Very Important Information
Please Read!

4 Month Visit

Date: _____

Length: _____ **in.**	**Weight:** _____ **lbs.** _____ **oz.**	**Head Circumference:** _____**in.**	**BP:**_____
Percentile: _____%	**Percentile:** _____%	**Percentile:** _____%	**BMI:**_____ **Percentile:** _____%

Check-up and Immunization Schedule

Age	Check-up*	Immunizations/Tests Due
2 wk.	within 3 days	Hep B #1 (if not given in hospital)
2 mo.	within 1 week	Pentacel #1; Hep B #2; Prevnar #1; Rotavirus #1 Maternal Depression Screen
4 mo.	within 2 weeks	Pentacel #2; Prevnar #2; Rotavirus #2 Maternal Depression Screen
6 mo.	within 3 weeks	Pentacel #3; Prevnar #3; Rotavirus #3 OAE Hearing & Spot Vision Screens Maternal Depression Screen
9 mo.	within 3 weeks	Hep B #3 Developmental Screen
12 mo.	MUST be after 1 yr. b'day	MMR #1; Varicella #1 OAE Hearing & Spot Vision Screens; CBC Lead Screen (if indicated)
15 mo.	within 3 weeks	Prevnar #4; Hep A #1
18 mo.	within 3 weeks	Pentacel #4 Developmental Screen
2 yr.	within 2 mo.	Hep A #2 Developmental Screen Anemia Screen w/CBC (if indicated)
30 mo.	within 2 mo.	Developmental Screen Anemia Screen w/CBC (if indicated)
3 yr.	within 2 mo.	OAE Hearing & Spot Vision Screens Anemia Screen w/CBC (if indicated)
4 yr.	MUST be after 4 yr. b'day	MMR #2; Varicella #2; Quadracel Hearing & Spot Vision Screens Anemia Screen w/CBC (if indicated)

***Time specified can either be before or after date of the specified age.**

Vaccines

Hep A/B=Hepatitis A/B
DTaP=Diptheria, Tetanus, Pertussis
IPV=Inactivated Polio Vaccine
MMR=Measles, Mumps, Rubella
Pentacel=DTap, Polio, Hib
Prevnar=Pneumococcal Vaccine
Td=Tetanus, Diptheria
Tdap=Tetanus, Diptheria, Pertussis
Quadracel=DTap, Polio

Age	Check-up*	Immunizations/Tests Due
5 yr.	yearly	Hearing & Titmus Vision Screens Anemia Screen w/CBC (if indicated)
6 yr.	yearly	Hearing & Titmus Vision Screens Anemia Screen w/CBC (if indicated)
7 yr.	yearly	----------
8 yr.	yearly	Hearing & Vision Screens Anemia Screen w/CBC (if indicated)
9 yr.	yearly	----------
10 yr.	yearly	Hearing & Vision Screens Anemia Screen w/CBC (if indicated) Lipid Panel
11 yr.	yearly	Tdap; Meningococcal #1; HPV Series Anemia Screen w/CBC (if indicated)
12-21 yrs.	yearly	Anemia Screen w/CBC (if indicated) 12, 15, 18 yrs. Hearing & Vision Screens 13 & up Adolescent Confidential Questionnaire 16 yr. Meningococcal #2 17 yr. Lipid Panel 21 yr. Td HPV Series if not already completed
ALL		Flu vaccine yearly for all patients 6 mos. & older

Tests

CBC=Complete Blood Count
OAE=Otoacoustic Emissions

Notes:

_____

_____

_____

YOUR BABY'S NEXT CHECK-UP IS DUE AT 6 MONTHS OF AGE.
PLEASE SCHEDULE THIS APPOINTMENT TODAY.

UPDATE: 2-7-2023

TABLE OF CONTENTS

Northside Pediatrics' Vaccine Policy

Northside Pediatrics firmly believes in the effectiveness of vaccines to prevent serious illnesses and save lives. We only follow the CDC schedule for vaccine administration which is the one schedule that has been tested as safe and effective for children.

We do not follow any alternative vaccination schedules, as the safety and efficacy of these schedules has not been verified. We require all patients to be vaccinated in accordance with the CDC schedule, unless there is a medical contraindication to vaccines, which is very rare and will be discussed on a case-by-case basis. Our doctors have seen serious and fatal infectious diseases eradicated by vaccines, and we believe vaccines are one of the most important public health improvements of the last century.

We also strongly believe in the safety of vaccines and provide the same vaccines on the same schedule to our own children.

Children's Healthcare of Atlanta
STRONG4LIFE

What you need to know about
Feeding your 4-month-old

QUESTIONS TO ASK AT YOUR BABY'S 4-MONTH VISIT:

- How do I know if my baby is hungry or full?
- Is my baby eating enough?
- Is my baby ready for solid foods?

FIND ALL OF THIS and more at Strong4Life.com/baby

1 TRUST YOUR BABY'S HUNGER AND FULLNESS CUES.

As your baby grows, it is important to continue to learn and make adjustments to new behaviors and needs. And remember: Your baby knows exactly how much he needs to eat.

HUNGER CUES:	FULLNESS CUES:
Putting fingers in his mouth	Turning his attention away from eating
Leaning toward or grabbing for the breast or bottle	Using the breast or bottle nipple as a pacifier
Crying or fussing *(This could also mean your baby is too hot or cold, needs to sleep, needs his diaper changed or needs to be comforted.)*	Sealing his lips closed
	Falling asleep

Is your baby eating enough?
If your baby is growing well and having enough wet diapers (at least six a day), then he is probably getting enough to eat. If you still are not sure, talk to your baby's doctor.

2 WATCH FOR SIGNS THAT YOUR BABY IS READY FOR SOLID FOODS.

How do you know your baby is ready for solids?

Your baby may be ready for solid foods if he:

- Sits with support and has good head and neck control
- Opens his mouth for the spoon and closes mouth over the spoon
- Can move food from the spoon into his mouth and swallow (without pushing the food back out)
- Seems interested in the foods you eat

3 WHEN YOUR BABY IS READY, START WITH IRON-RICH FOODS.

Which foods should you try first?

Iron is an essential nutrient for your baby's brain development and overall growth, and babies most often use up the iron that is stored in their bodies by about 6 months old.

- First, try iron-rich foods, such as iron-fortified infant cereal or pureed meat.
- Next, add a single pureed vegetable, such as green peas or carrots to help your baby's taste buds get used to veggies.

Did you know?

The American Academy of Pediatrics (AAP) recommends only breastmilk for the first six months and continuing to breastfeed until your baby is 1 year old.

4 BE PATIENT, TURN OFF SCREENS AND EXPECT A MESS.

What's the best way to introduce your baby to solids?

- Make sure he is able to sit up in the high chair and hold up his head.
- Your baby may make funny faces or even spit out a food, but that doesn't mean he doesn't like it. He is just reacting to a new taste, texture and experience. Continue to offer new foods many times.
- Your baby may get more food on his bib than in his mouth, but that is OK. **A messy baby is a learning baby**, so be patient as your baby learns this new life skill.
- Make eye contact with your baby and make feeding time distraction-free so you can easily recognize and respond to your baby's cues. That means no toys, screens (such as cellphones, computers and the TV) or airplane spoons to deliver food into his mouth.

No juice zone

- Fruit juice (even 100%) has a lot of sugar and can cause diarrhea, diaper rash and tooth decay.
- Your baby's kidneys are still developing and cannot handle anything else, so he does not need fruit juice (or water).

What to expect next:

- Over the next two months, as your baby continues to grow and develop new skills, you may need to adjust your current routine based on his new eating or sleeping behaviors.
- Look forward to helping your baby explore solid foods, transition to different food textures and learn how to feed himself.

Doctor's notes:

Vitamin D

- Vitamin D plays a critical role in calcium absorption and bone growth. It prevents rickets (a serious bone disorder) and likely reduces the risk of adult osteoporosis.
- Vitamin D is involved in the immune system and may help prevent other serious disorders in adults.
- Vitamin D is synthesized via sunlight as well as absorbed in the gut; however, many people are deficient due to low sun exposure and the poor bioavailability of vitamin D.
- Infants are at risk for vitamin D deficiency. Breast milk contains little vitamin D, and formula volume does not usually meet daily requirements for vitamin D. Additionally infants have appropriately limited sun exposure, which reduces vitamin D synthesis.
- For these reasons, we recommend vitamin D supplementation in all age groups.

Recommended Vitamin D Supplementation

Age	Vitamin D Amount	Supplement options
Infant *(breastmilk or formula fed)*	400 IU	-D-vi-sol, Poly-vi-sol, Tri-vi-sol (or generic equivalent) - 1 ml daily -Vitamin D drops - 1 drop per day
1 yo - 2 yo	600 IU	-D-vi-sol, Poly-vi-sol, Tri-vi-sol (or generic equivalent) - 1 ml daily -Vitamin D drops - 1 drop per day + Dietary sources
3 yo and up	600 IU	-Chewable vitamin or swallowed tablet (age dependent) + Dietary sources

- **Dietary sources and other recommendations**
  - Vitamin D
    - Oily fish (i.e. salmon, sardines, tuna, mackerel, herring), egg yolks, fortified dairy
    - The recommended milk intake for children age 1-9 years old is 16 oz.
  - Calcium
    - Milk and dishes made with milk, cheeses, yogurt, canned fish (sardines, anchovies, salmon), dark-green leafy vegetables (kale, mustard greens, collard greens etc.), broccoli
    - Adolescents and teens need additional calcium and may need calcium supplements. The recommended daily intake is 1200-1500 mg calcium per day. If your teen has less than 4 servings of calcium daily, add a calcium supplement such as Viactiv, Oscal, or Caltrate.
    - Avoid excess salt as too much salt in the diet will increase the amount of calcium excreted out of the body through the kidneys.

Iron (Fe)

Iron helps with growth and brain development. A baby is born with iron stores that last until about 4 months old. After that, iron stores are depleted, and it is necessary to provide iron supplementation and/or iron rich foods.

Recommended Iron Supplementation

Age	Iron (Fe) Amount	Supplement options
4 mo - 12 mo *breastfed*	~6-11 mg/day	-Poly-vi-sol with Fe - 1 ml daily (10 mg Elemental Fe) + Dietary sources + Ok to stop Poly-vi-sol with Fe once dietary intake meets iron requirements
4 mo - 12 mo *formula fed*	~6-11 mg/day	-24-32 oz formula per day meets iron requirements + Dietary sources
1 yo -14 yo	7 -10 mg/day	+ Dietary sources
>14 yo boy	11 mg/day	+ Dietary sources
>14 yo girl	15 mg/day	-May require iron supplement due to heavy periods + Dietary sources

- **Dietary Sources and other recommendations**
  - Infants: Iron-fortified infant cereal, pureed meats, green beans, peas, spinach
    - Infants taking Poly-vi-sol with Fe do not need a separate vitamin D supplement.
  - Children and adolescents: Fortified breakfast cereal, fortified oatmeal, meat, tofu, spinach, beans. Three serving per day of iron-containing foods should meet daily iron requirements. Read the labels on packaging to check iron content on common foods.
  - Foods high in vitamin C (citrus, strawberries, tomatoes, dark green veggies) enhance iron absorption.
  - Limit cow's milk consumption to less than 20 oz per day as more than this can increase risk of iron deficiency. Infant's under one should primarily drink breast milk or formula.
  - Menstruating females should also take folic acid, which can be found in most multivitamins. Folic acid is a B vitamin and recommended daily dosing is 400 mcg.
  - An over-the-counter multivitamin is not recommended for a child who receives a normal, well-balanced diet.

