attention. Thus, some children begin to wet their bed when they are under stress, such as at the start of school, when there is a new baby in the home, or when the family is moving or has just moved. Occasionally, nocturnal enuresis may be due to medical illness such as infections of the urinary tract. Sometimes it may be due to abnormalities in the structure of the urinary passages. It is interesting that bedwetting often runs in families though no one knows why. If your family has this history, let your child know, as this fact will be reassuring. The actual bedwetting is thought to occur during the phase of very deep sleep. Children who are very active and sleep quite soundly may have this problem more frequently.

WHAT HAS THE DOCTOR DONE? Your child's doctor will evaluate him/her for evidence of the more serious causes of bedwetting such as infection or structural abnormalities of the urinary passages. Sometimes the doctor will recommend medications. These medicines should be given just as prescribed.

WHAT CAN THE FAMILY DO? Some families are more tolerant of bedwetting than others. Parents nagging, punishing, or shaming only make the problem worse. Again, children train themselves, with your help, only when they are ready. Rewards will encourage the desired end. Being positive and reinforcing the good helps your child improve his/her sense of accomplishment and pride in controlling urination. Some children are encouraged by a structured system for earning a reward. A simple but effective reward system is that of placing stars on a calendar for each day that the child is dry. It is good to make an agreement in advance as to what reward a certain number of stars will bring. For other children, such a system is too much pressure. Your child, if school age, should be encouraged to change his/her own bedding. A younger child may help the parent. If your doctor is not recommending bladder exercises, then there are some other simple measures that may aid your child in achieving control. You should encourage the child not to drink liquids after the evening meal. He/she should be encouraged to urinate before going to sleep. You may wake a younger child when you are ready to go to sleep so that he/she may void once more. Again, part of the problem is related to your child wetting during a stage of deep sleep when the brain does not get the message that the bladder is full. An older child may use a special alarm device that alerts him/her to the release of urine. Such a device allows the child to assume the responsibility for waking up. Some physicians recommend bladder exercise for school-aged children. These are designed to teach the child to learn to control the bladder and increase its capacity. Your doctor will review these with you. Medications may be given in addition. Your child should drink plenty of fluids during the day. He/she should be encouraged to hold the urine as long as possible before going to the bathroom. You must understand that more accidents may occur during this period--remember, your child is learning control. Your doctor may request you to keep a record of how much liquid your child takes in and how much urine is put out for several days before beginning exercise and occasionally during the exercise months. Again, it is important for the family to remain relaxed and tolerant. It is best to be positive about proper performance rather than to be unduly negative about mishaps in control.

DISCIPLINE

Discipline is a matter of concern to most parents because it is the education of their children toward the development of self-

control. However, by its nature, discipline often causes parents considerable conflict and confusion often resulting in an inner struggle whether or not to discipline their children. This struggle is an expression of parental love conflicting with parental recognition that a child needs to be disciplined in being taught how to be a member of our society

Parents must provide guidance and limits. But in setting these limits, they must not be too restrictive. Children should be allowed to take some risks, for this encourages exploration and learning. And also, children should be permitted to express their own feelings. At the same time parents, too, must express feelings. Which of your expressions of feelings he/she wants to obtain will in part guide your child's behavior. Similarly, your child learns that having and expressing emotions is important for effective communication. Your consistency in manner of interaction helps your child develop a foundation for judging his/her relationship to you and the family. Your consistency in adhering to reasonable limits teaches your child how to adapt not only to these parental constraints but also to social norms. There are some concepts that are basic to effective interaction with your children and success as a "child-rearer" (a term less threatening than "disciplinarian"). Try to be honest with yourself, spouse, and children. Similarly be sensitive and understanding, particularly to your own feelings and especially too your child's view. You may find it difficult to translate from your child's realm to your own, but your success in analyzing all aspects of a behavior, or of a situation, determines the effectiveness of your actions. An example might be attention-getting behavior. This is not a problem per se. Rather, the problem is why the attention is needed and why is he/she trying to obtain it by this method. Remember, your child is constantly struggling to assert his/her individuality just as you are trying to maintain yours! Often the natural or logical outcome of an act provides enough reward for your child. When reality's pressure is not sufficient, then your positive reinforcement is the desirable behavioral guidance your child needs. Do not restrict praise just to the completion of a task but give it also during the performance. This encouragement shows your child that he/she is worthwhile. Don't reward misbehavior by giving increased attention to the misbehavior itself or by giving in. Similarly, don't physically punish more than is necessary or threaten inappropriate punishment. Threats and physical abuse only promote fear, guilt, and shame.

