

Education

Choking: Prevention

Choking can be life-threatening. Choking on foods or other objects kills as many children each year as accidental poisonings. Follow these guidelines to help prevent your child from choking.

- Do not give hard foods to children less than 4 years old. Hard foods that could be sucked into the lungs when a child takes a breath are nuts, sunflower seeds, orange seeds, cherry pits, watermelon seeds, gum, hard candies, popcorn, some corn chips, raw carrots, raw peas, and raw celery. Children under the age of 4 years don't know which foods they should spit out. They also need more molar teeth to chew the other hard foods properly.
- Chop up dangerous soft foods before you serve them. Soft foods that most commonly cause fatal choking by completely blocking the windpipe are hot dogs, sausage, gummy candy, large pieces of any meat, grapes, and caramels (especially if a child is in a hurry).
- Warn baby sitters and older siblings not to share these dangerous hard and soft foods with small children.
- Teach your child to chew all foods thoroughly before swallowing them.
- Don't allow your child to fill his cheeks with food like a chipmunk.
- Clean up right away after parties. An especially dangerous time is the morning after parties, when a toddler may find dangerous foods on the floor.
- Warn your child never to chew or suck on pieces of rubber balloons. Rubber balloons are the leading cause of choking deaths resulting from objects other than foods. Most incidents occur when a child suddenly inhales a deflated balloon he has been chewing on. Even teenagers have died from inhaling a deflated balloon. Chewing on an inflated balloon is also dangerous because the balloon could burst. Mylar helium balloons are safer than rubber balloons, but rubber balloons are fine when they are used with supervision.
- Don't give a young child a toy with small, detachable parts. If you do, in a few minutes you'll find the missing part in the child's mouth (unless he has already swallowed it).
- Periodically check your child's environment for small objects that your child could choke on (anything with a diameter less than 1.25 inch, or 3.2 cm). Ask older children to protect younger siblings by checking the carpet for small pieces from toys or games.
- Dispose of button batteries carefully.
- Remind your child not to run or play sports with gum or other material in his mouth.

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Cow's Milk: Pros and Cons

Occasionally, recommendations are made that children over 2 years old and adults should not drink cow's milk. The American Academy of Pediatrics and the American Medical Association strongly disagree with this position. Here are the reasons the benefits of drinking cow's milk outweigh the risks.

The Benefits of Cow's Milk

Dairy products are an inexpensive source of protein. They are a convenient source of calcium. In addition, they often taste good. These benefits of milk haven't changed.

The Risks of Cow's Milk

- **Bleeding from the intestines during infancy** The intestines of some babies may bleed if they drink cow's milk during their first year of life. This slow leakage of blood from the lining of the intestine can cause iron deficiency anemia. For this reason, pediatricians no longer recommend giving cow's milk to children during their first year of life.
- **Food allergies** About 1% of children are allergic to the protein in cow's milk. When they eat or drink milk products, they may develop hives, diarrhea, wheezing, or other allergic symptoms. These children need to avoid cow's milk products.
- **Lactose intolerance** Lactose is the sugar found in milk. Some children and many adults have a condition called lactose intolerance and have bloating and diarrhea when they eat or drink milk products. You can prevent these symptoms by adding lactase drops to the milk. (Lactase is an enzyme that helps people digest the sugar in milk.)
- **Heart disease** Children with strong family risk factors for early heart attacks should avoid cow's milk products because of the high amounts of cholesterol and saturated fat in milk. You can reduce this risk by giving your child skim milk or 1% milk.
- **Diabetes** One study has suggested that a reaction to the protein in cow's milk could trigger the onset of diabetes mellitus. A later study showed no correlation. This theory is not a reason to give up milk.

Precautions for Children Who Avoid Milk

Children and adults who need to avoid drinking milk or eating food made from milk must supplement their diets with calcium. Children who don't get enough calcium every day may develop rickets, which leads to soft bones and short stature. They also have a greater chance of fractures. Also, these children do not store enough calcium to build strong bones and prevent osteoporosis during late adulthood.

Some vegetables such as broccoli and kale contain relatively high amounts of calcium. However, it would be extremely difficult to eat enough broccoli and kale each day to get enough calcium. Therefore, children who are not eating or drinking milk products should take calcium supplements. They are available without prescription in liquid, chewable, and tablet forms. Calcium-fortified orange juice is also available and contains as much calcium per ounce as milk products.

Recommendations

- During the first year of life children should either be breast-fed or be given iron-fortified formula.
- Give whole cow's milk to children 12 to 24 months old.
- Children who don't like the taste of milk will often drink 3 servings a day if they are offered chocolate or strawberry milk. Flavored milks do not have any nutritional drawbacks.
- After 2 years of age children should drink low-fat milk. If they are overweight, they can drink skim milk.

Consuming milk products in moderation is not harmful.

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Electrical Shock, Prevention of

- Cover all electrical outlets that are not in use with plastic safety caps.
- Unplug appliances with heating elements, such as hair dryers, curling irons, electric shavers, coffeepots, and toasters, when they are not being used.
- Keep electrical cords away from toddlers who might chew on them. (Note: This accident could burn off part of the lip or the end of the tongue.)
- Teach your child not to turn on lights or electrical appliances when he or she is standing on a wet floor or wet ground.
- Teach your child never to touch an electrical appliance, such as a hair dryer, telephone, or radio, while he or she is in the bathtub. (Note: This mistake can result in immediate electrocution if the appliance is plugged into the socket, even if the switch is turned off.)
- Teach your child to avoid open water (such as swimming pools, lakes, and streams), tall trees, high ground, or metal objects (such as a shovel) during thunderstorms. Cars and houses are safe.

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Formula (Bottle) Feeding

Should I use formula?

Breast milk is best for babies, but breast-feeding isn't always possible. You will need to use a baby formula if:

- You decide not to breast-feed.
- You need to stop breast-feeding and your baby is less than 1 year old.
- You need to occasionally supplement breast-feeding with formula (after breast-feeding is well established).

If you want to breast-feed but you think you are not making enough milk, don't stop breast-feeding. Talk to your health care provider or lactation nurse before you stop. Any bottle feeding, before breast-feeding has been well established, could reduce your supply of breast milk and make it difficult to continue breast-feeding.

What type of formula should I use?

If your child is less than 1 year old, discuss which formula to use with your health care provider.

Baby formulas are designed to give your baby all known essential nutrients in their proper amounts. Most formulas are made from cow's milk. A few are made from soybeans. Soy formula is used for babies who may be allergic to or have difficulty digesting the type of protein in cow's milk. The American Academy for Pediatrics recommends you use iron-fortified (not low-iron) formula to prevent anemia.

Most formulas are available in three forms: powder, ready-to-serve liquid, and concentrated liquid. Powder and ready-to-serve liquid are best if you are using it to supplement breast milk. You must mix concentrated liquid before using. It forces you to prepare 26 ounces at a time. Powder and concentrated liquid formulas are less expensive per feeding than ready-to-serve formulas.

When can I give my baby regular milk?

Regular, whole cow's milk should not be given to babies before 12 months of age. This is due to increased risks such as iron deficiency anemia and allergies. Skim or low-fat milk should not be given to babies before they are 2 years old because the fat in whole milk is needed for rapid brain growth.

How do I prepare formula?

Mix concentrated liquid formula with water in a ratio of one to one. Mix each level scoop of powdered formula with 2 ounces of water. Never make the formula for your baby more concentrated by adding extra concentrated liquid or extra powder. Never dilute the formula by adding extra water. Careful measuring and mixing ensure that your baby receives the proper mix of formula.

Do I need to boil the water first?

Most city water supplies are quite safe. If you make one bottle at a time, you don't need to use boiled water. When using tap water for preparing formula, use only water from the cold water tap. Let the water run for 2 minutes before you use it. (Old water pipes may contain lead-based solder and lead dissolves more in warm water or standing water.) Fresh, cold water is safe. After you prepare the formula with the cold water, you can heat the bottle to the right temperature. Ask your health care provider if you are not sure whether your water supply is safe for your baby.

If you have well water, you need to boil your water for 10 minutes (plus 1 minute for each 1000 feet of elevation above sea level) or use distilled water until your child is 6 months old.

If you prefer to prepare a batch of formula, you must use boiled or distilled water and closely follow the directions printed on the side of the formula can. This prepared formula should be stored in the refrigerator and must be used within 48 hours.

Can I make my own formula?

If necessary, you can make your own formula temporarily from evaporated milk. (Evaporated milk formulas have some of the same risks as whole cow's milk, namely, iron deficiency anemia and allergies.) Mix 13 ounces of evaporated milk with 19 ounces of boiled water and 2 tablespoons of corn syrup. Place this mixture in sterilized bottles and keep the bottles refrigerated until use (up to 48 hours).

What temperature does the formula need to be?

In the summertime, many children prefer cold formula. In the wintertime, most prefer warm formula. By trying formula at various temperatures you can probably find out what your child prefers. If you do warm the formula, check the temperature

of the formula before you give it to your baby. If it is too hot it will burn your baby's mouth. Be especially careful if you heat the formula in a microwave because the formula can get too hot very quickly.

How often should I feed my baby?

Your health care provider will tell you when and how often to feed your baby. In general, your baby will probably need:

- 6 to 8 formula feedings per day for the first month
- 5 to 6 formula feedings per day from 1 to 3 months
- 4 to 5 formula feedings per day from 3 to 7 months
- 3 to 4 formula feedings per day from 7 to 12 months

If your baby is not hungry at some feedings, increase the time between feedings.