Northside Pediatrics
The best care for your kids

Starting Solids

Your baby is now 4-6 months old and may be ready to start strained foods. There is no one right way to introduce solids, but the following principles should guide you:

- Feeding should be a relaxed, pleasant time. Choose a time of day when you are unhurried. Your baby should be hungry enough to maintain interest but not too impatient to wait between bites.

- You may start with any food for your baby including whole grain cereals, fruits, vegetables, or protein in the form of meat/fish and legumes. Some fish contain methyl mercury, a toxin that children should avoid, so please check the FDA or AAP websites for further information. Please also be aware that in 2016, the FDA proposed a new lower limit of arsenic levels allowed in all rice products. The AAP has thus recommended offering a variety of iron-fortified cereals including oat, barley, and multigrain cereals in addition to rice cereal. If you choose to start with cereal, you may mix 2 tablespoons of cereal with formula, breast milk, or water to a thin consistency. Feed your baby from a spoon. It may take awhile for your baby to get used to the spoon, so be patient.

- Listen to your baby as far as amount. If he/she pushes the spoon away or repeatedly spits the food out, he/she is finished. A few spoonfuls may be enough, especially in the beginning. If he/she continues to maintain interest, feed him/her up to 2 tablespoons initially. He/she may gradually work up to as much as 4-6 ounces per feeding. You may try solid feedings once or twice daily initially and by 6 months of age, three times per day is necessary.

- After a few days, you may try new foods. All foods are fair game, including fruits, vegetables, meats, fish, eggs and nut butters. Wait 2-3 days between each new food to be sure your baby tolerates the latest introduction. *The only food to avoid until your infant is 12 months of age is honey.*

- There is no known benefit to choosing one food category over another to start first. Just be sure to add only one new food at a time. Aim for a good balance of food groups overall (www.myplate.gov).

- Latest information supports the early introduction of more allergenic foods like eggs and nuts to decrease the risk of developing allergies. Food allergies are complicated reactions and can occur anytime from weeks to years after starting a food, but usually start as soon as a few minutes after eating a food. If you think your baby may be allergic to a food, discuss this and any other questions with the nurse or provider. Please have Benadryl at home in case your child was to develop an allergic reaction. Benadryl is an antihistamine and it can help to relieve mild food allergy symptoms primarily hives. If your child were to develop signs of a severe allergic reaction or anaphylaxis these could include, vomiting, swelling of face or body, pallor, labored breathing, coughing, wheezing, call 911 immediately.

- The AAP recommends infants begin finger-foods once they are able to sit well unsupported, bring their hands to their mouths, and their pincer grasp is well-developed. These abilities usually develop at age 7 to 9 months. Introduce foods that are soft and easy to swallow. Foods should be cut into small pieces no larger than one-half inch. Keep foods such as whole grapes, hot dogs, chunks of raw vegetables, chunks of peanut butter, chunks of meat and cheese, nuts and seeds, and popcorn away from babies and young children. Do not allow your child to run, walk, or lie down with food in their mouths.

- It is important to offer your baby water in a sippy cup once your baby is eating baby foods regularly, typically at 6 months. A good rule of thumb for recommended daily water intake is half your child's weight in ounces (ie. 20 lbs then 10 oz per day). The water should contain fluoride. Beware that many bottled waters do not thus check the label.

11/2020

Working Together: Breastfeeding and Solid Foods

Breastfeeding, like many other aspects of parenting, is a gradual process of increasing independence and self-mastery on your baby's part and a gradual stepping back on yours. You may have already experienced the beginnings of this process during the first half year of life as your baby learned to enjoy drinking expressed breast milk from a bottle or cup and you began to go places without her. Still, the two of you were closely tied to each other in a nutritional sense: your child thrived on your breast milk alone, which provided the nutrients she needed.

During the second half of the year, your breast milk will continue to provide the great majority of necessary nutrients as she starts to sample a variety of new foods. Though your baby will no doubt greatly enjoy the introduction of new tastes and textures in her life, her experiences with solid food are still just practice sessions for the future. It's important to make sure she continues getting enough breast milk to meet her nutritional needs.

Introducing foods

The American Academy of Pediatrics recommends breastfeeding as the sole source of nutrition for your baby for about 6 months. When you add solid foods to your baby's diet, continue breastfeeding until at least 12 months. You can continue to breastfeed after 12 months if you and your baby desire. Check with your child's doctor about vitamin D and iron supplements during the first year.

Parents with food allergies are often advised to avoid foods that commonly cause allergic reactions (such as cow's milk, dairy products, and foods made from peanuts or other nuts). But recent research found that the late introduction of certain foods may actually increase your baby's risk for food allergies and inhaled allergies. You should discuss any concerns with your pediatrician.

If no allergies are present, simply observe your baby for indications that she is interested in trying new foods and then start to introduce them gradually, one by one. Signs that the older baby is ready for solids include sitting up with minimal support, showing good head control, trying to grab food off your plate, or turning her head to refuse food when she is not hungry. Your baby may be ready for solids if she continues to act hungry after breastfeeding. The loss of the tongue thrusting reflex that causes food to be pushed out of her mouth is another indication that she's ready to expand her taste experience.

First foods

Since most breastfeeding babies' iron stores begin to diminish at about six months, good first choices for solids are those rich in iron. Current recommendations are that meats, such as turkey, chicken, and beef, should be added as one of the first solids to the breastfed infant's diet. Meats are good sources of high-quality protein, iron, and zinc and provide greater nutritional value than cereals, fruits, or vegetables.

Iron-fortified infant cereal (such as rice cereal or oatmeal) is another good solid food to complement breast milk. When first starting infant cereal, check the label to make sure that the cereal is a single-ingredient product—that is, rice cereal or oatmeal—and does not contain added fruit, milk or yogurt solids, or infant formula. This will decrease the likelihood of an allergic reaction with the initial cereal feedings. You can mix the cereal with your breast milk, water, or formula (if you've already introduced formula to your baby) until it is a thin consistency. As your baby gets used to the taste and texture, you can gradually make it thicker and increase the amount.

Once your child has grown accustomed to these new tastes, gradually expand her choices with applesauce, pears, peaches, bananas, or other mashed or strained fruit, and such vegetables as cooked carrots, peas, and sweet potatoes. Introduce only one new food at a time and wait several days before you add another new food, to make sure your child does not have a negative reaction.

As you learn which foods your baby enjoys and which ones she clearly dislikes, your feeding relationship will grow beyond nursing to a more complex interaction— not a replacement for breastfeeding, certainly, but an interesting addition to it. Remember to keep exposing your baby to a wide variety of foods. Research indicates that some babies need multiple exposures to a new taste before they learn to enjoy it. The breastfed baby has already been experiencing different flavors in the mother's breast milk, based upon her diet, so solid foods often have a familiar taste when introduced to the breastfed baby.

Babies need only a few spoonfuls as they begin solids. Since these first foods are intended as complements and not replacements for your breast milk, it's best to offer them after a late afternoon or evening feeding, when your milk supply is apt to be at its lowest and your baby may still be hungry.

Some pediatricians recommend an iron supplement. If this is the case, be careful to give the exact dose prescribed by your doctor. Always store iron and vitamin preparations out of the reach of young children in the household, since overdoses can be toxic.

You may find that the number of breastfeedings will gradually decrease as her consumption of solid food increases. A baby who nursed every two to three hours during early infancy may enjoy three or four meals of breast milk per day (along with several snacks) by her twelfth month.

Unless you intend to wean her soon, be sure to continue breastfeeding whenever she desires, to ensure your continuing milk supply. To ease breast discomfort, it may become necessary to express a small amount of milk manually on occasion, if her decreasing demand leaves you with an oversupply. Breast comfort is another reason why a gradual introduction of solid foods is advisable, since it allows your body time to adapt to changing demands. Over the span of several months, a readjustment in the supply-and-demand relationship can take place smoothly and painlessly.

Last Updated: 11/21/2015
Source: Adapted from New Mother's Guide to Breastfeeding, 2nd Edition (Copyright © 2011 American Academy of Pediatrics)

How to Safely Prepare Formula with Water

Water used for mixing infant formula must be from a safe water source, as defined by your state or local health department.

If you are concerned or uncertain about the safety of the tap water:
You may use bottled water or bring cold tap water to a rolling boil for 1 minute (no longer), then cool the water to room temperature for no more than 30 minutes before it is used.

Important Message for Parents:

Watering Down Formula is Dangerous!
News reports have found parents diluting formula to try and save money or feeding water in addition to breast milk or formula. This can lead to a dangerous condition called water intoxication. The American Academy of Pediatrics (AAP) wants to remind parents to avoid these practices.

Babies do not need water in addition to formula. Adding extra water to formula reduces the about of nutrients baby will receive at each feeding. This can slow growth and development. Extra water also disturbs electrolyte balances which can lead to seizures. So always mix formula as directed by the manufacturer. If you're using formula but having trouble affording it check with your pediatrician, local health department, food pantry or social service agency.

How to test the temperature of a bottle:
Warmed water should be tested in advance to make sure it is not too hot for an infant. The easiest way to test the temperature is to shake a few drops on the inside of your wrist. Otherwise, a bottle can be prepared by adding powdered formula and room temperature water from the tap just before feeding. Bottles made in this way from powdered formula can be ready for feeding, as no additional refrigeration or warming would be required.

How long is the bottle of formula good for after making it?

- Prepared formula must be discarded within 1 hour after serving an infant.
- Prepared formula that has not been given to an infant may be stored in the refrigerator for 24 hours to prevent bacterial contamination.
- An open container of ready-to-feed formula, concentrated formula, or formula prepared from concentrated formula, should be covered, refrigerated, and discarded after 48 hours if not used.

Last Updated: 7/3/2018
Source: Adapted from Pediatric Nutrition, 7th Edition (Copyright © 2014 American Academy of Pediatrics)

Forms of Baby Formula: Powder, Concentrate & Ready-to-Feed

Infant formulas generally come as ready-to-feed liquid, concentrated liquid, and powder. Which type is going to work best for you is likely to depend on how much formula you plan to use, where you plan to use it, and how much you want to spend.

Start Thinking in Ounces:
Bottle-feeding your baby will require you to think in ounces and adopt it as your standard unit of measurement.

Here are the basic measurements you'll need for formula success.