The methods of discipline you use depend on several factors. You are greatly influenced by the way in which your parents raised you. You may have and should pursue additional education about parenting. There are a number of classes that can be helpful. To a large extent your parenting will depend on the kind of child you have. Your physician can help advise you and focus your perspective when dealing with behavior problems. Yet, by its nature, parenthood requires that you make choices for your child and that you are responsible for these. When possible, allow the child to participate in these choices. Your being respectful of your child's opinion will promote his/her respect for you.

TEMPER TANTRUMS

WHAT IS IT? Temper tantrums are episodes of uncontrolled crying and screaming. Commonly during the tantrum, the child will throw himself/herself on the floor and thrash about.

HOW LONG DOES IT LAST? Temper tantrums occur most often between the ages of 1 and 3 years. As your child understands the inappropriateness of his/her behavior, the tantrums will begin to stop.

HOW COMMON IS IT? Temper tantrums are quite common, particularly for toddlers or young children. This is the age when your child is asserting his/her individuality. The frequency of this behavior normally peaks between 24 and 30 months.

HOW IS IT ACQUIRED? Temper tantrums originally begin as an expression of your child's frustration. Usually your giving him/her increased attention rewards this behavior. Then tantrums continue to occur, not only as a reaction to frustration but as a method of obtaining attention.

WHAT CAN THE FAMILY DO? It is often not possible and not advisable to avoid those situations, which trigger your child's tantrums. When the tantrum occurs, remain composed. Do not reward this inappropriate behavior with attention. This includes attention in all forms, giving in to his/her demands or using counter force such as hitting. Ignore the temper tantrums. Turn around or look away. Your changing behavior towards your child's tantrums may cause these to occur less frequently. Occasionally, the tantrums will get worse and occur more frequently before improvement is noticed. This worsening is because your child was used to receiving attention for a tantrum. It may take him/her a while to realize that now the tantrums are being ignored and family is not giving in. Remember, the entire family must participate in consistently ignoring the tantrums, particularly in public, even though this may be quite a trying experience.

BREATH-HOLDING

WHAT IS IT? Breath holding is a temporary halt in breathing. Usually it lasts from a few seconds to a half minute. This behavior may be voluntary but sometimes these spells can be involuntary. Often breath holding is preceded by crying during a period of anger, fright, frustration, or conflict.

WHAT ARE THE SYMPTOMS? Crying stops abruptly when your child holds his/her breath. You may notice some bluish coloration around the mouth and some stiffening of your child's body. The body then relaxes and breathing returns to normal.

WHAT ARE THE COMPLICATIONS? Rarely does breath-holding lead to permanent injury. Occasionally a breath holding spell will cause the child to pass out (lose consciousness) or to have a convulsion, which ends quickly with resumption of breathing.

HOW LONG DOES IT LAST? The frequency of breath holding is greatest between the ages of 1 and 4 years. Peak occurrence is age 18 months.

HOW COMMON IS IT? Breath holding spells are common.

HOW IS IT ACQUIRED? Certain emotions as previously mentioned are associated with breath holding spells. In this respect, they are not unlike temper tantrums.

WHAT CAN THE FAMILY DO? It is important that members of the family remain calm. Try to ignore breath-holding episodes; turn the other way maintaining a matter-of-fact attitude. Do not positively reinforce your child's breath holding behavior by permitting his/her own way or by giving rewards afterwards. Many children will stop this behavior when no one pays attention. It is best not to punish your child as this does not usually resolve the problem and often makes it worse. Though it is difficult, the family should try to avoid situations that seem to initiate breath-holding spells.

WHEN TO CALL THE DOCTOR AGAIN? Promptly contact your physician if your child suffers convulsions or loss of consciousness.

SIBLING RIVALRY

WHAT IS IT? Sibling rivalry is jealousy between children, most commonly between a young child and a new infant, but it can continue when both are older. Sibling rivalry results because of the difference in the amount of attention the child receives now as compared to before the arrival of the baby or because one child thinks he/she is, or in actuality is, receiving more attention than the other.

WHAT ARE THE SYMPTOMS? The symptoms of sibling rivalry are quite variable. Your child does what he/she thinks will regain the focus of attention. Some children will imitate the new baby, making baby noises or returning to baby habits such as bottle drinking or refusing to use the potty. Some children act differently in order to draw attention to them.

HOW COMMON IS IT? Sibling rivalry is quite common. It should be expected as a manifestation of your child's thinking abilities in defense of his/her rights. It is most common for the first-born child.