How much formula should I give my baby?

Newborns usually start with 1 ounce per feeding, but by 7 days they can take 3 ounces. The amount of formula that most babies take per feeding (in ounces) can be calculated by dividing your baby's weight (in pounds) in half. For example, if your baby weighs 8 pounds, your baby will probably drink 4 ounces of formula per feeding. No baby should drink more than 32 ounces of formula a day. If your baby needs more than 32 ounces and is not overweight, consider starting solid foods. Overfeeding can cause vomiting, diarrhea, or excessive weight gain.

How should I hold the baby during feedings?

Feeding should be a relaxing time -- a time for you to provide both food and comfort for your baby. Make sure that both you and the baby are comfortable:

- Your arm supported by a pillow.
- Baby in a semi-upright feeding position supported in the crook of your arm. This position reduces choking and the flow of milk into the middle ear.
- The bottle tilted so that the nipple and the neck of the bottle are always filled with formula. (This prevents your baby from taking in too much air.)

How long should I feed my baby?

Gently remove the bottle from time to time to let your baby rest. A feeding shouldn't take more than 20 minutes. If it does, you are overfeeding your baby or the nipple is clogged. A clean nipple should drip about 1 drop per second when the bottle of formula is turned upside-down.

Do I need to burp my baby?

Burping is optional. It doesn't decrease crying. Burping helps your baby spit up less. Air in the stomach does not cause pain. If you burp your baby, be sure to wait until your baby reaches a natural pause in the feeding process. Burping two times during feeding and for about a minute is plenty. More burping may be needed if your baby spits up a lot.

How long can I store formula?

Prepared formula should be stored in the refrigerator. It must be used within 48 hours. Prepared formula left at room temperature for more than 1 hour should be thrown away. At the end of each feeding, throw away any formula left in the bottle.

Does my baby need to drink water?

Babies do not routinely need extra water. However, when they have a fever or the weather is hot they should be offered a bottle of water twice a day. Run the water from the tap for 2 minutes before you use it for drinking. Keep some of this water in your refrigerator.

Do I need to give my baby vitamins?

No. Baby formulas contain all the vitamins and minerals your baby will need.

Do I need to give my baby fluoride?

From 6 months to 16 years of age, children need fluoride to prevent cavities. If the water supply where you live contains fluoride and your child drinks at least 1 pint of formula made with water each day, this should be enough. Otherwise, fluoride drops or tablets should be given. Formula-fed infants should receive fluoride supplements without vitamins. You can get a prescription for fluoride drops from your child's health care provider.

Another way you can help your baby's teeth is by making sure your baby does not sleep with a bottle. Milk, juice, or any sweetened liquid in the mouth can cause severe decay of your baby's first teeth. Liquids tend to pool in the mouth during sleep. The sugar in these drinks is changed to acid by bacteria in the mouth. The acid then etches the tooth enamel and causes decay.

Prevent tooth decay by not using the bottle as a daytime or nighttime pacifier. If you cannot stop the nighttime bottle or replace it with a pacifier, fill the bottle with water.

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First Aid Measures for Emergencies

The following recommendations will help you care for your child's minor emergencies and provide first aid for your child's major emergencies while you are waiting for medical assistance. Also, take a first aid course. You can't learn CPR (cardiopulmonary resuscitation) just by reading.

1. **Animal bites** Immediately wash the bite with lots of soap and water for 10 minutes. Many dog bites can be prevented by teaching a child not to pet strange dogs, not to tease dogs, and not to go near his own dog when the dog is eating or fighting. Also, teach your child not to pick up sick or injured wild animals.
2. **Bee stings** (Note: Yellow jackets and wasps don't leave stingers.) Carefully remove the stinger by scraping it off without squeezing it. Use the edge of a knife blade or credit card. Then put a few drops of water on the area of the sting, sprinkle on meat tenderizer, and massage the solution into the skin for 10 minutes. Don't use meat tenderizer near the eye. Putting an ice cube on the area will also relieve pain. Call your child's health care provider if your child develops hives or has trouble breathing.
3. **Tick bites** The simplest and quickest way to remove a tick is to pull it off. Use tweezers to grasp the tick as close to the skin as possible. Pull steadily upward until the tick releases its grip. Do not twist the tick or squeeze the tweezers so much that you crush the tick. If you don't have tweezers, pull the tick off in the same way by using your fingers. If you remove the body but leave the head in the skin, remove the head by using a sterile needle (in the same way you would remove a sliver). Wash the wound and your hands with soap and water after you remove the tick. Put on antibiotic ointment once. Embedded ticks do not back out when covered with petroleum jelly, fingernail polish, or rubbing alcohol. Applying a hot match to the tick also does not work. If you aren't successful in completely removing the tick, call your child's provider. Most ticks do not cause disease. However, if your child develops fever, rash, or other symptoms during the 2 weeks after the bite, call your child's health care provider.
4. **Bleeding, severe** Determine whether an artery or a vein has been cut. When an artery is cut, the blood pumps or spurts from the wound with each heartbeat. When a major vein is cut, the blood runs out of the wound at a steady rate. If an artery is cut, place several sterile dressings or a clean cloth (towels, sheets, or shirts) over the wound and apply direct pressure over the wound immediately. For arterial bleeding, the pressure must be forceful and continuous, often applied with the palm of the hand. Act quickly because the ongoing blood loss can cause shock. If a vein is cut, place several sterile dressings or the first clean cloth at hand (towels, sheets, or shirts) over the wound and apply direct pressure over the wound. After about 10 minutes of pressure, the dressings can often be bandaged in place until the child arrives at an emergency room.
5. **Breathing, stopped** Call the rescue squad (911) and begin mouth-to-mouth resuscitation.
6. **Burns** Immediately (within 10 seconds of the burn) immerse the burn in cold tap water for at least 5 minutes. If this is impossible (for example, if the burn is on the face and trunk), apply cool wet cloths or pour a pan of cold tap water over the burn. This will lessen the depth of the burn and relieve pain. Do not put butter or burn ointment on the burn. Do not break blisters. After you have cooled the burn, call your child's provider for further instructions.
7. **Choking** Most children occasionally choke on liquids that go down the windpipe instead of the esophagus. Your child's cough reflex will clear the windpipe of the liquid within 10 to 30 seconds. It is best if you do nothing except reassure your child. Sometimes a young child will suddenly choke on a peanut, raw carrot, or other piece of food. If your child is coughing and able to breathe, encourage him to cough the material up by himself. If your child can't breathe, cough, or make a sound, proceed with high abdominal thrusts, called the Heimlich maneuver. Grasp your child from behind, just below the lower ribs but above the navel, in bear-hug fashion. Give a sudden, upward jerk at a 45-degree angle to try to squeeze all the air out of his chest and pop the lodged object out of his windpipe. Repeat this upward abdominal thrust 10 times in rapid succession. If your child is too heavy for you to suspend from your arms, lay him on his back on the floor. Put your hands on both sides of his abdomen, just below the ribs, and apply sudden strong bursts of upward pressure. If your child is less than 1 year old, first use back blows. Place him face down at a 60-degree angle over your knees. (Gravity may help get the object out.) Deliver 5 hard blows with the heel of your hand to the area between your child's shoulder blades. If this is not successful, lay him on his back and give 5 rapid chest compressions over the lower sternum (breast bone) using two fingers. If he still hasn't started breathing, begin mouth-to-mouth resuscitation and call the rescue squad (911).
8. **Convulsions with fever** Bringing your child's fever down as quickly as possible will shorten the seizure. Remove most of your child's clothing and apply cold washcloths to her forehead and neck. Sponge her body with cool water. (Do not use rubbing alcohol.) As the water evaporates, your child's temperature will fall. When the seizure is over and your child is awake, give her an appropriate dose of acetaminophen or ibuprofen and encourage her to drink cool fluids. If your child starts to vomit, place her on her side or abdomen. If her breathing becomes noisy, pull her jaw and chin forward by placing a finger behind the corner of her jaw on each side. Don't put anything into her mouth. Have someone call your child's health care provider.
9. **Drowning** Begin mouth-to-mouth breathing as soon as possible, in a boat, a life preserver, or at the latest, when the rescuer reaches shallow water. Continue rescue breathing until the child reaches a medical facility. Some children have survived long submersions, especially in cold water. If there is any possibility of a neck injury (for example, a diving accident), protect the neck from any bending or twisting.
10. **Eye, chemical in** Most chemicals such as alcohol or hydrocarbons (for example, gasoline or lighter fluid) cause only

temporary stinging and superficial irritation. However, acids and alkalis splashed into the eye can severely damage the cornea. When any chemical is accidentally splashed into your child's eye, treat it as an emergency until your provider or a Poison Control Center expert tells you otherwise. Immediate and thorough irrigation of the eye with tap water is essential to prevent damage to the cornea. (Do not use antidotes such as vinegar.) Hold your child's face up under gently running tap water. Or have your child lie down while you continuously pour lukewarm water from a pitcher or glass into his eye. It is very important to try to hold your child's eyelids open during this process. For most chemicals, you should irrigate the eye for 5 minutes; for acids, 10 minutes; and for alkalis, 20 minutes.