- 1 ounce = 30 cc (cubic centimeters) = 30 mL (milliliters)
- 8 fluid ounces = 1 cup
- 32 fluid ounces = 1 quart

Formula Prep by Form:

- **Powder.** The simple concept here is that you add powder to premeasured water and shake a lot. In what we can only assume was an enlightened attempt to eliminate room for mixing errors, most powdered formula is mixed according to the same recipe: *1 scoop of powder to every 2 fluid ounces of water.* Powdered formula comes in cans containing enough powder to make anywhere from 90 ounces to more than 200 ounces of prepared formula. It is certainly your most economical choice, and quite frankly works perfectly well for most babies. You can decide whether to mix it up as you go or prepare a full day's worth at a time and refrigerate it.
- **Liquid concentrate.** This is the "just add water as directed and shake" formula option. Mixing and measuring is again quite straightforward, because all brands of concentrate call for equal amounts of water and concentrate. If you intend to end up with a total of 4 fluid ounces of prepared formula, you'll need to mix 2 fluid ounces of concentrate with 2 fluid ounces of water. Of course, many people choose to mix an entire can of concentrate (13 fluid ounces) with an equal amount of water. The resulting 26 fluid ounces of now-ready-to-feed formula can be covered and put in the refrigerator to be used over the next 48 hours. While some parents find concentrate to be easier, neater, and/or more convenient than powder, it is a convenience for which you will pay more.
- **Ready-to-feed.** This is your no-mixing, no-measuring, no-mess option. Typically sold in 2-,6-or 8-fluid-ounce containers (with anywhere from 4 to 24 to a pack) or 1-quart (32-fluid-ounce) containers/cans, the use of ready-to-feed formula is hopefully self-explanatory—what you see is what you give. While the fairly small "Ready-to-Feed" caption isn't always prominently displayed on the label, you'd be hard pressed to miss the distinguishing price tag. While buying ready-to-feed formula inevitably costs the most, it leaves almost no room for error (assuming that you don't mistake it for concentrate and dilute it with water). It also happens to be the easiest way to limit your newborn's exposure to too much fluoride. Unopened cans can be conveniently stored at room temperature. Once opened, unused portions can be covered and then refrigerated for up to 48 hours.

Last Updated: 8/7/2018
Source: Heading Home With Your Newborn, 2nd Edition (Copyright © 2010 American Academy of Pediatrics)

With Your Baby, Make Sure It's Safety First!

Each year, hundreds of children die from preventable accidents. Babies are fast learners when it comes to rolling, crawling, grasping, sitting, standing and then walking. There is a reason one whole aisle at the Baby Super Store is devoted to safety.

Here are some tips for keeping your home safe:

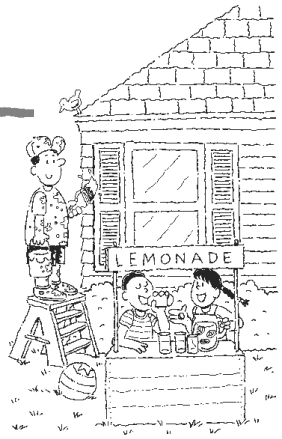
- **Water heater:** Ensure your water heater is set no higher than 120 degrees Fahrenheit. This will help to ensure water from the faucet does not lead to burns during bathing, handwashing, etc.
- **Smoke detectors:** Keep a smoke alarm on every level of your home and test the alarms at least twice a year (daylight savings time is a good time to remember). Use long-life batteries so they only need to be changed once a year.
- **Carbon monoxide detectors:** Carbon monoxide is an odorless gas and can be deadly. Your home should have these detectors as well.

Babies love to explore. They learn new skills to do this very quickly!

Here are some tips for keeping your infant safe from more dangers:

- **Rolling and falling:** Always keep an eye (and hand) on your newborn and infant. Rolling off beds, couches and changing tables happens very quickly so never leave your baby alone.
- **Burns and scalds:** Children also love to grab at everything starting around 4-6 months. Never leave hot cups of coffee, tea or other liquids near table or counter edges. Do not carry hot liquids while holding or walking with your baby. Keep your baby in an enclosed safe area or playpen while cooking or when you can't keep your FULL attention on them.
- **Choking**: Make sure all small objects and toys are out of your baby's reach, especially if you have older children. Babies explore their world by putting objects in their mouths. As you introduce new foods at age 4-6 months, small food items such as nuts, popcorn, grapes, hot dogs etc. will be potential choking hazards and should be avoided. Finally, learning infant and child CPR is an excellent and empowering idea for all parents.
- **Honey**: Please do not offer your newborn or infant any raw or baked honey until **after** age 1 year. Honey is a potential source of a bacteria called *Clostridium botulinum*. This bacteria can cause botulism if disease-causing spores are ingested. Botulism can be a very serious and rapidly progressive disease that can cause the nerves to function abnormally leading to weakness, paralysis and even death.

Lead is a Poison: What You Need To Know



Lead in the body can affect child development and behavior. Lead is a metal that is found in a lot of places. Though you can't usually see it, there are things you can do to prevent your child from being exposed to lead. No safe level of lead has been identified for children. Children are at highest risk because they often put their hands and objects in their mouths, and their growing bodies tend to easily absorb what they eat. This publication was written by the American Academy of Pediatrics to help parents understand how lead can be harmful, where it may be found, and what they can do to keep their children safe.

How is lead harmful?

- Lead can interfere with normal growth and development and have an impact on almost every system of the body, including the brain.
- Most children with lead in their blood show no symptoms. However, lead can harm development in ways that are easily seen in a child.
- Some children show learning and behavior problems. These may be seen first during preschool years or later.
- Physical symptoms may include stomach pain, headaches, vomiting, and feeling weak. Very high levels of lead in the body may cause seizures, coma, and death.

Where lead can be found

- **Homes and buildings.** Lead was added to indoor and outdoor paint until 1978. That is why it is found in so many homes. When lead-based paint surfaces rub together (like when a window is opened or a door closed) or when paint begins to peel or chip, the lead can get into the dust and dirt in and around the home.
- **Hobby materials** (stained glass, paints, solders, fishing weights, and buckshot).
- **Folk or home health remedies** (azarcon and greta, which are used for upset stomach or indigestion; pay-loo-ah, which is used for rash or fever).
- **Workplaces** (foundries, smelters, battery recycling plants, and auto repair shops).
- **Food bowls painted with lead glazes** (especially if made in another country or they are old).
- **Sometimes in products** like toys, jewelry, or furniture (especially if made in another country).
- **Water that has been in contact with lead pipes, lead solder, or older plumbing fixtures** (especially hot water pipes because hot water absorbs lead more quickly than cold water).

What you can do

- **Test your home for lead.** If your home was built before 1978, talk with your local health department about getting your home tested for lead. If you don't know how old your home is, assume there is lead. In the United States, lead is in paint in 87% of homes built before 1940, 69% of homes built from 1940–1959, and 24% of homes built from 1960–1977. Homes in the Northeast and Midwest are most likely to have lead in paint. Ask the landlord about lead before you sign a lease. Before you buy a home, have it inspected for lead.
- **Before any work is done on your home, learn about safe ways to make repairs.** When repairs are being done, seal off the area until the job is done and keep your child away until everything is cleaned up. Be sure to use a certified contractor. Removing lead paint on your own can often make the condition worse. If work is not done the safe way, you and your child can be harmed by increased exposure to lead in dust.
- **Keep your children away from old windows, old porches, and areas with chipping or peeling paint.** If it is in your home, cover it with duct tape or contact paper until it can be completely removed. If you rent your home, let your landlord know about any peeling or chipping paint. Landlords are legally required to repair lead problems found on their property.
- **Do not allow your child to play in the dirt next to your old home.** Plant grass over bare soil or use mulch or wood chips.
- **Clean your home regularly.** Wipe down floors and other level surfaces with a damp mop or sponge. Taking shoes off at the door can help reduce tracking in dirt.
- **Teach your children to wash their hands, especially before eating.** Wash pacifiers and toys regularly.
- **Keep clean.** If your work or hobbies involve lead, change your clothes and shoes and shower when finished. Keep your clothes at work or wash your work clothes as soon as possible.
- **Use cold flushed tap water for mixing formula, drinking, or cooking.** If you are in an older home, run the water for several minutes before using it in the morning and start with cold water for drinking or cooking.
- **Eat healthy.** Give your child a well-balanced diet that includes breakfast and food high in calcium and iron. A good diet can help your child absorb less lead.

Treatment for lead poisoning

The first action is to identify the source of exposure and prevent further exposures to lead. Some children with high levels of lead in their blood need to take a medicine that helps the body get rid of it faster. If your child's lead level is too high, it can take months to years for it to come down; close follow-up is needed. Children with development or behavior problems should be evaluated and, if needed, receive services to help them improve.

Lead screening

The only way to know for sure if your child has been exposed to lead is with a blood test. Lead screening tests sometimes take blood from the finger, but it is better and more accurate to take the blood from a vein in the arm. The test measures the amount of lead in the blood. If you think that your child has been exposed to lead, talk with your pediatrician about getting a blood test to check for lead.

For more information

CDC Childhood Lead Poisoning Prevention Program
770/488-3300
www.cdc.gov/nceh/lead

National Lead Information Center
800/424-LEAD (800/424-5323)
www.epa.gov/lead/nlic.htm

US Department of Housing and Urban Development
202/755-1785
www.hud.gov/offices/lead

From your doctor

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Choking Prevention and First Aid for Infants and Children

When children begin crawling or eating table foods, parents must be aware of the dangers and risks of choking. Children younger than 5 years can easily choke on food and small objects.

Choking occurs when food or small objects get caught in the throat and block the airway. This can prevent oxygen from getting to the lungs and the brain. When the brain goes without oxygen for more than 4 minutes, brain damage or even death may occur.

Many children die from choking each year, and some children who survive a severe choking episode have permanent, life-changing brain injuries. Most children who choke to death are younger than 5 years. Two-thirds of choking victims are infants younger than 1 year. Balloons, balls, marbles, pieces of toys, and foods cause the most choking deaths.

Read more about choking prevention and first aid.

Dangerous Foods

Keep dangerous foods from children until 4 years of age or older, depending on each child's development and maturity level. However, round, firm foods, such as hot dogs or grapes, can be served if completely chopped into tiny pieces. When infants and young children do not grind or chew their food well, they may try to swallow it whole. Peanut butter and other nut butters should be spread thinly.

Here are foods that can be choking hazards:

- Hot dogs
- Hard, gooey, or sticky candy
- Chewing gum
- Nuts and seeds
- Whole grapes
- Raw vegetables, such as carrot sticks
- Raw fruit chunks, such as apple chunks
- Popcorn
- Chunks of peanut butter or other nut butters
- Marshmallows
- Meat sticks/sausages
- Chunks of meat
- Chunks of cheese or string cheese

Dangerous Household Items

Keep the following household items away from infants and children:

- Balloons
- Coins
- Marbles
- Toys with small parts
- Toys that can be squeezed to fit entirely into a child's mouth
- Small balls
- Pen or marker caps
- Small button-type batteries
- Medicine syringes

What You Can Do To Prevent Choking

- Learn CPR (cardiopulmonary resuscitation) (basic life support).
- Be aware that balloons pose a choking risk to children up to 8 years of age.
- Keep dangerous foods from children until 4 years of age or older, depending on each child's development and maturity level.
- Insist that children eat at the table or sit down when they eat. They should never run, walk, play, or lie down with food in their mouths.
- Cut food for infants and young children into pieces no larger than one-half inch, and teach them to chew their food well.
- Supervise mealtime for infants and young children.
- Be aware of older children's actions. Many choking incidents occur when older brothers or sisters give dangerous foods, toys, or small objects to a younger child.
- Avoid toys with small parts, and keep other small household items out of the reach of infants and young children.
- Follow the age recommendations on toy packages. Age guidelines reflect the safety of a toy, which is based on any possible choking hazard, as well as the child's physical and mental abilities at various ages.
- Check under furniture and between cushions for small items that children could find and put in their mouths.
- Do not let infants and young children play with coins.

First Aid for the Child Who Is Choking

Make it a point to learn the instructions on the following pages of this publication. Post the chart in your home. However, these instructions should not take the place of an approved class in basic first aid, CPR, or emergency prevention. Contact your local American Red Cross (www.redcross.org) or the American Heart Association (www.heart.org) to find out about classes offered in your area. Most of the classes teach basic first aid, CPR, and emergency prevention, along with what to do for a choking infant or child. Your child's doctor also can help you understand these steps and talk with you about the importance of supervising mealtime and identifying dangerous foods and objects.