WHAT CAN THE FAMILY DO? Be sympathetic to your young child. Set aside time which will be solely devoted to giving attention to your child. Encourage the children to help with the baby. This shows your trust. When showering the new baby with new things and affection, provide new things and affection for your young child too. However, aggressive behavior between different-age children, both beyond nursery-school age is not appropriate. This behavior should not be accepted or approved. You should make your disapproval known to the children in a consistent, firm manner. Reinforce good interaction. If there is great disparity in the children's ages or abilities don't force cooperative activities on them. Instead, positively reinforce independent performance of activities. Remember, the entire family, particularly the parents, should try to be consistent in their interactions with the children.

DENTAL EMERGENCY PROCEDURES

Toothache - Rinse the mouth vigorously with warm water to clean out debris. Use dental floss to remove any food that might be trapped between the teeth. If swelling is present, place cold compresses on the outside of the cheek. (Do not use heat or place aspirin on the aching tooth or gum tissues.) See your dentist as soon as possible.

Orthodontic Problems (Braces and Retainers) - If a wire is causing irritation, cover end of the wire with a small cotton ball, beeswax, or a piece of gauze, until you can get to the dentist. If a wire is embedded in the cheek, tongue, or gum tissue, do not attempt to remove it. Go to your dentist immediately. If an appliance becomes loose or a piece of it breaks off, take the appliances and the piece and go to the dentist.

Knocked-Out Tooth - If the tooth is dirty, rinse it gently in running water. Do not scrub it. Gently insert and hold the tooth in its socket. If this is not possible, place the tooth in a container of milk or cool water. Go immediately to your dentist (within 30 minutes, if possible). Don't forget to bring the tooth.

Broken Tooth - Gently clean dirt or debris from the injured area with warm water. Place cold compresses on the face, in the area of the injured tooth, to minimize swelling. Go to the dentist immediately.

Bitten Tongue or Lip - Apply direct pressure to the bleeding area with a clean cloth. If swelling is present, apply cold compresses. If bleeding does not stop, go to a hospital emergency room.

Objects Wedged Between Teeth - Try to remove the object with dental floss. Guide the floss carefully to avoid cutting the gums. If not successful in removing the object, go to the dentist. Do not try to remove the object with a sharp or pointed instrument.

Possible Fractured Jaw - Immobilize the jaw by any means (handkerchief, necktie, towel). If swelling is present, apply cold compresses. Call your dentist or go immediately to a hospital emergency room.

(AMERICAN DENTAL ASSOCIATION * 211 E CHICAGO AVE * CHICAGO)

LEAD POISONING IN CHILDREN

BY

PHYLLIS E. STUBBS, M.S., M.P.H., PUBLIC HEALTH SERVICE

National Head Start Bulletin Issue #41

Lead poisoning is the number one environmental health risk to young children in the United States.

At a conference in Washington, D.C., to assess progress in the fight against lead poisoning, Health and Human Services Secretary Louis W. Sullivan announced that the Centers for Disease Control (CDC) has lowered the blood lead level considered poisonous from 25 micrograms per deciliter of whole blood to 10 micrograms per deciliter. This new, lower blood level is estimated to raise the number of young children at risk of lead poisoning to approximately 3 million.

Lead poisoning was formerly believed to be a health problem for young, minority children living in old, dilapidated housing or housing undergoing renovation in urban poverty areas. However, evidence shows that any child exposed to even very low levels of lead, regardless of race or family income, can have permanent neurological impairments. It is for this reason that Dr. Sullivan also announced the new CDC guidelines calling for blood lead testing of all children younger than six.

Parents often want to know the early warning signs of lead poisoning. But, there are often no clearly discernible early signs that would cause parents to suspect lead poisoning in their children. However, even low levels of lead exposure ("***Because signs and symptoms of lead poisoning are often absent or easily mistaken for the flu, it is important to have your children tested for lead poisoning.***") may affect young children by causing delayed development, damage to red cell production, lower IQ scores, and behavior problems. Often when signs are present they can easily be mistaken for other illnesses. Some general signs of lead poisoning may include stomachache and cramps, irritability, fatigue, frequent vomiting, constipation, headache, sleep disorders, and poor appetite. Because signs and symptoms of lead poisoning are often absent or easily mistaken for the flu, it is important to have your children tested for lead poisoning.

Sources of lead in the environment are not limited to lead-based paint -- they can also include household dust and soil, home remedies containing lead, lead pipes, home hobby materials containing lead, environmental lead, and workplace lead dust.

If you are concerned about lead in your home or community, the Berkeley, California, Childhood Lead Poisoning Prevention program recommends the following:

- * Have your child tested for lead poisoning.
- * Try to keep your child away from peeling paint and paint dust.
- * Try to decrease all sources of lead in your home. Don't use home remedies containing lead, and hobbies using lead should not be placed in your living space.
- * If you work around lead, don't bring it home.
- * If your home is going to be refurbished, follow safe paint removal methods. If someone else is doing the work, insist that they use these methods too.
- * If you think a business in your neighborhood is causing a lead problem, there are agencies, such as those that follow, which can help you.