11. **Eye, foreign body in** If the particle is in the corner of your child's eye, try to remove it with the corner of a clean cloth or a moistened cotton swab. If the particle is under your child's eyelid, try to remove it by opening and closing her eye several times while her eye is submerged in a cup of water. If the object stays on the lid and you can see it, try to remove it with a moistened cotton swab. If you can't see the particle or remove it, call your child's provider.
12. **Fracture, suspected** If you think your child has broken a bone, take him in for a medical exam and an x-ray. Don't let your child put weight or pressure on the bone. Put a splint on the suspected fracture before you move your child so the edges of the fracture won't damage blood vessels.
 - Shoulder or arm: Use a sling made of a triangular piece of cloth to support the forearm at an 80° to 90° angle to the upper arm. If you can't make a sling, at least support the injured part with the other hand.
 - Leg: After placing a towel between the legs for padding, use the uninjured leg as a splint by binding the thighs and legs together with straps. If you can't do this, at least carry your child and don't permit him to put any weight on the injured leg.
 - Neck: Protect the neck from any turning or bending. Do not move your child until a neck brace or spine board has been applied. Call a rescue squad (911) for transportation.
13. **Sprained ankle or knee** Remember the acronym RICE for treatment of most sports injuries: rest, ice, compression, and elevation. Apply continuous compression by wrapping an elastic bandage around the ankle or knee. Numbness, tingling, or increased pain means the bandage is too tight. Keep the bandage on for 24 to 48 hours. Put a plastic bag of crushed ice on the ankle or knee. Do this 20 minutes of every hour while your child is awake for the first 4 hours after the injury. Ice and compression reduce bleeding, swelling, and pain. Keep the injured ankle or knee elevated and at rest for 24 hours. Call your child's provider for further instructions.
14. **Poisoning** If your child has swallowed something poisonous, first sweep any pills or solid poisons out of your child's mouth with your finger. Then, if your child swallowed a chemical, immediately give her one glass of water or milk to rinse her esophagus; this is not necessary if your child swallowed a medicine. Call the National Poison Center Hotline at 1-800-222-1222 for advice. Do not induce vomiting.
15. **Nosebleed** Pinch the soft parts of the nose against the center wall for 10 minutes. Tell your child to breathe through his mouth during this time. If blood continues to come out of the nose while it is pinched, you may not be pressing on the right spot. If the nosebleed hasn't stopped after 10 minutes, insert a piece of gauze covered with vasoconstrictor nose drops (for example, Neo-Synephrine) or petroleum jelly into the nostril. Squeeze again for 10 minutes. If bleeding persists, call your child's health care provider but continue applying pressure in the meantime.
16. **Skin injuries** Call your child's provider immediately if you have any difficulty stopping the bleeding, if the wound is caused by a dirty object, if there is any chance that a foreign body is in the wound, or if the skin is split and will need stitches. Any deep cut that needs stitches must be sutured within 12 hours. After 12 hours the wound is no longer clean enough to close with stitches.
 - Abrasions or superficial cuts Wash abrasions or superficial cuts for 5 minutes with soap and water; then rinse well. Put on an antibiotic ointment and Band-Aid or sterile gauze dressing and change it daily.
 - Puncture wounds (as from stepping on a nail) Soak the area in hot water and soap for 15 minutes. Try to make the puncture wound bleed some more. If there is any chance that an object has broken off inside the puncture wound or if your child has not had a tetanus booster in the last 5 years, call your child's health care provider.
 - Bruises Put ice on the bruise for 20 minutes. No other treatment should be necessary.
 - Slivers and splinters Most slivers can be removed with a needle and tweezers. Before you use them, sterilize the needle and tweezers with alcohol. Wash the skin surrounding the sliver with soap before you try to remove the sliver. Grasp the sliver firmly with tweezers and pull it out at the same angle it went in. Call your child's health care provider if you can't remove a sliver.
17. **Head injuries**
 - Observation and rest Observe your child for the first 2 hours after the injury. Encourage your child to lie down and rest until he no longer has symptoms. It is all right for your child to sleep; trying to keep him awake continuously

unnecessary. Have your child sleep near you so you can periodically check on him.

- Diet Give your child only clear fluids (ones you can see through) and no food until he has gone 6 hours without vomiting. Vomiting is common after head injuries.
- Avoid pain medicines Don't give your child acetaminophen or ibuprofen because your provider needs to know your child's reaction to the injury. If your child's head hurts badly enough to need a pain reliever, your provider should check him.
- Special precautions and awakening Although your child is probably fine, watching him for 48 hours will ensure that you don't miss any serious complication. After 48 hours, however, your child should return to a normal routine and full activity.
 - Awaken your child twice during the night: once at your bedtime and once 4 hours later. (Awakening him every hour is unnecessary and next to impossible.) Arouse him until he is walking and talking normally. Do this for 2 nights. If his breathing becomes abnormal or his sleep is otherwise unusual, awaken him to be sure a coma is not developing. If you can't awaken your child, call 911 immediately.
 - Checking pupils is unnecessary. Some health care providers may ask you to check your child's pupils (the black centers of the eyes) to make sure they are equal in size and become smaller when you shine a flashlight on them. Unequal pupils are never seen before other symptoms like confusion and unsteady walking. In general, pupil checks are necessary only for a hospitalized child with a severe head injury.

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Lead Poisoning, Prevention of

What is lead poisoning?

Lead poisoning is a common preventable disease in the U.S. and Canada. Most commonly, lead poisoning is caused by being repeatedly exposed to small amounts of lead. Once lead is in the body it does not leave on its own. If enough lead builds up in the body it causes lead poisoning.

What are the symptoms of lead poisoning

There may not be any obvious symptoms at first, so parents of children with mild lead poisoning may not know to get medical help. Low levels of lead are harmful. The brain is most sensitive to lead exposure during the first 6 years of life. Exposure to lead may cause such problems as lowered IQ scores (an average of 7 IQ points lost), decreased attention span, decreased hearing, speech delays, and other developmental delays.

Though uncommon, exposure to large amounts of lead causes severe lead poisoning and major symptoms. The symptoms of severe lead poisoning include abdominal pains, headaches, vomiting, confusion, muscle weakness, seizures, hair loss, and anemia.

Where might my child be exposed to lead?

The most common source of lead exposure for children is lead-based paint. Lead was finally banned from house paint in 1978. Three-quarters of all houses built before 1960 contain lead-based paint. When paint chips or peels, young children can pick up these chips and chew them. More commonly, children swallow dust and soil contaminated with lead paint. Home remodeling and sanding put a great deal of lead powder into dust and soil. Because toddlers commonly put their hands in their mouths, suck their thumbs, and explore their environment by tasting things, they are at greater risk for lead poisoning.

Other sources of lead are air, water, and food. The amount of lead in the air from car exhaust has been markedly reduced now that unleaded gasoline is commonly used. Lead is found in low levels in some drinking water because lead-based solder on old water pipes may add lead to water. (Lead-based solder was not banned for use with water pipes until 1986.) Lead is also sometimes found in fruit juice, food stored in lead-glazed pottery, low-quality toys, metal trinkets, and crayons. Average lead levels in children in the U.S. have been declining in recent years, however all sources of lead have still not been eliminated.

How do I prevent lead poisoning?

- Make sure your child is not exposed to peeling paint. Pay special attention to windowsills.
- To remove lead dust:
 - Rinse your child's hands and face before she eats.
 - Rinse toys and pacifiers frequently.
 - If your child sucks his thumb or fingers, rinse his hands frequently.
 - Wet-mop your hard surface floors.
- Close off rooms that are being remodeled.
- If you have leaded paint on the outside of your house, keep lead dust from being tracked into your house. Have a washable mat at each door entry so everyone who enters wipes their feet. If the soil around your house is definitely contaminated with lead, have a rule that people take off their shoes before coming into your house.
- If the soil around your home is contaminated with lead, replace it or plant bushes next to the walls so that children cannot play there.
- If you need water for cooking or for preparing formula, use only water from the cold water tap. If the water hasn't been used for several hours, let the water run for 2 minutes before you use it. (Lead dissolves more in warm water or standing water.) If you are concerned, have your water tested for lead.
- Do not store food or drink in pottery that may not have been fired correctly.
- Make sure your child's diet contains enough iron and calcium. Both of these minerals make it harder for the body to absorb lead.
- Make sure that all adults who work with lead shower and change clothes before spending time with your child.

- Make sure your child's toys and crayons are made by a reputable manufacturer.

How can I check if my child has lead poisoning?

Lead poisoning is diagnosed by a blood test. In most states only children who are at high risk for lead poisoning are tested. For high risk children this test is done when children are 12 months old and repeated when they are 2 years old. You should have your child tested if:

- Your child lives in or regularly visits a house or structure with peeling or chipped paint that was built before 1950, including day care centers, preschools, or homes of baby sitters and relatives.
- Your child lives in or regularly visits a home that is being renovated and was built before 1978.
- Your child has a brother, sister, housemate, or playmate who is being tested or treated for lead poisoning.
- Your child lives with an adult whose job or hobby involves exposure to lead. Examples of such jobs or hobbies include furniture refinishing, making stained glass, making pottery, using indoor firing ranges, and working in industries such as storage batteries, automotive repair, and bridge, tunnel, and elevated highway construction.
- Your child lives near an active smelter, battery recycling plant, mine tailing pile, or other industry likely to release lead.
- Your child receives medical treatment for removal of a foreign body from the ear, nose, or stomach.
- Your child has the habit of swallowing nonfood substances (pica).
- Your child is less than 6 years old and has an unexplained developmental delay, hearing defect, irritability, severe attention deficit, violent tantrums, or unexplained anemia.
- Your child lives in a neighborhood at high risk for lead poisoning (often identified by zip code).