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CHOKING/CPR

LEARN AND PRACTICE CPR (CARDIOPULMONARY RESUSCITATION).

IF ALONE WITH A CHILD WHO IS CHOKING...

1. SHOUT FOR HELP. 2. START RESCUE EFFORTS. 3. CALL 911 OR YOUR LOCAL EMERGENCY NUMBER.

START FIRST AID FOR CHOKING IF	DO *NOT* START FIRST AID FOR CHOKING IF
• The child cannot breathe at all (the chest is not moving up and down). • The child cannot cough or talk or looks blue. • The child is found unconscious/unresponsive. (Go to CPR.)	• The child can breathe, cry, or talk. • The child can cough, sputter, or move air at all. The child's normal reflexes are working to clear the airway.

FOR INFANTS YOUNGER THAN 1 YEAR

INFANT CHOKING

If the infant is choking and is unable to breathe, cough, cry, or speak, follow these steps. Have someone call 911.

1 GIVE 5 BACK BLOWS (SLAPS).

ALTERNATING WITH

2 GIVE 5 CHEST COMPRESSIONS.

Alternate back blows (slaps) and chest compressions until the object is dislodged or the infant becomes unconscious/unresponsive. If the infant becomes unconscious/unresponsive, begin CPR.

INFANT CPR

To be used when the infant is **UNCONSCIOUS/UNRESPONSIVE** or when breathing stops. Place infant on flat, hard surface.

1 START CHEST COMPRESSIONS.

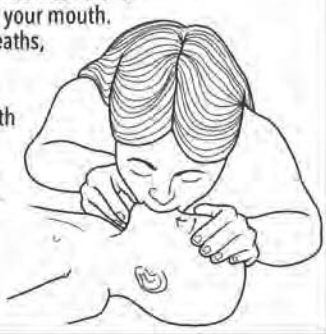
- Place 2 fingers of 1 hand on the breastbone just below the nipple line.
- Compress chest at least ⅓ the depth of the chest, or about 4 cm (1.5 inches).
- After each compression, allow chest to return to normal position. Compress chest at rate of at least 100 times per minute.
- Do 30 compressions.

2 OPEN AIRWAY.

- Open the airway (head tilt-chin lift).
- If you see a foreign body, sweep it out with your finger. Do NOT do blind finger sweeps.

3 START RESCUE BREATHING.

- Take a normal breath.
- Cover infant's mouth and nose with your mouth.
- Give 2 breaths, each for 1 second. Each breath should make the chest rise.



4 RESUME CHEST COMPRESSIONS.

- Continue with cycles of 30 compressions to 2 breaths.
- After 5 cycles of compressions and breaths (about 2 minutes), and if no one has called 911 or your local emergency number, call it yourself.

If at any time an object is coughed up or the infant/child starts to breathe, stop rescue breaths and call 911 or your local emergency number.

Ask your pediatrician for information on choking/CPR instructions for children older than 8 years and for information on an approved first aid or CPR course in your community.

Home Safety Checklist

Is your house a safe place for your child to live and play?

This safety checklist can help you prevent serious injuries or even death. Keep in mind that every house is different. Because there may be other safety concerns in your house, a more thorough safety check is recommended at least every 6 months.

Throughout the Home

- ☐ Teach your child how to call 911 in an emergency.
- ☐ Post the Poison Help number 1-800-222-1222 by every phone in your home and program the number into your cell phone.
- ☐ Make sure to have a plan of escape from your home in case of a fire. Review and practice the plan with your family.
- ☐ Install smoke alarms inside every bedroom, outside each sleeping area, in furnace areas, and on every level of your home, including the basement. Buy alarms with long-life lithium batteries. Standard batteries should be changed every year. Test alarms every month to make sure they are working properly.
- ☐ Install carbon monoxide (CO) alarms outside each sleeping area and on each floor of your home. CO is a toxic gas that has no taste, no color, and no odor. It comes from appliances or heaters that burn gas, oil, wood, propane, or kerosene.
- ☐ A home is safest without firearms. If you must have a gun, make sure the gun is stored unloaded and locked in a safe or with a trigger lock, with the bullets locked in another place.
- ☐ Make sure all the rooms in your home are free from small parts, plastic bags, small toys, coins, and balloons that your child could choke on. Keep magnets and button-cell batteries out of sight and out of reach of children. Frequently check in, around, and under furniture for these items.
- ☐ Secure bookshelves, dressers, TVs, and all tall or heavy furniture to the wall with straps, brackets, or screws.
- ☐ Use cordless window coverings in all homes where children live or visit. If this is not possible, make sure drapery and blind cords are tied up high, with no loops. Loose cords can strangle children, so remember to check the cords in all rooms to make sure they are out of reach.
- ☐ Make sure window guards are secured to prevent a child from falling out the window.
- ☐ Block all stairs by using child gates.
- ☐ Check electrical cords and replace any cords that are worn, frayed, or damaged. Never overload outlets. Cords should run *behind* furniture and not hang down for children to pull on. Remove unused cords.
- ☐ Store matches and lighters out of your child's reach or in a locked cabinet. Teach your child that matches and lighters are to be used by adults only.
- ☐ Only use candles when an adult is in the room. Blow out candles if you leave the room or go to sleep.
- ☐ Keep houseplants out of your child's reach because some may be poisonous. Teach your child to never pick and eat anything from an indoor or outdoor plant. Also, teach your child to ask an adult first before picking and eating homegrown fruits or vegetables.

Child's Bedroom

Changing Table

- ☐ Never leave your child unattended. Keep supplies within arm's reach and always use the safety belt to help prevent falls. Try to keep a hand on your child at all times, even when using the safety belt.
- ☐ If you use baby powder, use one made with cornstarch. Pour it out carefully and keep the powder away from baby's face. Published reports indicate that talc (also called *talcum powder*) in baby powder can injure a baby's lungs.

Crib

- ☐ Reduce the risk of sudden infant death syndrome (SIDS). All healthy babies younger than 1 year should sleep on their backs—at nap time and at night. The safest place for your baby to sleep is in a crib, on a firm mattress with a fitted sheet. Infants should never sleep in an adult bed or on a couch.
- ☐ Keep pillows, quilts, bumpers, comforters, sheepskins, and stuffed toys out of your baby's crib. They can cover your baby's face—even if she is lying on her back.
- ☐ Don't hang anything with strings or ribbons over cribs. Keep monitor cords well away from the crib and make sure your baby cannot reach any window cords.
- ☐ Use a crib that meets current standards. It should not have a drop side or any raised corner posts or cutouts, where loose clothing could get snagged and strangle your baby. Also, the slats should be no more than 2⅜ inches apart, and the mattress should fit snugly to prevent entrapment. All cribs purchased after June 28, 2011, are required to meet the current standard.
- ☐ Tighten all the screws, bolts, and other hardware securely to prevent the crib from collapsing. Only use hardware provided by the manufacturer.

Other Bedroom Items

- ☐ Keep night-lights away from drapes or bedding, where they could start a fire. Buy only cool night-lights that do not get hot.
- ☐ Store toys in a box or basket without a lid. If a toy chest has a lid, make sure it has safe hinges that hold the lid open and do not pinch. The chest should also have air holes in case your child gets trapped inside.
- ☐ Use a cool-mist humidifier or vaporizer to avoid burns. Clean it according to manufacturer instructions to avoid bacteria and mold growth.

Kitchen

- ☐ Store sharp knives, other sharp utensils, dishwasher detergent, and other cleaning supplies in a locked cabinet.
- ☐ Keep chairs and stools away from counters and the stove, where a child could climb up and get hurt.

- ☐ Use the back burners and point pot handles toward the back of the stove to keep them out of your child's reach. Keep your child away from the stove when someone is cooking.
- ☐ Keep electrical appliances out of your child's reach and unplugged when not in use. Appliance cords should be tucked away so they cannot be reached by a child.
- ☐ Use a high chair that is sturdy and has a seat belt with a crotch strap.
- ☐ Keep a working fire extinguisher in the kitchen and know how and when to use it.

Bathroom

- ☐ Always stay within arm's reach of your infant or young child when he is in the bathtub. Many bathtub drownings happen (even in a few inches of water) when a parent leaves an infant or young child alone or with another young child.
- ☐ Keep the bathroom door closed when the bathroom is not in use. Keep the toilet seat cover down and consider using a toilet lid latch. Use a doorknob cover to keep your child out of the bathroom when you are not there.
- ☐ Place a nonskid bath mat in the bathtub and on the floor.
- ☐ Keep all medicines, toiletries, cosmetics, and cleaning supplies out of your child's reach. Store these items in locked cabinets. Make sure all medicines have child-resistant caps on them.
- ☐ Unplug and store hair dryers, curling irons, and other electrical appliances out of your child's reach.
- ☐ Make sure the outlets in the bathroom have ground fault interrupters (GFIs).
- ☐ To prevent scalding, adjust your water heater so the hottest temperature at the faucet is no more than 120 degrees Fahrenheit (48.9 degrees Celsius).

Family Room

- ☐ Pad edges and corners of tables.
- ☐ Secure TVs to the wall with anchoring straps so they don't tip over. TVs should only be put on furniture that is low, sturdy, and designed to hold them.
- ☐ Place a barrier around the fireplace or other heat sources.

Playground

- ☐ Make sure swings are made of soft materials, such as rubber, plastic, or canvas.
- ☐ Use wood chips, mulch, or shredded rubber under play equipment. It should be at least 9 inches deep for play equipment up to 7 feet high. Rake it back under the swings and slides often to keep it the right depth.
- ☐ Make sure home playground equipment is put together correctly, sits on a level surface, and is anchored firmly to the ground.

Pool

- ☐ Make sure to have a fence at least 4 feet high around all sides of the pool to separate the pool from the house and the rest of the yard. A child should not be able to climb the fence. The gate on the fence should open outward, self-close, and self-latch, with the latch high out of a child's reach.
- ☐ Always have rescue equipment, such as a shepherd hook or life preserver, by the pool.
- ☐ Keep a telephone by the pool with your local emergency number (usually 911) clearly posted.
- ☐ Learn basic first aid and cardiopulmonary resuscitation (CPR). Because of the time it might take for help to arrive in an emergency, your CPR skills can save your child's life. CPR performed by bystanders has been shown to improve outcomes in drowning victims.

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Baby Walkers: What You Need to Know

Baby walkers send thousands of children to hospitals every year. Read about why they are not safe and what you can do.

Children in baby walkers can

- Roll down the stairs—which often causes broken bones and severe head injuries. This is how most children get hurt in baby walkers.
- Get burned—a child can reach higher in a walker. It is now easier for a child to pull a tablecloth off a table and spill hot coffee, grab pot handles off the stove, and reach radiators, fireplaces, or space heaters.
- Drown—a child can fall into a pool or bathtub while in a walker.
- Be poisoned—reaching high objects is easier in a walker.

Most walker injuries happen while adults are watching. Parents or caregivers simply cannot respond quickly enough. A child in a walker can move more than 3 feet in 1 second! That is why walkers are never safe to use, even with an adult close by.