WHO'S DOING WHAT

The following list includes many of the agencies involved with regulating lead exposure or researching the effects of lead,

along with their areas of responsibility.

FDA (Federal Drug Administration) has responsibility for regulating lead in bottled water, calcium supplements, ceramic and other food ware, commercial coffee urns, decorated glassware, food, including ingredients, and packaging, lead crystal, and lead-soldered food cans.

EPA (Environmental Protection Agency) researches and/or monitors lead content in air, water and soil, and have some involvement monitoring lead-based paints. (800) 942-6496

NIOSH (National Institute for Occupational Safety and Health) conducts research and surveillance on occupational lead exposure and offers health hazard evaluation programs on work sites when requested and industrial hygiene training. (800) 356-4674

OSHA (Occupational Safety and Health Administrations) regulates lead exposure at the work site. (202) 634-7943

NIEHS (National Institute of Environmental Health Sciences) conducts basic biomedical research on effects of lead on human health. (301) 496-4000

HUD (U.S. Department of Housing and Urban Development) funds public housing authorities to contain or remove lead-base paint in public housing units. (800) 669-9777

CPSC (Consumer Product Safety Commission) requires warning labels on lead solder for drinking water pipes, monitors lead paint on children's toys to ensure compliance with the federal standard limiting lead in paint, regulates the labeling of artists' materials, and issues safety warnings on use of lead-based paint in the home. (800) 638-7272

ATSDR(Agency for Toxic Substances and Disease Registry) is responsible for health assessment of areas near Superfund sites (toxic waste sites that pose an environmental threat), writes case studies on lead for health professionals, and is involved in the nature and extent of lead poisoning of American children. (202) 472-7136

LEAD CHECKLIST

- _____ **How old is your house?**
(Why important: If your house was built before 1960, it was probably painted with lead-based paint both inside and outside. The last use of lead-based paint for home use was in the late 1970's, although lead paint manufacture was phased out by 1957.)
- _____ **Are there shrubbery and/or grass around your house?**
(Why important: If your house has grass or shrubbery covering the soil, children who play in the yard will be protected from exposure to lead-contaminated soil. Children can be exposed to lead in the soil when playing in the dirt and getting lead-laden dust in their lungs or by putting dirty hands in their mouths.)
- _____ **Is there peeling of paint inside or outside of your house?**
(Why important: Children sometimes eat peeling paint. Lead-based paint chips taste slightly sweet and that can encourage children to eat them. Removing peeling paint inside the house by sweeping up chips and raking up peeling paint outside (put it in the garbage can), can help protect children.)
- _____ **Is your young child very active?**
(Why important: Very active children are at risk of getting into many things, including paint chips and lead in dust and soil. If they wash their hands often, they can protect themselves from lead on their hands.)
- _____ **Do your children like to put their hands in their mouths?**
(Why important: If your children like to put their hands in their mouths, they are at risk of picking up lead on their fingers as they play in lead-contaminated soil. Wash their hands often to reduce the risk of lead poisoning.)
- _____ **What kinds of plumbing pipes are in your house?**

Do you have lead pipes in the basement?

(Why important: Lead pipes can be found in some older homes. If your house has them, have them replaced as soon as possible. Running the water for 5 minutes will help reduce the risk of lead in the water).

Do you have lead soldered copper pipes?

(Why important: Lead from the solder can leach into water that stands overnight in the pipes. This is a particularly true form home with corrosive water. To test your water, contact your water company or the Department of Environmental Protection. You can reduce exposure to lead by running the water for 5 minutes to clear the pipes of standing water. The problem is most severe when water stands many hours).

Do you have lead pipe service lines?

(Why important: Some older cities have lead service connections. The water company will replace these. Until the time that they are replaced, run the water for five minutes before using the water in the tap.)

What are your hobbies? Do they use lead?

(Why important: Stained glass workers, fishermen making sinkers or flies, musket shot makers, potters, jewelers, and others may be exposing themselves to lead. **Are you safely venting the lead vapors?**)

Are you exposed lead at your job? Are you bringing lead home on your clothes?

Are you fixing up an old house? Are you sandblasting old paint? Are you burning old paint? If you are, you may be exposing yourself, and others, to air-borne lead.

The above information was taken from a kit entitled, *Get the Lead Out: A Community Discussion Package*, from Concerned Parents for Head Start, Paterson, New Jersey. The kit includes a curriculum module, a video, a comic book, and other components. The text is available in both English and Spanish and can be copied. For more information contact:

**"Get The Lead Out," concerned Parents for Head Start,
90 Martin Street, Paterson, NJ 07522**