Children who remain at high risk for lead exposure should be tested for lead at least every year until their 6th birthday. The levels of lead when a child is 12 months old and 24 months old are especially important.

How is it treated?

Children with high levels of lead in their blood or symptoms of lead poisoning need to start taking a medicine (called a chelating agent) that binds with the lead and carries it out of the body. All children need to be protected from re-exposure to the lead until it is removed. A public health agency or housing agency should carefully inspect the child's home for lead hazards. Your family should take all of the precautions for preventing lead exposure.

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Passive Smoking

What is passive smoking?

Nonsmoking children who live in homes with smokers are exposed to cigarette smoke. This situation is called "passive smoking."

The smoke comes from two sources: secondhand smoke and sidestream smoke. Secondhand smoke is the smoke exhaled by the smoker. Sidestream smoke is the smoke that rises off the end of a burning cigarette. Most of the smoke in a room is sidestream smoke. Sidestream smoke contains 2 or 3 times more harmful chemicals than secondhand smoke because it does not pass through the cigarette filter. At its worst, a child in a very smoky room for one hour with several smokers inhales as many bad chemicals as he would by actually smoking 10 or more cigarettes.

In general, children of smoking mothers absorb more smoke into their bodies than children of smoking fathers because they spend more time with their mothers. Children who are breast-fed by a smoking mother are at the greatest risk because chemicals from the smoke are in the breast milk as well as the surrounding air.

How does passive smoke harm my child?

Children who live in a house where someone smokes have more respiratory infections. Their symptoms are also more severe and last longer than those of children who live in a smoke-free home.

The impact of passive smoke is worse during the first 5 years of life, when children spend most of their time with their parents. The more smokers there are in a household and the more they smoke, the more severe a child's symptoms are.

Passive smoking is especially hazardous to children who have asthma. Exposure to smoke causes more severe asthma attacks, more emergency room visits, and more admissions to the hospital. These children are also less likely to outgrow their asthma.

The following conditions are worsened by passive smoking:

- pneumonia
- coughs or bronchitis
- croup or laryngitis
- wheezing or bronchiolitis
- asthma attacks
- flu (influenza)
- ear infections
- middle ear fluid and blockage
- colds or upper respiratory infections
- sinus infections
- sore throats
- eye irritation
- crib deaths (SIDS)
- school absenteeism caused by illness.

How can I protect my child from passive smoking?

- **Give up smoking.** You can stop smoking if you get help. Sign up for a stop-smoking class or program. If you need some self-help reading materials, call your local American Lung Association or American Cancer Society office. If you want your child not to smoke, set a good example by not smoking yourself. It is even more important to give up smoking if you are pregnant. The unborn baby of a smoking mother has twice the risk for prematurity and newborn complications. You must also avoid smoking if you are breast-feeding because harmful chemicals from the smoke get into the breast milk. For more information call the National Cancer Institute on their toll-free line: 1-800-4-CANCER.

- **Never smoke inside your home.** Some parents find it very difficult to give up smoking, but all parents can change their smoking habits. Smoke only when you are away from home. If you have to smoke when you are home, smoke only in your garage or on the porch. If you have to smoke inside your house, decide which room in your home will be a smoking room. Keep the door to this room closed and open a window sometimes to let fresh air into the room. Wear an overshirt in this room so your underlying clothing does not collect the smoke. Never allow your child inside this room. Don't smoke in any other parts of the house. Visitors must also smoke only in this one room.
- **Never smoke when you are close to your child.** If you cannot limit your smoking to one room, at least don't smoke when you are holding your child. Never smoke in a car when your child is a passenger. Never smoke when you are feeding or bathing your child. Never smoke in your child's bedroom. These precautions will reduce your child's exposure to smoke and protect him from cigarette burns. Even doing just this much will help your child to some degree.
- **Avoid leaving your child with someone who smokes.** Ask about smoking when you are looking for day care centers or baby sitters. If your child has asthma, this safeguard is crucial.

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Poisoning: Prevention

- Remember to keep drugs and chemicals locked up or out of reach of children. Think about where you keep drain cleaners, furniture polish, drugs, and insecticides. These are the most common dangerous poisons.
- Keep alcoholic beverages also out of a child's reach. Alcoholic beverages have caused serious poisonings. As little as 3 ounces of hard liquor can kill a 2-year-old child. Remember that most mouthwashes contain 15% to 25%.
- Whenever you or your child is prescribed a new drug, remember to keep the safety cap on and make sure that you are giving the right dose.
- Don't leave drugs on countertops, especially when you are called away to the door or telephone.
- Don't leave drugs in a purse because children often search them for candy or gum. When you have guests, keep purses out of reach of children.
- Always read the label before giving any medicine. Be sure it's the right drug and that you are giving the correct dosage. Don't give medicines in the dark.
- Know the names of all your houseplants and remove any (for example, Dieffenbachia) that could cause sickness other than vomiting or diarrhea. Teach your child never to put leaves, stems, seeds, or berries from any plant into her mouth without your permission.
- Don't store any chemicals in soft drink bottles. Don't put gasoline into any type of food or beverage container.
- Keep the telephone number of the Poison Control Center handy.
- Remember that kids often get into poisons simply to satisfy their curiosity. Telling a young child not to put something in their mouth is not enough to prevent poisoning. To prevent poisonings, parents have to consistently supervise where young children are and what they are doing.

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Preparation for Calling a Physician

Before calling your physician, have a pencil and paper ready and the following information (except in emergencies):

- Your child's main symptoms Note: If your child has a chronic disease, be sure to mention it.
- Your child's temperature (if he or she is sick)
- Your child's approximate weight (needed for calculating drug dosages)
- The names and dosages of any medication your child is taking
- Your pharmacy's telephone number
- Your questions written down

Have your child nearby in case something needs to be checked.

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Sleep Position for Young Infants

What is the safest sleep position for my baby?

The American Academy of Pediatrics (AAP) recommends that all healthy infants sleep on their backs the first 6 months of life. Studies have shown sleeping on the back reduces the risk of Sudden Infant Death Syndrome (SIDS). SIDS is the sudden unexplained death of a healthy infant. Thousands of babies die each year from SIDS. Typically, a baby dies from SIDS while sleeping.

The AAP started recommending that babies sleep on their backs in 1992. Eighty percent of parents now follow this advice and there has been a 40% drop in the rate of SIDS.

Why does sleeping on the stomach increase the risk of SIDS?

Laying a baby on his stomach puts pressure on his jaw bone. This causes the airway in the back of the mouth to become narrower. Also, if the baby sleeps on a soft surface, the nose and mouth may sink in so the child breathes from a small pocket of stale air.

If your baby sleeps on his stomach, the risk of SIDS is 3 to 9 times greater. Sleeping on the side is safer than the stomach but still has twice the risk of SIDS as the back position. If you use a child-care center or babysitter, be sure they know how important it is to put your baby on his back to sleep.

Are there other ways I can reduce the risk of SIDS?

You can also reduce the risk of SIDS by:

- Using a firm mattress (avoid soft bedding). Young infants should never be placed on waterbeds, sheepskin, soft pillows, bean-filled pillows, or other soft, spongy surfaces. Also make sure that none of these surfaces are placed in the crib. Even if you place your child to sleep on the back, it is possible that your child will roll over during the night.
- Not letting your baby sleep in your bed during the first 12 months. The mattresses in most adult beds are too soft for babies. Blankets and pillows in your bed also increase the risk. The rate for sudden death for infants is 20 times higher for babies sleeping in an adult bed compared to a crib.
- Breast-feeding your baby, if possible.
- Protecting your infant from exposure to cigarette, cigar, or pipe smoke.

When should a baby sleep on his stomach?

Your baby should only sleep on the stomach if recommended and supervised by your child's health care provider. The American Academy of Pediatrics recommends putting your baby to sleep on his stomach in the following cases:

- Infants with complications of spitting up. These complications include recurrent pneumonia from aspiration, interruption of breathing (apnea), or acid damage to the lower esophagus (esophagitis), and choking. While spitting up is common, these complications are rare. Years ago, doctors recommended that babies sleep on their stomachs to decrease the chance of choking. But choking is extremely rare and it was never proven that the stomach position prevented choking better than any other position.
- A birth defect of the upper airway that interferes with breathing. Examples are a large tongue, a very small mouth, or a large and floppy larynx.

Any baby who needs to sleep on his stomach must also be placed on a firm sleeping surface.

Are there any disadvantages of sleeping on the back?

There are 2 minor disadvantages. When lying on the back, young infants are more likely to have a startle reflex that awakens them. Swaddling your baby in a snug blanket can prevent this. To swaddle your baby use the 3-step "burrito-wrap" technique. Start with your baby lying on the blanket and the arms at the sides. Then pull the left side of the blanket over the body and tuck. Next, pull the bottom of the blanket up. Then pull the right side over and tuck.

The other disadvantage is that some babies get a flattening of the back of the head. You can prevent this by changing the baby's head position slightly during sleep.

Should I lay my baby on his stomach during playtime?

It is good for your baby to spend some time on his stomach when he is awake during the day. The back position is only recommended for bedtime and naps. Letting your baby play on his stomach helps strengthen his shoulder muscles. Changing positions also keeps your baby's head from becoming flattened from laying in the same position all of the time.

For more information:

Sudden Infant Death Syndrome Alliance
1314 Bedford Ave. Ste. 210
Baltimore, MD 21208
800-221-SIDS(7437)
E-mail: sidshq@charm.net <http://www.sidsalliance.org>

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Teething

What is teething?