There are no benefits to baby walkers

Many parents think walkers will help their children learn to walk. But they don't. In fact, walkers can actually delay when a child starts to walk

What you can do

- Throw out your baby walkers! Also, be sure that there are no walkers wherever your child is being cared for, such as child care centers or in someone else's home.
- Try something just as enjoyable but safer, like
  - Stationary activity centers—they look like walkers but have no wheels. They usually have seats that rotate, tip, and bounce.
  - Play yards or playpens—these are great safety zones for children as they learn to sit, crawl, or walk.
  - High chairs—older children often enjoy sitting up in a high chair and playing with toys on the tray.

About safety standards

New safety standards for baby walkers have been in place since 1997. They are now made wider so they cannot fit through most doors, or they have brakes to stop them at the edge of a step. However, these improvements will not prevent all injuries from walkers. They still have wheels, so children can still move fast and reach higher.

The American Academy of Pediatrics has called for a ban on the manufacture and sale of baby walkers with wheels.

Remember

One way you can keep your child safe from injury is to throw away your baby walker.

From your doctor

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Web site— www.aap.org

Fun in the Sun:

Keep Your Family Safe

Warm, sunny days are wonderful. It's great to exercise outside, and the sun feels good on your skin. But what feels good can harm you and your family. Read on for information from the American Academy of Pediatrics about how to keep your family safe from the sun's harmful rays.

The Sun and Skin Cancer

The sun gives energy to all living things on earth, but it can also harm us. Its ultraviolet (UV) rays can damage skin and eyes and cause skin cancer. All skin cancers are harmful and some, especially malignant melanoma, can be deadly.

One-quarter of our lifetime sun exposure happens during childhood and adolescence. Since children spend a lot of time outdoors, especially in the summer, it's important to protect them from the sun.

Research shows that 1 or more blistering sunburns as a child or teen can increase the risk of melanoma skin cancer later in life. Sunburns can also be very painful. Too much sun exposure can cause other problems, too, such as

- Dehydration (loss of fluids) and fever
- Damage to skin, such as changes in color and wrinkles
- Cataracts (clouding of eye lens) of the eye
- Damage to the body's immune system

Sun Safety Tips

It's good for children and adults to spend time playing and exercising outdoors, and it's important to do so safely. Follow these simple rules to protect your family from sunburns now and from skin cancer later in life.

- Keep babies younger than 6 months out of direct sunlight. Find shade under a tree, an umbrella, or the stroller canopy.
- When possible, dress yourself and your children in cool, comfortable clothing that covers the body, such as lightweight cotton pants, long-sleeved shirts, and hats.
- Select clothes made with a tight weave; they protect better than clothes with a looser weave. If you're not sure how tight a fabric's weave is, hold it up to see how much light shines through. The less light, the better. Or you can look for protective clothing labeled with an Ultraviolet Protection Factor (UPF).
- Wear a hat with an all-around 3-inch brim to shield the face, ears, and back of the neck.
- Limit your sun exposure between 10:00 am and 4:00 pm when UV rays are strongest.
- Wear sunglasses with at least 99% UV protection. Look for child-sized sunglasses with UV protection for your child.
- Use sunscreen.
- Make sure everyone in your family knows how to protect his or her skin and eyes. Remember to set a good example by practicing sun safety yourself.

Sunscreen

Sunscreen can help protect the skin from sunburn and some skin cancers but only if used correctly. Keep in mind that sunscreen should be used for sun protection, not as a reason to stay in the sun longer.

How to pick sunscreen

- Use a sunscreen that says "broad-spectrum" on the label; that means it will screen out both UVB and UVA rays.
- Use a broad-spectrum sunscreen with a sun protection factor (SPF) of at least 15 (up to SPF 50). An SPF of 15 or 30 should be fine for most people. More research studies are needed to test if sunscreen with more than SPF 50 offers any extra protection.
- If possible, avoid the sunscreen ingredient oxybenzone because of concerns about mild hormonal properties. Remember, though, that it's important to take steps to prevent sunburn, so using any sunscreen is better than not using sunscreen at all.
- For sensitive areas of the body, such as the nose, cheeks, tops of the ears, and shoulders, choose a sunscreen with zinc oxide or titanium dioxide. These products may stay visible on the skin even after you rub them in, and some come in fun colors that children enjoy.

How to apply sunscreen

- Use enough sunscreen to cover all exposed areas, especially the face, nose, ears, feet, hands, and even backs of the knees. Rub it in well.
- Put sunscreen on 15 to 30 minutes before going outdoors. It needs time to absorb into the skin.
- Use sunscreen any time you or your child spends time outdoors. Remember that you can get sunburn even on cloudy days because up to 80% of the sun's UV rays can get through the clouds. Also, UV rays can bounce back from water, sand, snow, and concrete, so make sure you're protected.
- Reapply sunscreen every 2 hours and after swimming, sweating, or drying off with a towel. Because most people use too little sunscreen, make sure to apply a generous amount.

Sunscreen for Babies

For babies younger than 6 months. Use sunscreen on small areas of the body, such as the face, if protective clothing and shade are not available.

For babies older than 6 months. Apply to all areas of the body, but be careful around the eyes. If your baby rubs sunscreen into her eyes, wipe her eyes and hands clean with a damp cloth. If the sunscreen irritates her skin, try a different brand or sunscreen with titanium dioxide or zinc oxide. If a rash develops, talk with your child's doctor.

Sunburns

When to call the doctor

If your baby is younger than 1 year and gets sunburn, call your baby's doctor right away. For older children, call your child's doctor if there is blistering, pain, or fever.

How to soothe sunburn

Here are 5 ways to relieve discomfort from mild sunburn.

1. Give your child water or 100% fruit juice to replace lost fluids.
2. Use cool water to help your child's skin feel better.
3. Give your child pain medicine to relieve painful sunburns. (For a baby 6 months or younger, give acetaminophen. For a child older than 6 months, give either acetaminophen or ibuprofen.)
4. Only use medicated lotions if your child's doctor says it is OK.
5. Keep your child out of the sun until the sunburn is fully healed.

About Indoor Tanning and Sunless Tanning Products

Many teens, especially girls and young women, go to tanning salons because a tan makes them feel more attractive and healthy. But tanning at a salon is dangerous! Like the natural sun, tanning beds give off UV rays that can cause sunburns and skin cancer. Tanning indoors is not safe for anyone—teens or adults!

Sunless tanning lotions, sprays, and airbrush tanning booths are popular too. These products contain a chemical that darkens the skin. The tan usually lasts for several days. However, all sunless tanning products can cause side effects such as skin rashes and irritation. They should also be kept away from the eyes, nose, and mouth. Most of these products do not include sunscreen, so skin is not protected from the real sun. Anyone using a sunless tanner must also use a sunscreen.

Sun Myths

Myth: Only people with light skin can get sunburn.

Fact: People with pale skin or light hair need to be more careful in the sun because they sunburn more easily compared to people with darker skin. However, most people can sunburn no matter what their skin color is. All people need to take steps to protect themselves from the sun's harmful rays.

Myth: A suntan is good for you.

Fact: A "base tan" does not protect you from getting sunburn. In fact, it may increase the chance you'll get sunburn because you may think that you can stay out in the sun longer. A tan is actually a sign of skin damage.

Myth: Only adults can get skin cancer, so putting sunscreen on children is not necessary.

Fact: While most of the people who get skin cancer are older, children, teens, and young adults can get it too. Also, too many sunburns and too much sun exposure over the years can cause not only skin cancer but also skin wrinkles and cataracts of the eye. Skin cancer is the most common form of cancer in the United States. According to the American Cancer Society, there are more than 3.5 million new cases of skin cancer each year.

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A Parent's Guide to Water Safety

Drowning is one of the top causes of injury and death in children. Children can drown in pools, rivers, ponds, lakes, or oceans. They can even drown in a few inches of water in bathtubs, toilets, and large buckets.

Here is information from the American Academy of Pediatrics (AAP) about how to keep your children safe in or around water.

Water Safety at Home

Parents need to keep a close eye on infants and young children, especially as they learn to crawl.

To keep your child safe, make sure you

- **Never leave your child alone in the bathtub—even for a moment.** Many bathtub drownings happen (even in a few inches of water) when a parent leaves a small child alone or with another young child. Also, bath seats are just bathing aids. Bath seats can tip over and your child can slip out of them, so they won't prevent drowning.
- **Empty water from containers, such as large pails and 5-gallon buckets, immediately after use.**
- **Keep bathroom doors closed.** Install doorknob covers or a hook-and-eye latch or other lock that is out of the reach of your small child.
- **Keep toilets closed.** Always close the toilet lid, and consider using a toilet lid latch.

Water Safety at the Pool

An adult should actively watch children at all times while they are in a pool. For infants and toddlers, an adult should be in the water and within arm's reach, providing "touch supervision." For older children, an adult should be paying constant attention and free from distractions, like talking on the phone, socializing, tending to household chores, or drinking alcohol. The supervising adult must know how to swim.

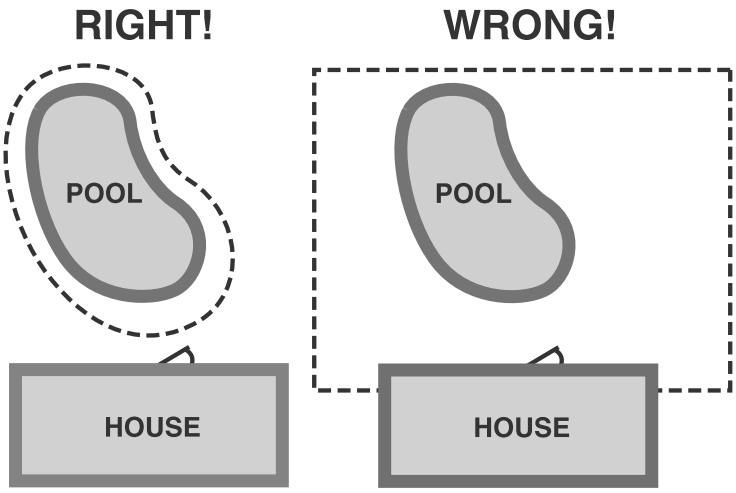
Pool Rules

If you have a pool, insist that the following rules are followed:

- No one, adult or child, should ever swim alone.
- Keep toys away from the pool when the pool is not in use.
- Empty small blow-up pools after each use.
- No tricycles or other riding toys at poolside.
- No electrical appliances near the pool.
- No diving in a pool that is not deep enough.
- No running on the pool deck.

Pool Fences

Children can climb out a window, climb though a doggy door, or sneak out a door to get to the backyard and the pool. To prevent small children from entering the pool area on their own, there should be a fence that completely surrounds the pool or spa. Combined with the watchful eyes of an adult, a fence is the best way to protect your child *and* other children who may visit or live nearby.



A fence should completely surround the pool, isolating it from the house.

Pool fences should also

- Be climb-resistant and not have anything alongside them (such as lawn furniture) that can be used to climb them.
- Be at least 4 feet high and have no footholds or handholds that could help a child climb them.
- Have no more than 4 inches between vertical slats. Chain-link fences are very easy to climb and are not recommended as pool fences. If they must be used, the diamond shape should not be bigger than 13/4 inches.
- Have a gate that is well maintained and is self-closing and self-latching. It should only open away from the pool. The latches should be higher than a child can reach—54 inches from the bottom of the gate.
- For aboveground pools always keep children away from steps or ladders. When the pool is not in use, lock or remove ladders to prevent access by children.

Other protection products, when used with an "isolation" fence, may be of some benefit; however, these are not substitutes for adequate fencing.