Teething is the normal process of new teeth working their way through the gums. Your baby's first tooth may appear any time between the time he is 3 months to 1 year old. Most children have completely painless teething. The only symptoms are increased saliva, drooling, and a desire to chew on things. Teething occasionally causes some mild gum pain, but it doesn't interfere with sleep. The degree of discomfort varies from child to child. Your child won't be miserable. When the back teeth (molars) come through (age 6 to 12 years), the overlying gum may become bruised and swollen. This is harmless and temporary.

Because teeth erupt almost continuously from 6 months to 2 years of age, many unrelated illnesses are blamed on teething. Fevers are also common during this time because after the age of 6 months, infants lose the natural protection provided by their mothers' antibodies.

Which baby teeth come in first?

Your baby's teeth will usually erupt in the following order:

1. 2 lower incisors
2. 4 upper incisors
3. 2 lower incisors and all 4 first molars
4. 4 canines
5. 4 second molars.

How can I take care of my child?

- **Gum massage** Find the irritated or swollen gum. Massage it with your finger for 2 minutes. Do this as often as necessary. You may also massage the gum with a piece of ice.
- **Teething rings** Your baby's way of massaging his gums is to chew on a smooth, hard object. Teethers or teething rings are helpful. Most children like them cold. Offer a teething ring that has been chilled in the refrigerator, but not frozen in the freezer. A piece of chilled banana may help. Avoid ice or Popsicles that could cause frostbite of the gums. Also avoid hard foods that he might choke on (like raw carrots). Teething biscuits are fine.
- **Diet** Avoid salty or acid foods. Your baby probably will enjoy sucking on a nipple, but if he complains, use a cup for fluids temporarily.
- **Pain medicine** If the pain increases, give acetaminophen (Tylenol) for 1 day. Special teething gels are unnecessary and probably not beneficial. Many teething gels contain benzocaine, which can cause an allergic reaction. In addition it's unlikely they can numb the gums because they are washed out of the mouth and swallowed within a few minutes. If you still want to use a gel, do not apply it more than 4 times a day.
- **Common myths about teething**
 - Teething does not cause fever, sleep problems, diarrhea, diaper rash, or lowered resistance to any infection. It probably doesn't cause crying. If your baby develops fever while teething, the fever is caused by something else.
 - Don't tie a teething ring around your baby's neck. It could catch on something and strangle your child. Attach it to your baby's clothing with a "catch-it-clip."

When should I call my child's health care provider?

Call during office hours if:

- Your child develops a fever over 101°F, or 38.3°C.
- Your child develops crying that doesn't have a cause.

- You have other questions or concerns.

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Tooth Decay Prevention

What is tooth decay?

Tooth decay is when the enamel of a tooth is destroyed. It may cause toothaches, lost teeth, malocclusion (poor bite), and costly visits to the dentist. Fortunately, modern dentistry can prevent 80% to 90% of tooth decay.

How can I help my child prevent tooth decay?

Here are some tips for raising cavity-free kids.

Fluoride

Fluoride builds strong, decay-resistant enamel and reduces cavities by 70%. Children 6 months to 16 years old need fluoride. By 16 years, the enamel formation on the 3rd molars is completed. Drinking fluoridated water (containing 0.7 to 1.2 parts fluoride per million) or taking a prescription fluoride supplement is the best protection against tooth decay.

To get enough fluoride from drinking water, a child must drink at least 1 pint of fluoridated water each day. By school age a child should drink 1 quart of fluoridated water per day. Fluoride is safe. Over half of all Americans drink fluoridated water. Fluoride has been added to water supplies for over 50 years.

If fluoride isn't added to your city's water supply or you are breast-feeding, ask your health care provider for a prescription for fluoride drops or tablets during your next routine visit. The dosage of fluoride is:

- 0.25 mg per day for children up to 3 years old
- 0.5 mg per day for children 3 to 6 years old
- 1.0 mg for children over age 6.

Mixing fluoride with milk reduces absorption of the fluoride to 70%. For this reason you should give fluoride to your child when he or she has an empty stomach.

Bottled water usually doesn't contain enough fluoride. Call the bottled water producer for information. If your child drinks bottled water containing 0.6 or less parts fluoride per million, ask your provider for a fluoride supplement.

One concern about fluoride is white spots or mottling on the teeth (called fluorosis). This can occur when a child has 2 mg or more fluoride per day. Children may get too much fluoride if they receive fluoride supplements when fluoride is already present in the city water supply. Occasionally they can get extra fluoride by eating their toothpaste. A ribbon of toothpaste contains about 1 mg of fluoride. Therefore, people of all ages should use only a drop of toothpaste the size of a pea. This precaution, and encouraging your child not to swallow most of the toothpaste, will prevent fluorosis.

Toothbrushing and flossing

The purpose of toothbrushing is to remove plaque from the teeth. Plaque is the invisible scum that forms on the surface of teeth. Within this plaque, mouth bacteria change sugars to acids, which in turn etches the tooth enamel.

Toothbrushing should begin before a child is 1 year old. Help your child brush at least until after the age of 6 years. Most children don't have the coordination or strength to brush their own teeth adequately before then. If your child is negative about tooth-brushing, have him brush your teeth first before you brush his.

Try to brush after each meal, but especially after the last meal or snack of the day. To prevent mouth bacteria from changing food caught in the teeth into acid, brush the teeth within the first 5 to 10 minutes after meals. If your child is in a setting where he can't brush his teeth, teach him to rinse his mouth with water after meals instead.

Brush the molars (back teeth) carefully. Decay usually starts in the pits and crevices in these teeth. Dental floss is very useful for cleaning between the teeth where a brush can't reach. This should begin when your child's molars start to touch. In the early years, most of the teeth have spaces between them.

A fluoride toothpaste is beneficial at all ages starting at 1 year. Adults and children tend to use too much toothpaste. An amount the size of a small pea is all that you need.

Diet

A healthy diet from a dental standpoint is one that keeps the sugar concentration in the mouth at a low level. The worst foods for your teeth contain sugar and also stick to the teeth.

If your child is a baby, prevent baby-bottle cavities by not letting your infant sleep with a bottle of milk or juice. After the

first teeth appear give your baby a bottle of water if your child must have a bottle at night. It is better to put your child to bed after he or she is finished with the bottle.

Avoid letting your child carry around a bottle or sippy-cups during waking hours. Young children who use milk, juice or other sweetened liquid for comforting, are prone to severe dental decay.

Discourage your child from eating foods such as hard candy or sticky sweets (for example, caramels or raisins). When a child eats these foods his or her teeth are in contact with sugar for a long time. Since no one can keep children away from candy completely, try to teach your child to brush after eating it. Avoid frequent snacks and offer foods that contain sugar with meals only.

Dental sealants

The latest breakthrough in dental research is dental sealing of the pits and fissures of the biting surfaces of the molars. Fluoride does little to prevent decay on these surfaces. A special plastic seal can be applied to the top surfaces of the permanent molars at about age 6. The seal may protect against decay for 10 to 20 years without needing replacement. Ask your child's dentist about the latest recommendations.

Dentist visits

The American Dental Association recommends that dental checkups begin at the age of 3 years (sooner for dental symptoms or teeth that look abnormal).

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Weaning: How to Prevent Problems

Weaning is the replacement of bottle or breast-feedings with drinking from a cup and eating solid foods. Weaning occurs easily and smoothly unless the breast or bottle has become overly important to the child.

If you have a choice, it is best to wait until your baby is at least 6 months old before you wean from the breast. Your baby's digestive system is better able to tolerate a change in food after this age.

If you stop breast-feeding before 9 months of age, switch to bottle-feeding first. You should still introduce your child to a cup at about 6 months of age, but wait to fully wean your baby to a cup until he is at least 9 months old. If you stop breast-feeding after 9 months, you may be able to wean your baby directly to a cup.

Preventing Problems

Children normally show less interest in breast and bottle feedings between 6 and 12 months of age if they are also taking cup and spoon feedings. Many children start weaning themselves by 12 months. After the age of 12 to 18 months, the parent often has to start the weaning, but the child will be receptive. After 18 months of age, the child usually resists weaning because she has become overly attached to the breast or bottle.

If your child shows a lack of interest in the breast or bottle at any time after 6 months of age, start to phase out these nipple feedings. You can tell that your baby is ready to begin weaning when she throws the bottle down, takes only a few ounces of milk and then stops, chews on the nipple rather than sucking it, refuses the breast, or nurses for only a few minutes and then wants to play.

The following steps encourage early natural weaning at 9 to 12 months:

1. **Keep bottle feedings to 4 times a day or less after your child reaches 6 months of age.** Some breast-fed babies may need 5 feedings a day until 9 months of age.
2. **Give older infants their daytime feedings at mealtime with solids.** Once your child is having just 4 formula or breast-feedings a day, be sure 3 of them are given at mealtime with solids rather than as part of the ritual before naps. Your child can have the fourth feeding before he goes to bed at night.
3. **After your baby is 4 weeks old and breast-feeding is well established, offer him a bottle of expressed breast milk or water once a day.** This experience will help your baby get used to a bottle so you can occasionally leave him with a baby sitter. This step is especially important if you will be returning to work or school. The longer you wait to introduce the bottle after your baby is 4 weeks old, the more strongly your infant will initially reject it. If you wait until 2 months of age, it may take several weeks for your baby to accept the bottle. Once your baby accepts bottle feedings, continue to offer them 3 times a week so your baby will continue to accept them.
4. **Hold your child for discomfort or stress instead of nursing her.** You can comfort your child and foster a strong sense of security and trust without nursing every time she is upset and not hungry. If you always nurse your child in such situations, your child may learn to eat whenever she is upset. She may also be unable to separate being held from nursing, and you may become an "indispensable mother."
5. **Don't let the bottle or breast substitute for a pacifier.** Learn to recognize when your baby just needs to suck. At these times, instead of offering your child food, encourage him to suck on a pacifier or thumb. Feeding your baby every time he needs to suck can lead to obesity.
6. **Don't let the bottle or breast become a security object at bedtime.** Your child should be able to go to sleep at night without having a breast or bottle in her mouth. She needs to learn how to put herself to sleep. If she doesn't, she will develop sleep problems that require the parents' presence during the night.
7. **Don't let a bottle become a daytime toy.** Don't let your child carry a bottle around as a companion during the day. This habit may keep him from engaging in more stimulating activities.
8. **Don't let your child hold the bottle or take it to bed.** Your child should think of the bottle as something that belongs to you; hence, she won't protest giving it up because it never belonged to her in the first place.
9. **Offer your child formula or breast milk in a cup by 6 months of age.** For the first few months your child will probably accept the cup only after he has drunk some from the bottle or breast. However, by 9 months of age your child should be offered some formula or breast milk from a cup before breast or bottle feedings. Wean a baby younger than 6 months to a bottle and not to a cup. Babies cannot drink well enough from a cup at this age to get enough nourishment.
10. **Help your baby become interested in foods other than formula or breast milk.** Introduce solids with a spoon by 4 months of age to formula-fed babies and by 6 months to breast-fed infants. Finger foods can be introduced between 9 and 10 months of age or whenever your child develops a pincer grasp. As soon as your child can use finger foods, include her at the table with the family during mealtime. She will probably become interested in the foods that she sees you eating and will ask for them. As a result, she will become more interested in having other foods as well as formula or breast milk.

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Crying Baby

TO say that crying is a key challenge to early parenting is an understatement, especially when it is 3 AM, you haven't gotten any sleep, and your baby is still crying!

With crying, there are no firm rules--both as to what causes it and what you can do to get your baby to stop. As you get to know your baby, however, you will get better at understanding what causes your baby to cry and what will get him to stop. Soon you will be able to distinguish hungry cries from boredom cries, hurt cries from angry cries. And then of course there are times when your baby will cry seemingly for no reason at all.

Why is my baby crying?

When your baby cries, first check the obvious causes such as hunger, discomfort, over-stimulation, and boredom.

HUNGER: If it is possible that your baby is hungry, try feeding first.

- Newborns need short (20 minutes), frequent (every 2 hours) feedings. The feedings provide comfort and closeness as well as keeping your baby's tummy full.

DISCOMFORT: Your baby may be bothered by something.

- **Illness:** If your child is sick, there are usually other signs, such as fever, vomiting, diarrhea, decreased appetite, or a stuffy nose. Some illnesses cause discomfort without other obvious symptoms. Sometimes a baby can get scratched in the eye or get something stuck in the throat. Make sure your baby's eyes look okay and that he can swallow. A doctor should examine your baby if you are worried that something is wrong.
- **Clothes:** Check clothing to see if it is too tight. Sometimes threads from the baby's clothes get wound around his fingers or toes and cut off circulation.
- **Temperature:** Your baby may be too hot or too cold.
- **Diapers:** Unless they have been trained to cry about dirty diapers or unless they have a bad diaper rash, babies generally don't mind wet or soiled diapers. For babies in cloth diapers, check to see if a diaper pin has become loose.

OVER-STIMULATION: Over-stimulation from playing and handling can often cause overtiredness, which will result in crying.

- Some babies like the secure feeling of being tightly swaddled in a blanket--as in the hospital.
- If you know your baby is not hungry, sucking on a pacifier or a finger (his or yours) can be just the thing to relax your baby and put him to sleep.
- If you think your baby is not ill, your baby may simply need to cry himself to sleep.

BOREDOM: Crying can also mean that your baby wants a change in scenery or activity.

- Babies can often be distracted by lively music, by your dancing with them in your arms, or by a noisy rattle or toy.
- Car or stroller rides often work wonders for a crying baby and for parents as well. A baby swing may also work.
- Since babies love to see the sights and to be held close in someone's arms, walking your baby from room to room is generally a good cure for crying.
- Try using a front pack to free up your hands for little chores while you are walking. (While this is a good cure for crying, it can injure your back--don't overdo it!)

RELAX! As you will notice, your baby can tell when you are tense and will often also become tense and cry. Quiet music, gentle rocking, soft singing, or talking often help, as does a warm bath or a gentle massage.

What is colic?

Colic is a term used to describe a baby who cries daily for several hours at a time, usually at the same time each day. There is no known cause and no sure cure for colic other than time. Almost all babies outgrow colic by 3 months of age.

If your baby won't stop crying, you may want to try the following ideas to help calm your baby.

- Place the baby on a soft blanket on top of or beside a running clothes dryer. The warmth and vibration may calm him. (Be sure to never leave the baby alone when doing this.)
- A steady sound (white noise) such as a fan, a dishwasher, or a vacuum cleaner may calm your baby.

What if I get angry and frustrated?

NEVER hurt your baby. Ask a spouse, friend, neighbor, or relative to relieve you. If your baby has been crying and you are getting so angry that you are afraid you might hurt your baby, call your health care provider or an emergency room and talk about the problem.

When should I call my child's health care provider?

Call if:

- Your baby seems to be ill or in pain.
- Your baby has cried constantly for 2 hours or more.
- You are feeling angry, resentful, or exhausted and you are afraid you might hurt your baby.

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Clothing Needs for New Baby

Clothes for your new baby do not have to be elaborate or expensive. A number of factors determine what you should purchase before your baby's arrival:

1. What climate you live in and what season of the year is it?
2. Do you have a washer and dryer so you can wash clothes more often?
3. Do you have friends or relatives who might give or loan you clothes?
4. Will you receive gifts and presents before or after the baby is born?

Clothing Items You Will Need

- 2 Body suits (Onesies) or T-shirts (size Newborn). T-shirts are good at first until the umbilical cord falls off.
- 4 to 6 Body suits (Onesies) size Small
- 4 to 6 Sleepers or gowns (a couple newborn size, the rest size 6 months)
- 50 to 60 Newborn size disposable diapers (about 1 weeks worth). Babies grow so fast that you will start using the small (size 1) diaper in just a few weeks.
- 4 to 6 Diaper covers (if you are using cloth diapers or diaper service)
- 36 to 48 Cloth diapers (if you are using cloth diapers)
- 4 to 6 Stretch suits/Play suits (some newborn size, but most size 6 months)
- 3 to 4 Blanket sleepers (less if your baby is born during the summer)
- 4 to 6 Receiving blankets
- 2 Blankets
- 1 to 2 Sweaters/Sweatshirts/Jackets
- 4 to 6 Socks/Booties
- 6 Burp cloths (cloth diapers work well for this)

If it is **winter** you will need:

- 1 Snowsuit (make sure it is large enough to last the whole winter and fit over clothes)
- 1 Hat
- 2 Blanket sleepers

If it is **summer** you will need:

- 1 Swimsuit
- 1 Sun hat
- Swim diapers

Hints about Clothes and Dressing:

- Buy clothes based on your baby's weight, not according to age. Your baby will grow very fast the first few months and quickly outgrow small clothes. Most clothes that you use at first should be size 6 months or "up to 18 lbs."
- Think about spitting up, leaky diapers, and other common mishaps when deciding how many Onesies to buy.
- Look for clothing that is easy to put on and take off, such as onesies with snaps or large openings at the neck, sleepers with zippers that go from neck to foot, and pants with snaps at the crotch. This makes it easy to change diapers.
- Make sure that seams in clothes are not scratchy or bulky and that there are no loose threads to snag your baby's toes or fingers.
- Read the washing instructions on clothing tags. Some baby clothing has a fire-retardant coating that can come off if not washed properly.
- Dress your baby for comfort and the weather. Use layers of clothing rather than a lot of heavy clothes so you can add or take off layers as needed.
- Use loose fitting socks or booties so your baby can wiggle his or her toes. If it is warm, your baby can be barefoot. Babies do not need shoes or no-skid socks until they start walking.
- Pull clothes over the head quickly. Babies panic when their breathing is blocked. Remember this when you pull clothes over your baby's head. Gather the clothes at the back of the head, put the clothes on the back of the head, and then pull them quickly over your baby's face. When taking off shirts, take the arms out first and then pull it over your baby's head.

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Burn Safety: Hot Water Temperature

The leading cause of deaths and injuries to children at home is accidents. Scalding from hot water is one of the most dangerous of these accidents. The following chart shows just how dangerous hot water can be.

Temperature of Water	Time to Cause a Bad Burn
150°F (66°C)	2 seconds
140°F (60°C)	6 seconds
125°F (52°C)	2 minutes
120°F (49°C)	10 minutes

Small children can get to sinks or bathtubs quickly. They can get badly burned before they can get out of the water. Infants are unable to move away from hot water if it is accidentally left on too hot or if the cold water is unintentionally turned off. Here are some tips to keep in mind:

- When using tap water, always turn on the cold water first, then add hot. When finished, turn the hot water off first.
- Do not use hot steam vaporizers. They can cause steam burns. Use a cool mist vaporizer.
- Never leave a child alone in the bathroom for any reason. They are at risk for getting burned by hot water or drowning.