These may include

- Automatic pool covers (motorized covers operated by a switch). Pool covers should cover the entire pool so that a child can't slip under them. Make sure there is no standing water on top of the pool cover. Be aware that floating solar covers are *not* safety covers.
- Door alarms pool alarms, and window guards.
- Doors to the house that are self-closing or self-latching.

Swimming Lessons

Children need to learn to swim. The AAP supports swimming lessons for most children 4 years and older and for children 1 to 4 years of age who are ready to learn how to swim. Keep in mind that because children

Don't Drink and Swim

Swimmers are at serious risk of drowning when they drink alcohol or use other drugs while swimming, diving, and playing water sports. These activities require clear thinking, coordination, and the ability to judge distance, depth, speed, and direction. Alcohol impairs all of these skills. People who are supervising other swimmers should not be using alcohol or drugs.

develop at different rates, each child will be ready to swim at her own time. Also, swimming lessons do not provide "drown-proofing" for children of any age, so supervision and other layers of protection are necessary—even for children who have learned swimming skills.

Some factors you may consider before starting swimming lessons for younger children include frequency of exposure to water, emotional maturity, physical limitations, and health concerns related to swimming pools (for example, swallowing water, infections, pool chemicals). While some swim programs claim to teach water survival skills to infants younger than 12 months, evidence does not show that they are effective in preventing drowning.

Swim classes should be taught by qualified teachers. For children younger than 3 years, the World Aquatic Babies & Children Network recommends that parents must participate, the time the head is submerged underwater is limited (swallowing too much water can make your child sick), and classes should be fun and include one-on-one teaching.

Pool conditions should be monitored to make sure chemical and water temperature levels are safe. Another safety measure is to check with the pool operator if there are protective drain covers or vacuum release systems.

Diving

Serious spinal cord injuries, permanent brain damage, and death can occur to swimmers who dive into shallow water or spring upward on the diving board and hit it on the way down.

Keep safe by following these simple commonsense diving rules.

- Check how deep the water is. Enter the water feetfirst, especially when going in for the first time.
- Never dive into aboveground pools.
- Never dive into the shallow end of a pool.
- Never dive through inner tubes or other pool toys.
- Learn how to dive properly by taking classes.

Water Safety in Other Bodies of Water

Swimming in a pool is different from swimming in other bodies of water. In addition to rules for pool safety, parents and children should know the rules for swimming in oceans, lakes, ponds, rivers, and streams.

These include

- Never swim without adult supervision.
- Never dive into water unless an adult who knows the depth of the water says it's OK.
- Always use an approved personal flotation device (life jacket or life vest) when boating, riding on a personal watercraft, fishing, waterskiing, or playing in a river or stream. Water wings and other blow-up swimming aids should not be used in place of life jackets.
- Never try water sports such as skiing, scuba diving, or snorkeling without instructions from a qualified teacher.
- Never swim around anchored boats, in motorboat lanes, or where people are waterskiing.
- Never swim during electrical storms.
- If you swim or drift far from shore, stay calm and tread water, or float on your back until help arrives.
- Other water hazards found near many homes include canals, ditches, postholes, wells, fishponds, and fountains. Watch your child closely if he is playing near any of these areas.

Life Jackets and Life Preservers

If your family enjoys spending time on the water, make sure everyone wears an approved personal flotation device or life jacket. Some people think life jackets are hot, bulky, and ugly. However, today's models have improved in looks, comfort, and protection. Many states require the use of life jackets and life preservers. They must be present on all boats traveling in water supervised by the US Coast Guard. Remember, without wearing a life jacket, your child is not protected.

Keep the following tips in mind:

- A life jacket should not take the place of adult supervision.
- Choose a life jacket that fits your child's weight and age. It should be approved by the US Coast Guard and tested by Underwriters Laboratories (UL). Check the label to be sure. The label should also say whether the jacket is made for an adult or a child.
- Teach your child how to put on her own life jacket and make sure it is worn the right way.
- Blow-up water wings, toys, rafts, and air mattresses should never be used as life jackets or life preservers.

In an Emergency

Here are ways to be ready for an emergency.

- **Learn CPR.** Anyone caring for or watching children should know CPR (cardiopulmonary resuscitation). CPR can save a life and help reduce injury after a near drowning. The American Red Cross, the American Heart Association, and your local hospital or fire department offer CPR training.
- **Always have a phone near the pool.** Clearly post your local emergency phone number (usually 911).
- **Post safety and CPR instructions at poolside.**
- **Make sure all rescue equipment is nearby.** This includes a shepherd hook, safety ring, and rope.

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Car Safety Seats Guide

One of the most important jobs you have as a parent is keeping your child safe when your child is riding in a vehicle.

Each year, thousands of young children are killed or injured in car crashes. Proper use of car safety seats helps keep children safe. But, because so many different seats are on the market, many parents find this overwhelming. If you are expectant parents, consider working with a certified passenger safety technician (CPST or CPS technician) , before your baby is born, to ensure a safe ride home from the hospital. (See *If You Need Installation Help*.)

The type of seat your child needs depends on several things, including your child's age, size, and developmental needs. Here is more information from the American Academy of Pediatrics (AAP) about choosing the most appropriate car safety seat for your child. (See *Car Safety Seats Product Information* for a list of seats and manufacturer websites.)

> **NOTE:** The "Types of Car Safety Seats at a Glance" chart is a quick guide on where to start your search. It's important to continue your research to learn about each seat you use.

Installation Information—Seat Belts and LATCH

Car safety seats may be installed with either the vehicle's seat belt or its LATCH (lower anchors and tethers for children) system. LATCH is an attachment system for car safety seats. Lower anchors can be used instead of the seat belt to install the seat, and many parents find them easier to use in some cars. The top tether should always be used with a forward-facing seat, whether you use the seat belt or lower anchors to secure it. The seat belt and LATCH systems are equally safe, so caregivers should use one or the other, whichever works best for them, their car safety seat, and their vehicle. In general, caregivers should use only 1 of the 2 options, unless the car safety seat and vehicle manufacturers say it is OK to use both systems at the same time.

Vehicles with the LATCH system have lower anchors located in the back seat, where the seat cushions meet. Tether anchors are located behind the seat, either on the panel behind the seat (in sedans) or on the back of the seat, ceiling, or floor (in most minivans, SUVs, hatchbacks, and pickup trucks). All forward-facing car safety seats have tethers or tether connectors that fasten to these anchors. Nearly all passenger vehicles and all car safety seats made on or after September 1, 2002, are equipped to use LATCH. See vehicle owner's manual for highest weight of child allowed to use top tether.

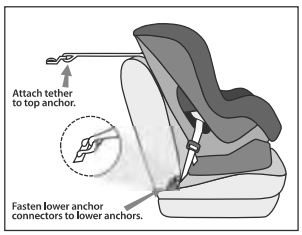

Figure 1. Car safety seat with LATCH (lower anchors and tethers for children).

All lower anchors are rated for a maximum weight of 65 pounds (total weight includes car safety seat and child). Parents should check the car safety seat manufacturer's recommendations for maximum weight a child can be to use lower anchors. New car safety seats have the maximum weight printed on their label.

> **NOTE: Seat belts**—If you install a car safety seat by using your vehicle's seat belt, you must make sure the seat belt locks to hold the seat tightly. In most newer cars, you can lock the seat belt by pulling it all the way out and then allowing it to retract to keep the seat belt tight around the car safety seat. In addition, many car safety seats have built-in lock-offs so you can lock the belt without having to lock the seat belt separately as well. Refer to the vehicle owner's manual for details about how your seat belt locks.
>
> **Middle of the back seat**—The safest place to ride for all children younger than 13 years is the back seat. If possible, it may be best for the child to ride in the middle of the back seat. However, it is sometimes difficult to install a car safety seat tightly in the middle if the vehicle seat is narrow or uneven. Also, many vehicles do not have lower anchors for the middle seating position. It is safest to put the car safety seat in a position where you can install it tightly with either the lower anchor system or the seat belt; in some cases, this position may be on either side of the back seat rather than in the middle. A child passenger safety technician (CPST or CPS technician) can help you decide which place is best to install your child's car safety seat in your vehicle.

Infants and Toddlers—Rear-Facing Seats

The AAP recommends that all infants ride rear facing starting with their first ride home from the hospital. All infants and toddlers should ride in a rear-facing seat as long as possible until they reach the highest weight or height allowed by their car safety seat manufacturer. Most convertible seats have limits that will allow children to ride rear facing for 2 years or more. When infants outgrow their rear-facing–only seat, a convertible seat installed rear facing is needed. All parents can benefit from getting installation help from a CPST to ensure that their child's seat is properly installed. (See *If You Need Installation Help*.)

Types of Rear-Facing Seats

Three types of rear-facing seats are available: rear-facing–only, convertible, and all-in-one. When children reach the highest weight or length allowed by the manufacturer of their rear-facing–only seat, they should continue to ride rear facing in a convertible or all-in-one seat.

1. Rear-facing–only seats

- Are used for infants up to 22 to 35 pounds, depending on the model.
- Are small and have carrying handles.
- Usually come with a base that can be left in the car. The seat clicks into and out of the base so you don't have to install the seat each time you use it. Parents can buy more than one base for additional vehicles.
- Should be used only for a child's travel (not sleeping, feeding, or any other use outside the vehicle).

Figure 2. Rear-facing–only car safety seat.

2. Convertible seats (used rear facing)

- Can be used rear facing and, later, "converted" to forward facing for older children when they outgrow either the weight limit or the length limit for rear facing. This means the seat can be used longer by your child. Convertible seats are bulkier than infant seats, however, and they do not come with carrying handles or separate bases and are designed to stay in the car.

Figure 3. Convertible car safety seat used rear facing.

Types of Car Safety Seats at a Glance		
Age-group	**Type of Seat**	**General Guidelines**
Infants and toddlers	Rear-facing–only Rear-facing convertible	All infants and toddlers should ride in a rear-facing seat until they reach the highest weight or height allowed by their car safety seat manufacturer. Most convertible seats have limits that will allow children to ride rear facing for 2 years or more.
Toddlers and preschoolers	Forward-facing convertible Forward-facing with harness	Children who have outgrown the rear-facing weight or height limit for their convertible seat should use a forward-facing seat with a harness for as long as possible, up to the highest weight or height allowed by their car safety seat manufacturer. Many seats can accommodate children up to 65 pounds or more.
School-aged children	Booster	All children whose weight or height exceeds the forward-facing limit for their car safety seat should use a belt-positioning booster seat until the vehicle seat belt fits properly, typically when they have reached 4 feet 9 inches in height and are 8 to 12 years of age. All children younger than 13 years should ride in the back seat.
Older children	Seat belts	When children are old enough and large enough for the vehicle seat belt to fit them correctly, they should always use lap and shoulder seat belts for the best protection. All children younger than 13 years should ride in the back seat.

- Many have higher limits in rear-facing weight (up to 40–50 pounds) and height than those of rear-facing–only seats, a feature that makes convertible seats ideal for bigger babies and toddlers.
- Have a 5-point harness that attaches at the shoulders, at the hips, and between the legs.
- Should be used only for a child's travel (not sleeping, feeding, or any other use outside the vehicle).

3. All-in-one seats (used rear facing)

- Can be used rear facing, forward facing, or as a belt-positioning booster. This means the seat may be used longer by your child as your child grows.
- Are often bigger in size, so it is important to check that they fit in the vehicle while they are rear facing.
- Do not have the convenience of a carrying handle or separate base; however, they may have higher limits in rear-facing weight (up to 40–50 pounds) and height than those of rear-facing–only seats, a feature that makes all-in-one seats ideal for bigger babies and toddlers.