If your hot water heater is set at 150°F (66°C) and your child comes in contact with the hot water for just 2 seconds, your child will get burned badly enough to need medical treatment.

Here are some common questions and answers about hot water heater settings.

1. Q: If I turn the hot water heater setting down, won't I have trouble getting the dishes in the dishwasher and the clothes in the washing machine clean? A: No. The major soap manufacturers design their soap to work best in water between 120°F and 125°F (49°C to 52°C).
 2. Q: Will my baby get more colds if the hot water isn't hot enough? A: No. Hot water has nothing to do with getting colds.
 3. Q: Will we run out of hot water any sooner if we turn the temperature down? A: Yes, you will. But this may be a small price to pay to protect your child.
 4. Q: Will I save any money on utility bills by turning down the temperature setting? A: Yes. On the average, for every 10°F (6°C) that you turn the temperature down, you will save 4% on the water-heating portion of your utility bill.
 5. Q: I don't know where the thermostat of my hot water heater is, and I don't know how to tell at what temperature it is set. How can I tell? A: First measure the hot water temperature. The best way to do this is to measure it in the morning, before anyone in your home has used any hot water. Turn on the hot water at the kitchen sink and let it run for 2 minutes. Then, using either an outdoor thermometer or a candy thermometer, hold the thermometer in the stream of the water until the reading stops going up. If your water-heater setting is at a safe level (between 120°F and 125°F, or 49°C to 52°C), you don't have to do anything. There is no advantage to setting the thermostat below 120°F (49°C). If your hot water setting is too high, here are some tips on how to find the thermostat and turn it down.
- Gas hot water heaters usually have a thermostat outside the tank at the bottom. Electric water heaters usually have either two panels screwed to the top and bottom of the tank or one panel along the side of the tank. Thermostats are located under these panels.
 - The thermostat should be set on the "low" setting or within the "energy efficient range." If the temperature at the kitchen sink is too hot at this setting, adjust the thermostat to a lower setting. After changing the thermostat setting, you can test the hot water temperature again about 24 hours later. If you test it in less than 24 hours, you may not get an accurate reading. Continue to test the water temperature and adjust the thermostat setting until the water is no hotter than 125°F (52°C). If you get it below 120°F (49°C), then turn it back up a small amount.

Please, take some time to think about the risk to your child from hot water in your home. Think about whether the convenience of having lots of very hot water is really worth the added risk that you might be taking with your child's health. Your child is at less risk for hot water burns by age 4.

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Single Parenting

A single parent is a parent who raises a child without another parent in the same household. Single parenthood may be a result of loss, such as divorce or the death of a spouse, or by choice, such as adoption or artificial insemination.

Being a single parent is not easy. The following suggestions may help your family:

1. **Find stable places for child care and home.** Check out child care options carefully before you choose one. Try to avoid changing caregivers and making too many other major changes too close together.
2. **Create a daily routine and try to stick to it 7 days a week.** It helps to wake up and go to bed at about the same time every day and to eat meals together on a regular schedule. It also helps to pick your child up from child care at an expected time.
3. **Plan regular visits with the other parent if possible.** Staying in contact with the other parent, both by phone and by visiting in person, is usually in your child's best interest. Your child will do better if he knows that both parents love him.
4. **Discipline consistently.** Set limits for acceptable and unacceptable behavior. Notice good behavior and praise your child. Use methods such as time outs or job grounding when children misbehave. Do not bribe your child or try to buy the child's affection.
5. **Don't put your child in the middle.** If you are raising your child in 2 different homes, don't ask your child to carry messages between parents. Don't ask the child to give you information about the other parent, or to choose sides in adult battles.
6. **Answer questions about the other parent briefly.** Answer only the questions that are asked. If you have negative feelings about the other parent, talk them over with another adult, not your child.
7. **Spend time with your child each day.** Try to spend some quality time with each child daily. Spending hours with your children watching TV is not quality time. Take the time to sit down with each of them and talk about the day or their problems. This can be calming and reassuring for both parent and child.
8. **Make and keep family traditions.**
9. **Set up a good support system.** This is important for both the parent and child. It may include extended family, a consistent play group, neighbors, friends, or parenting groups. Organizations such as Big Brothers or Big Sisters can help provide another adult in your child's life. Raising children is difficult, and you need a good backup when you are frustrated or exhausted.
10. **Volunteer to participate in activities at your child's school.** This helps you to meet other parents and have something to talk about with your child. Also talk with your child's teachers or school counselors about your situation. They can help watch for problems and support your child.
11. **Develop a social life separate from your child.** This could include an exercise group, book club, or church group. These are also good sources for support.
12. **Consider your situation when dating.** Dating can present different challenges, depending on the age of your child. At first, it may be easier on your child for you to meet your date away from home. Young children tend to attach easily to adults who spend time with them. Older children can feel jealous or threatened by someone with whom they must share their parent's time and space.
13. **Seek professional help if serious problems develop.** Feelings of grief or loss are common after divorce or death of one parent. Individual or family counseling can provide support for both the children and adults.
14. **Explain your money problems.** If the status of the family changes from a two-parent home to a single-parent home, finances are often affected. You may have to explain to your children that buying "extras" and some activities have to be limited. However, treat your child like a child. Your child should not be concerned with adult problems. Your child is not your best support for personal problems. It might be a good idea to talk to a financial planner or accountant for help.

Where can I get help?

Organizations and books are good resources.

Organizations

Parents Without Partners International, Inc.

1650 South Dixie Hwy., Suite 510
Boca Raton, FL 33432 (561) 391-8833

SingleMOTHER P.O. Box 68 Midland, NC 28107 <http://www.singlemothers.org> (704) 888-5437

Single and Custodial Father's Network, Inc. <http://scfn.org>

Books

In Praise of Single Parents: Mothers and Fathers Embracing the Challenge; by Shoshana Alexander; Houghton Mifflin, 1994

Mom's House, Dad's House: A Complete Guide for Parents Who Are Separated, Divorced, or Remarried; by Isolina Ricci; Simon and Schuster, 1997

The Single Parent Family: Living Happily in a Changing World; by Marge Kennedy and Janet Spencer King; Crown Publishers, 1994

Single Parents by Choice: A Growing Trend in Family Life; by Naomi Miller, Insight Books, 1992

The Ultimate Survival Guide for the Single Father (e-book); by Thomas Herner; Harbinger Press, 2002

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Smoke, Heat, and Carbon Monoxide Detectors

The leading cause of deaths and injuries to children at home is accidents. Fires are one of the most dangerous of such accidents. Most fatal home fires occur at night, while people sleep. If you are asleep or become disoriented from toxic gases produced by a fire, you may not even realize that there is a fire. A smoke or heat detector can sound an alarm and alert you to the danger in time to escape.

Carbon monoxide is a colorless, odorless gas that is made by many household appliances (furnaces, dryers, ranges, ovens, and heaters). Usually, carbon monoxide and other gases are vented to the outside. But, if something goes wrong and carbon monoxide leaks into your home, it could be deadly. The alarm of a carbon monoxide detector will go off in time to get out before a normal adult starts feeling sick.

The following are some common questions and answers about smoke, heat, and carbon monoxide detectors.

1. **Q. What are the types of alarms or detectors?** A: There are 3 types of detectors:
 1. Heat detectors, which sound an alarm to warn of an abnormally high temperature near the detector.
 2. Smoke detectors, which sound an alarm at the first trace of smoke.
 3. Carbon monoxide detectors, which sound an alarm if the carbon monoxide level in the home is too high.
2. **Q: What is the power source for these detectors?** A: Some detectors operate on batteries. Others are either plugged into a wall outlet or wired directly into the house.
3. **Q: What are the pros and cons of the battery powered alarms?** A: An advantage of battery alarms is that they are not affected by a fire that cuts off the electricity to the house. Also, they can be put anywhere, even where there are no electrical outlets or wires. The disadvantages are that the batteries need to be changed about once a year and the beep signaling a low battery can be annoying.
4. **Q: What is the best type of battery to use?** A: Lithium batteries can last up to 5 or 6 years, reducing the chance that the detector will have a dead battery when you need it most. However, lithium batteries are a lot more expensive.
5. **Q: What are the pros and cons of the detectors powered by household current?** A: You do not have to change batteries and there is no annoying beep when the battery is low. However, fires that affect the household current will make the alarm not work. Also, detectors must be placed where wiring or outlets are available.
6. **Q: Do I have to do anything to maintain my detectors?** A: Yes. You should test them once a month by holding a candle 6 inches away and blowing smoke toward the detector. The alarm should sound in 20 seconds. Some alarms have test buttons, but to be sure the detector works, you must use the smoke-testing method. To test your carbon monoxide detector, just use the test button. For all types of detectors, replace batteries at least once a year and when they are low. Use the correct kind of battery. You must clean the unit at least once a year by vacuuming the detector. Never paint the detector.
7. **Q: With so many brands of detectors on the market, how do I choose one?** A: Be sure to buy a detector that has the label of a testing laboratory, for example, Underwriter's Laboratory (UL). Follow the installation and maintenance recommendations of the manufacturer. Buy the type that best suits your household needs and budget.
8. **Q: How many smoke, heat, or carbon monoxide detectors should I buy for my house?** A: Install a smoke or heat detector outside each bedroom area and one on each floor of the house. For extra protection, you can also put them in bedrooms, the dining room, furnace room, utility room, attic, garage, and hallways. Carbon monoxide detectors should be just outside of or in each bedroom.
9. **Q: Where should the detectors be placed?** A: All types of detectors should be mounted on the ceiling. Smoke rises so to detect the first traces of smoke a detector could also be mounted high on a wall (4 to 12 inches from the ceiling).
10. **Q: How much will it cost to install smoke, heat, or carbon monoxide detectors?** A: You can buy detectors for about \$7 to \$60 each. Packaged fire detection systems may cost \$300 and up.