Installation Tips for Rear-Facing Seats

Always read the vehicle owner's manual and the car safety seat manual before installing the seat.

When using a rear-facing seat, keep the following tips in mind:

- Place the harnesses in your rear-facing seat in slots that are at or below your child's shoulders.
- Ensure that the harness is snug (you cannot pinch any slack between your fingers when testing the harness straps over the child's shoulders) and that the chest clip is placed at the center of the chest, even with your child's armpits.
- Make sure the car safety seat is installed tightly in the vehicle with either lower anchors or a locked seat belt. Many car safety seats have an integrated lock-off to keep the seat belt locked. If your seat has one, follow the manufacturer's recommendations on how to use it. If you can move the seat at the belt path more than an inch side to side or front to back, it's not tight enough.
- Never place a rear-facing seat in the front seat of a vehicle that has an active front passenger airbag. If the airbag inflates, it will hit the back of the car safety seat, right against your child's head, and could cause serious injury or death.
- If you are using a convertible or all-in-one seat in the rear-facing position, make sure the seat belt or lower anchor webbing is routed through the correct belt path. Check the instructions that came with the car safety seat to be sure.
- Make sure the seat is at the correct angle so your child's head does not flop forward. Check the instructions to find out the correct angle for your seat and how to adjust the angle if needed. All rear-facing seats have built-in recline indicators.
- Check the car safety seat instructions and vehicle owner's manual about whether the car safety seat may contact the back of the vehicle seat in front of it.
- Still having trouble? Check with a certified CPST in your area who can help. See *If You Need Installation Help* for information on how to locate a CPST.

Common Questions

Q: What if my child's feet touch the back of the vehicle seat?

A: This is a very common concern of parents, but it should cause them no worry. Children are very flexible and can always easily find a comfortable position in a rear-facing seat. Injuries to the legs are very rare for children facing the rear.

Q: What do I do if my child slouches down or to the side in the car safety seat?

A: You can try placing a tightly rolled receiving blanket on both sides of your child. Many manufacturers allow the use of a tightly rolled small diaper or cloth between the crotch strap and your child, if necessary, to prevent slouching. Do not place padding under or behind your child or use any sort of car safety seat insert unless it came with the seat or was made by the manufacturer for use with that specific seat.

Figure 4. Car safety seat with a small cloth between the crotch strap and infant; chest clip positioned at the center of the chest, even with the infant's armpits; and tightly rolled receiving blankets on both sides of the infant.

Q: Why should I dress my child in thinner layers of clothing before strapping him into a car safety seat?

A: Bulky clothing, including winter coats and snowsuits, can compress in a crash and leave the straps too loose to restrain your child, leading to increased risk of injury. Ideally, dress your baby in thinner layers and wrap a coat or blanket around your baby over the buckled harness straps if needed.

Q: Do preemies need a special car safety seat?

A: A car safety seat should be approved for a baby's weight. Very small babies who can sit safely in a semi-reclined position usually fit better in rear-facing–only seats. Babies born preterm should be screened while still in the hospital to make sure they can sit safely in a semi-reclined position. Babies who need to lie flat during travel may be able to ride in a car bed that meets Federal Motor Vehicle Safety Standard 213. They should be screened again while in the hospital to make sure they can lie safely in the car bed.

Toddlers and Preschoolers—Forward-Facing Seats

Always read the vehicle owner's manual and the car safety seat manual before installing the seat.

Any child who has outgrown the rear-facing weight or height limit for her convertible seat should use a forward-facing seat with a harness for as long as possible, up to the highest weight or height allowed by her car safety seat manufacturer. It is best for children to ride in a seat with a harness as long as possible, at least to 4 years of age. If your child outgrows a seat before reaching 4 years of age, consider using a seat with a harness approved for higher weights and heights.

Types of Forward-Facing Car Safety Seat Restraints

Four types of car safety seat restraints can be used forward facing.

1. **Convertible seats**—Seats can "convert" from rear facing to forward facing. These include all-in-one seats.
2. **Combination seats with harness**—Seats can be used forward facing with a harness for children who weigh up to 40 to 65 pounds (depending on the model) or without the harness as a booster (up to 100–120 pounds, depending on the model).
3. **Integrated seats**—Some vehicles come with built-in forward-facing seats. Weight and height limits vary. Do not use a built-in seat until your child has reached the highest weight or height allowed for your rear-facing convertible car safety seat. Read your vehicle owner's manual for details about how to use these seats.

Figure 5. Forward-facing car safety seat with a harness.

4. **Travel vests**—Vests can be worn by children 22 to 168 pounds and can be an option to traditional forward-facing seats. They are useful for when a vehicle has lap-only seat belts in the rear, for children with certain special needs, or for children whose weight has exceeded that allowed by car safety seats. These vests usually require use of a top tether.

Installation Tips for Forward-Facing Seats

Always read the vehicle owner's manual and the car safety seat manual before installing the seat.

It is important that the car safety seat is installed tightly in the vehicle and that the harness fits your child snugly. To switch a convertible or all-in-one seat from rear facing to forward facing,

- Move the harness shoulder straps to the slots or position that is at or just above your child's shoulders. Check the instructions that came with the seat to be sure you are positioning the shoulder straps correctly.
- You may have to adjust the recline angle of the seat so that it sits more upright in your vehicle. Check the instructions to be sure.
- If using a seat belt, make sure it runs through the forward-facing belt path (be sure to follow car safety seat instructions) and that the seat belt is locked and tightened. Many car safety seats have an integrated lock-off to keep the seat belt locked. If your seat has one, follow the manufacturer's recommendations on how to use it.
- If using the lower anchors, make sure that the weight of your child plus the weight of the seat does not exceed 65 pounds. Most seats now state in the manual and on the stickers on the side the maximum child weight to use the anchors. If the child weighs too much, caregivers must use the seat belt to install.
- Always use the tether when you can. A tether is a strap that is attached to the top part of a car safety seat and holds the seat tightly by connecting to an anchor point in your vehicle (often on the seat back or rear shelf; see your vehicle owner's manual to find where tether anchors are in your vehicle). Tethers give important extra protection by keeping the car safety seat and your child's head from moving too far forward in a crash or sudden stop. All new cars, minivans, and light trucks are required to have tether anchors as of September 2000. Forward-facing seats come with tether straps. A tether should always be used as long as your child has not reached the top weight limit for the tether anchor. Check the car safety seat instructions and vehicle owner's manual for information about the top weight limit and locations of tether anchors.

Common Question

Q: What if I drive more children than those who can be buckled safely in the back seat?

A: It's best to avoid this, especially if your vehicle has airbags in the front seat. All children younger than 13 years should ride in the back seat. If absolutely necessary, a child in a forward-facing seat with a harness may be the best choice to ride in front. Just be sure the vehicle seat is moved as far back away from the dashboard (and airbag) as possible.

School-aged Children—Booster Seats

Booster seats are for older children who have outgrown their forward-facing seats. All children whose weight or height exceeds the forward-facing limit for their car safety seat should use a belt-positioning booster seat until the vehicle seat belt fits properly, typically when they have reached 4 feet 9 inches in height and are 8 to 12 years of age. Most children will not fit in most vehicle seat belts without a booster until 10 to 12 years of age. All children younger than 13 years should ride in the back seat. Instructions that come with your car safety seat will tell you the height and weight limits for the seat. As a general guideline, a child has outgrown a forward-facing seat when any of the following situations is true:

Figure 6. Belt-positioning booster seat.

- He reaches the top weight or height allowed for his seat with a harness. (These limits are listed on the seat and in the instruction manual.)
- His shoulders are above the top harness slots.
- The tops of his ears have reached the top of the seat.

Types of Booster Seats

High-back and backless are 2 standard types of booster seats. They do not come with a harness but are used with lap and shoulder seat belts in your vehicle, the same way an adult rides. They are designed to raise a child up so that lap and shoulder seat belts fit properly over the strongest parts of the child's body.

Most booster seats are not secured to the vehicle seat with the seat belt or lower anchors and tether but simply rest on the vehicle seat and are held in place once the seat belt is fastened over a child. However, some models of booster seats can be secured to the vehicle seat and kept in place by using the lower anchors and tether along with lap and shoulder belts. (Currently, only a few vehicle manufacturers offer integrated booster seats.)

Installation Tips for Booster Seats

When using a booster seat, always read the vehicle owner's manual and the car safety seat manual before installing the seat. Booster seats often have a plastic clip or guide to correctly position vehicle lap and shoulder belts. See the booster seat instruction manual for directions on how to use the clip or guide.

Booster seats must be used with lap and shoulder belts. When using a booster seat, make sure

- The lap belt lies low and snug across your child's upper thighs.
- The shoulder belt crosses the middle of your child's chest and shoulder and is off the neck.

If your booster seat has lower anchors or tether attachments, check its manual for installation instructions.

Common Questions

Q: What if my car has only lap belts in the back seat?

A: Lap belts work fine with rear-facing–only, convertible, and forward-facing seats that have a harness but can never be used with a booster seat. If your car has only lap belts, use a forward-facing seat that has a harness and higher weight limits. You could also

- Check to see if shoulder belts can be installed in your vehicle.
- Use a travel vest (check the manufacturer's instructions about the use of lap belts only and about the use of lap and shoulder belts).
- Consider buying another car with lap and shoulder belts in the back seat.

Figure 7. Lap and shoulder seat belts.

Q: What is the difference between high-back boosters and backless boosters?

A: Both types of boosters are designed to raise your child so seat belts fit properly, and both will reduce your child's risk of injury in a crash. High-back boosters should be used in vehicles without headrests or with low seat backs. Many seats that look like high-back boosters are actually combination seats. They come with harnesses that can be used for smaller children and, later, removed for older children. Backless boosters are usually less expensive and are easier to move from one vehicle to another. Backless boosters can be used safely in vehicles with headrests and high seat backs.

Older Children—Seat Belts

Seat belts are made for adults. Children should stay in a booster seat until adult seat belts fit correctly, typically when children reach about 4 feet 9 inches in height and are 8 to 12 years of age. Most children will not fit in a seat belt alone until 10 to 12 years of age. When children are old enough and large enough to use the vehicle seat belt alone, they should always use lap and shoulder seat belts for the best protection. All children younger than 13 years should ride in the back seat.

Using a Seat Belt

1. An adult seat belt fits correctly when

- The shoulder belt lies across the middle of the chest and shoulder, not the neck or throat.
- The lap belt is low and snug across the upper thighs, not the belly.
- Your child is tall enough to sit against the vehicle seat back with her knees bent over the edge of the seat without slouching and can comfortably stay in this position throughout the trip.

2. Other points to keep in mind when using seat belts include

- Make sure your child does not tuck the shoulder belt under her arm or behind her back. This leaves the upper body unprotected and adds extra slack to the seat belt system, putting your child at risk of severe injury in a crash or with sudden braking.
- Never allow anyone to "share" seat belts. All passengers must have their own car safety seats or seat belts.

Common Question

Q: I've seen products that say they can help make the seat belt fit better. Should we get one of these?

A: No, these products are unapproved and should not be used. They may actually interfere with proper seat belt fit by causing the lap belt to ride too high on the stomach or making the shoulder belt too loose. They can even damage the seat belt. This rule applies to car safety seats too; do not use extra products unless they came with the seat or are specifically approved by the seat manufacturer. These products are not covered by any federal safety standards, and the AAP does not recommend they be used. As long as children are riding in the correct restraint for their size, they should not need to use additional devices.