The extra time provided by a detector alarm may allow your family to escape unharmed from a fire or carbon monoxide poisoning. The extra time and money spent on buying, installing, and maintaining your detectors could save your lives.

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Normal Development: 6 Months Old

Here's what you might see your baby doing between 6 and 9 months of age.

Daily Activities

- Adores playing with balls, rattles, and squeaky toys.
- Usually sleeps through the night.
- Usually begins teething.
- May prefer some foods to others.
- May enjoy playing with food.
- Loves games like peek-a-boo and pat-a-cake.

Language Development

- Babbles and squeals using single syllables.
- Loves to jabber.
- May recognize own name.

Emotional Development

- May show sharp mood changes.
- Displays especially strong attachment to mother.
- Develops deeper attachment to father, siblings, and other familiar people.
- Distinguishes children from adults.
- Smiles at other children.
- May show fear of strangers.
- Continues to be intrigued with mirror image.

Motor Skills

- Rests on elbows.
- Begins to sit alone.
- Sits in high chair.
- Continues to use motions leading to crawling.
- Makes jumping motions when held in standing position.
- Reaches with one hand.
- Bats and grasps dangling objects.
- Holds objects between thumb and forefinger.
- Passes objects from one hand to another.

Each child is unique. It is therefore difficult to describe exactly what should be expected at each stage of a child's development. While certain attitudes, behaviors, and physical milestones tend to occur at certain ages, a wide spectrum of growth and behavior for each age is normal. These guidelines are offered as a way of showing a general progression through the developmental stages rather than as fixed requirements for normal development at specific ages. It is perfectly natural for a child to attain some milestones earlier and other milestones later than the general trend.

If you have any concerns related to your child's own pattern of development, check with your health care provider.

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Car Safety Seats for Infants and Children

The #1 killer andcrippler of children in the United States is motor vehicle crashes. More than 600 children under the age of 5 years are killed each year, and about 270,000 are injured. Proper use of car safety seats can reduce traffic fatalities by at least 80%. All 50 states have passed laws that require children to ride in approved child passenger safety seats.

A parent cannot protect a child by holding him or her tightly. In a 30-mile-per-hour crash, the child will either be crushed between the parent's body and the dashboard or ripped from the parent's arms and possibly thrown from the car. Car safety seats also help to control a child's misbehavior, prevent motion sickness, and reduce the number of accidents caused by a child distracting the driver.

What are the types of car safety seats?

Before you buy a car safety seat, look at several different models. Make sure that the car seat will fit in your car and that your seat belts will work with the seat. There are several types of car safety seats:

- **Infant-only seats:** These are rear-facing only seats. They can be used from birth until a child weighs approximately 20 pounds (depending on the model). They are small and portable. Some of these seats come with a detachable base. You attach the base to the seat of the car. This allows you to easily snap the car seat in and out of the car without reinstalling the car seat each time. If the base does not attach tightly to your car, it is better to attach the seat each time and not use the base.
- **Convertible safety seats:** These seats can be used in both rear- and forward-facing positions. The seat needs to stay in the rear-facing position until your child is over 1 year old and has reached the highest weight allowed for the rear-facing position (usually about 30 pounds, but may be more or less depending on the car seat). They can then be used in the forward-facing position until the child has reached 40 pounds.
- **Combination seats:** These seats are forward-facing seats that can be used after your child has reached 20 pounds and is at least 1 year old. Your child must wear the 5-point harness until he or she has reached 40 pounds. When you child is over 40 pounds, you can use this seat as a booster seat by correctly positioning the car's lap/shoulder belt across your child. It can be used as a booster seat until your child is about 80 pounds (depending on the model).
- **Booster seats:** These are forward-facing seats that lift the child higher so your car's lap/shoulder belt will fit correctly over the child. A booster seat is for children over 40 pounds. It should be used until the child is 56 inches tall, a height usually reached between 9 and 12 years of age.
- **Travel vests:** Travel vests are used if you only have lap belts in your car. They vary in weight ranges depending on the model, but are typically used for children at least 2 years old and up to 100 pounds. The lap belt fits through a backrest or loops and the shoulder straps come over your child and buckle.
- **Built-in seats (integrated seats):** Some cars and vans come with built-in child safety seats. These may be used by children who are over 1 year of age and weigh at least 20 pounds. Weight and height requirements vary depending on the car manufacturer. Check with the maker of the car to find out the specific height and weight requirements.

What is LATCH?

Starting in 2002, most new vehicles and car safety seats will have a new system called LATCH (Lower Anchors and Tethers for Children). This system may be an easier way to attach safety seats. It allows you to attach the car seat without using a seat belt. However, you will need to continue attaching the car safety seat with a seat belt unless you have both a new car seat and a new car with the LATCH system.

What are tethers?

Tether straps are found on most new forward-facing car seats. A tether strap hooks the top of a car safety seat to a permanent anchor in the car to provide extra protection. Tethers reduce the amount of forward movement of the car seat in a crash. Check your car to see if it has an anchor. Cars made since September 2000 are required to have tether anchors. Cars made since 1989 can be retro-fitted with tether straps. Most anchors are on the rear window ledge, back of the seat, floor, or ceiling of the car. There are tether kits available for older car seats. Check with your car seat and car manufacturer.

Where should the car seat be placed?

Whenever possible and at any age, put the safety seat in the back seat of the car, which is much safer than the front seat.

Air bags are standard equipment in most new cars. They have saved many lives. However, they are very hazardous to infants in **REAR**-facing child safety seats and have caused death from brain injury. If your car has air bags, take the following precautions:

- Infants riding in **REAR**-facing child safety seats should **NEVER** be placed in the front seat of a car or truck with a passenger-side air bag. They must be in the car's rear seat or not ride in that vehicle.
- Children in **FORWARD**-facing child safety seats should also ride in a car's rear seat until 12 years of age.
- If the vehicle does not have a rear seat, children riding in the front seat should be positioned as far back as possible from the air bag. Move the seat all the way back so that the child is as far as possible from the dashboard. Some cars come with air bag ON/OFF switches. Turn the air bag off only if your car has no back seat.

When can my child use a regular seat belt?

Keep your child in a booster seat as long as possible. Your child could be ready for a regular seat belt anywhere between 9 and 12 years old depending on height and weight. Your child should be about 4' 9" tall and at least 60 to 80 pounds to properly fit an adult seat belt. When your child is ready for a regular seat belt, use a lap belt low across the thighs. If your child is using a shoulder belt, it should cross your child's chest, not the neck or throat. Never put the shoulder belt under both arms or behind the back.

What are the safety standards?

Since January 1981, all manufacturers of child safety seats have been required to meet stringent federal government safety standards, including crash-testing. The American Academy of Pediatrics (AAP) publishes a list of infant/child safety seats that have met the Federal Motor Vehicle Standards. The list is updated yearly. To get this list, write to the AAP or visit their Web site:

American Academy of Pediatrics (AAP) Division of Public Education PO Box 927 Elk Grove Village, Illinois 60007
<http://www.aap.org/family/carseatguide.htm>

Each state has its own seat belt laws and safety standards. Although all states require that children are buckled in, not all states require that children travel in the safest way possible. Using a car safety seat correctly is very important. Follow the safety seat instructions and make sure you are keeping your child as safe as possible.

Tips for Using a Car Seat Properly

If used consistently and properly, your child's car seat can be a lifesaver. Your attitude toward safety belts and car seats is especially important. If you treat buckling up as a necessary, automatic routine, your child will follow your lead and also accept car seats and seat belts. To keep your child safe and happy, follow these guidelines:

- Always use the safety seat. Use the safety seat on the first ride home from the hospital, and continue using it for every ride.
- Everyone buckles up. Allow NO exceptions for older kids and adults. If adults ride unprotected, the child quickly decides that safety is just kid stuff.
- Give frequent praise for appropriate behavior in the car.
- Remember that a bored child can become disruptive. Keep a supply of favorite soft toys on hand. Use food as a last resort, because they contribute to the unhealthy habit of snacking and overeating.
- NEVER let a fussy child out of the car seat or safety belt while the car is in motion. If your child needs a break, STOP the car. Responding to complaints by allowing your child to ride unprotected is a disastrous decision that will make it harder to keep him or her in the seat on the next ride.
- Parents should never take off their seat belt to reach into the back seat to attend to a child while the car is in motion. Too many parents have been seriously injured when their car was struck during those few seconds.
- Some infants begin crying at 4 or 5 months (possibly from separation anxiety) when placed in their rear-facing car seats. Try distracting them with music and toys. Also give them practice time in the car seat at home. Use it for pleasant activities such as playing and eating.
- If a child tries to get out of the seat, stop the car and firmly but calmly explain that you won't start the car until he or she is again buckled in the car seat.
- Booster seats must be used with a lap/shoulder belt.
- When your child travels in another person's car (such as a baby sitter's or grandparent's car), insist that the driver also use the safety seat.
- For long-distance trips, plan for frequent stops and try to stop before your child becomes restless. Cuddle a young child. Let an older child snack and run around for 10 to 15 minutes.

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