Shopping for Car Safety Seats

When shopping for a car safety seat, keep the following tips in mind:

- No one seat is the "best" or "safest." The best seat is the one that fits your child's size, is correctly installed, fits well in your vehicle, and is used properly every time you drive.
- Don't decide by price alone. A higher price does not mean the seat is safer or easier to use.
- Avoid used seats if you don't know the seat's history. Never use a car safety seat that
  - Is too old. Look on the label for the date the seat was made. Check with the manufacturer to find out how long it recommends using the seat.
  - Has any visible cracks on it.
  - Does not have a label with the date of manufacture and model number. Without these, you cannot check to see if the seat has been recalled.

- Does not come with instructions. You need them to know how to use the seat. Instructions can be found on manufacturer websites or by contacting the manufacturer.
- Is missing parts. Used car safety seats often come without important parts. Check with the manufacturer to make sure you can get the right parts.
- Was recalled. You can find out by calling the manufacturer or contacting the National Highway Traffic Safety Administration (NHTSA) Vehicle Safety Hotline at 888/327-4236. You can also visit the NHTSA website at www.safercar.gov.

- Do not use seats that have been in a moderate or severe crash. Seats that were in a minor crash may still be safe to use, but some car safety seat manufacturers recommend replacing the seat after any crash, even a minor one. The NHTSA considers a crash minor if all the following situations are true:
  - The vehicle could be driven away from the crash.
  - The vehicle door closest to the car safety seat was not damaged.
  - No one in the vehicle was injured.
  - The airbags did not go off.
  - You can't see any damage to the car safety seat.

If you have specific questions about the car safety seat, contact the manufacturer. See *Manufacturer Websites*.

About Airbags

- **Front airbags are installed in all new cars.** When used with seat belts, airbags work well to protect teenagers and adults; however, airbags can be very dangerous to children, particularly to those riding in rear-facing seats and to preschoolers and young school-aged children who are not properly restrained. If your vehicle has a front passenger airbag, infants in rear-facing seats must ride in the back seat. Even in a relatively low-speed crash, the airbag can inflate, strike the car safety seat, and cause serious brain injury and death.

  Vehicles with no back seat or a back seat that is not made for passengers are not the best choice for traveling with small children; however, the airbag can be turned off in some of these vehicles if the front seat is needed for a child passenger. See your vehicle owner's manual for more information.

- **Side airbags are available in most new cars.** Side airbags improve safety for adults in side-impact crashes. Read your vehicle owner's manual for more information about the airbags in your vehicle. Read your car safety seat instructions and the vehicle owner's manual for guidance on placing the seat next to a side airbag.

About Carpooling

If your child is being driven by someone else, make sure

- The car safety seat your child will be using fits properly in the vehicle used for transport.
- The car safety seat being used is appropriate for the age and size of your child.
- The person in charge of transporting your child knows how to install and use the car safety seat correctly.

Child care programs and schools should have written guidelines for transporting children, including

- All drivers must have a valid driver's license. In some states, school bus drivers need to have a special type of license.
- Staff to child ratios for transport should meet or exceed those required for the classroom.
- Every child should be supervised during transport, either by school staff or a parent volunteer, so the driver can focus on driving.
- School staff, teachers, and drivers should know what to do in an emergency, know how to properly use car safety seats and seat belts, and be aware of other safety requirements.

About Car Safety Seats on Airplanes

The Federal Aviation Administration (FAA) and the AAP recommend that children less than 40 pounds be securely fastened in certified child restraints when flying. This will help keep them safe during takeoff and landing or in case of turbulence. Most rear-facing, convertible, and forward-facing seats can be used on airplanes, but booster seats and travel vests cannot.

Read your seat's instruction manual and look for a label on the car safety seat that says, "This restraint is certified for use in motor vehicles and aircraft." You can also consider using a restraint made only for use on airplanes and approved by the FAA. Larger children may use the airplane seat belt or continue to use their car safety seat on the airplane as long as it is labeled for use on aircraft and the child has not exceeded the seat's weight or height limit. Remember that your child will need an appropriate car safety seat to use at your destination. For more information, visit the FAA website at www.faa.gov/travelers/fly_children or the CARES (Airplane Safety Harness for Children) website at www.kidsflysafe.com.

If You Need Installation Help

If you have questions or need help with installing your car safety seat, find a certified child passenger safety technician (CPST or CPS technician). Lists of certified CPSTs and child seat–fitting stations are available on the following websites:

National Child Passenger Safety Certification
https://cert.safekids.org (Click on "Find a Tech" or call 877/366-8154.)

Includes list of CPSTs fluent in Spanish and other languages or with extra training in transportation of children with special needs.

NHTSA Parents and Caregivers
www.safercar.gov/parents/index.htm

Important Reminders

1. **Be a good role model.** Make sure you always wear your seat belt. This will help your child form a lifelong habit of buckling up.
2. **Make sure that everyone who transports your child uses the correct car safety seat or seat belt on every trip, every time.** Being consistent with car safety seat use is good parenting, reduces fussing and complaints, and is safest for your child.
3. **Never leave your child alone in or around cars, and lock your vehicle when it is not in use.** Any of the following situations can happen when a child is left alone in or around a vehicle. A child can
   - Die of heatstroke because temperatures can reach deadly levels in minutes.
   - Be strangled by power windows, retracting seat belts, sunroofs, or accessories.
   - Knock the vehicle into gear, setting it into motion.
   - Be backed over when the vehicle backs up.
   - Become trapped in the trunk of the vehicle.

4. **Always read and follow the manufacturer's instructions for your car safety seat.** If you do not have those, write or call the company's customer service department. Staff will ask you for the model number, name of seat, and date of manufacture. The manufacturer's address and phone number are on a label on the seat. Also, be sure to follow the instructions in your vehicle owner's manual about using car safety seats. Some manufacturers' instructions may be available on their websites.
5. **Remember to fill out and mail in the registration card that comes with the car safety seat.** You can also register your seat on the manufacturer's website. It will be important in case the seat is recalled.
6. **Follow manufacturer directions for cleaning car seats.** Cleaning but not disinfecting is usually permitted because disinfectant products may decrease the protection provided by the seat and harnesses.

Figure 1 adapted from US Department of Transportation, National Highway Traffic Safety Administration (NHTSA). *LATCH Makes Child Safety Seat Installation as Easy as 1-2-3*. Washington, DC: NHTSA; 2011. DOT HS publication 809 489.

Figures 2, 3, 5, 6, and 7 by Anthony Alex LeTourneau.

Figure 4 from Bull MJ, Engle WA; American Academy of Pediatrics Committee on Injury, Violence, and Poison Prevention and Committee on Fetus and Newborn. Safe transportation of preterm and low birth weight infants at hospital discharge.Pediatrics. 2009;123(5):1424–1429.

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Teething: What you Need to Know

First tooth

- The average age a baby's first tooth appears is 6-12 months. Typically, the lower front teeth appear first (lower central incisors). Most children will have all of their teeth by age 3.
- Recent studies have shown that a true fever > 100.4 degrees Fahrenheit is *not* associated with teething. A fever is a sign of illness or infection and you may need to speak with your pediatrician if your baby has a fever and is uncomfortable.

Fluoride in water

- Fluoride helps prevent tooth decay by hardening the enamel of teeth.
- Most counties have added fluoride to drinking water.
- It is important to offer your baby water in a sippy cup once your baby begins solids foods around 6 months of age. A good rule of thumb for recommended daily water intake is half your child's weight in ounces (ie. 20 lbs then 10 oz per day).
- Fluoride is not typically found in all bottled waters so please check the label.

Toothpaste and the Dentist

- It is recommended by the AAP to begin brushing your baby's first teeth w/ toothpaste.
- Brush you baby's teeth twice daily with a *smear or size-of-a-rice-grain* amount of fluoride-containing toothpaste.
- Fluorosis (discoloration of the permanent teeth) may be a concern if you use too much fluoride-containing toothpaste with each brushing. Therefore, ensure that you are using only this small amount each time.
- Once your child can spit out the toothpaste, which is usually around age 3, you can transition to a pea-sized amount of fluoride-containing toothpaste with each brushing.
- It is also recommended that your child begin dental visits at age 1.

How to soothe teething pain in a safe way

- Some children may have very minimal discomfort with teething or no problems at all!
- If your child does seem to be bothered by teething pain you can help ease the pain w/ massaging your baby's gums with clean fingers, solid (not liquid-filled) teething rings, teething-nets filled with small pieces of frozen fruits, or a frozen wet washcloth.
- If you offer a frozen food (ie. bagel) or teething biscuit, make sure to watch your child as he may break off chunks which could result in choking. Some of these foods are high in sugar and offer no nutritional value, so please check the labels.
- **AVOID TEETHING TABLETS, GELS, OILS, AND AMBER NECKLACES**
    - Gels, oils, and tablets typically contain benzocaine and belladona which both have significant side effects including death. They may contain other herbal ingredients that could be dangerous and never received rigorous FDA testing to determine potential side effects and benefits.
    - Necklaces place your child at risk of strangulation and can be a potential choking hazard. In addition to these risks, there is not any data to suggest these necklaces are beneficial.
- If your child seems uncomfortable despite above measures, speak with your pediatrician about Tylenol or ibuprofen. Ibuprofen should NOT be used in infants less than 6 months.

Fluoride Varnish: What Parents Need to Know

Healthy gums and teeth are important to your child's overall health. This is why your child's doctor will talk with you about good dental habits even before your child's first tooth appears.

Once your child has a tooth, your doctor may recommend that your child receive fluoride varnish treatments in the pediatrician's office to help prevent tooth decay. This can be done 2 to 4 times per year. The number of treatments depends on how likely it is that your child may get a cavity.

Pediatricians are trained to apply fluoride varnish because many young children do not see or have access to a dentist until they are older. If your child is seeing a dentist at a young age, as recommended by the American Academy of Pediatrics, fluoride varnish may be applied in a dental office instead.

Read on for more information from the American Academy of Pediatrics about fluoride varnish.

What is Fluoride Varnish?

Fluoride varnish is a dental treatment that can help prevent tooth decay, slow it down, or stop it from getting worse. Fluoride varnish is made with fluoride, a mineral that can strengthen tooth enamel (outer coating on teeth).

Keep in mind that fluoride varnish treatments cannot completely prevent cavities. Fluoride varnish treatments can best help prevent decay when a child is also brushing using the right amount of toothpaste with fluoride, flossing regularly, getting regular dental care, and eating a healthy diet.

Is Fluoride Varnish Safe?

Fluoride varnish is safe and used by dentists and doctors all over the world to help prevent tooth decay in children. Only a small amount is used, and hardly any fluoride is swallowed. It is quickly applied and hardens. Then it is brushed off after 4 to 12 hours.

Some brands of fluoride varnish make teeth look yellow. Other brands make teeth look dull. However, the color of your child's teeth will return to normal after the fluoride varnish is brushed off. Most children like the taste.

How is Fluoride Varnish Put on the Teeth?

Fluoride varnish is painted on the top and sides of each tooth with a small brush. It is sticky but hardens once it comes in contact with saliva. Your child may feel the hardened varnish with his tongue but will not be able to lick the varnish off.

It does not hurt when the varnish is applied. However, young children may still cry before or during the procedure. Fortunately, brushing on the varnish takes only a few minutes. Also, applying the varnish may be easier when a child is crying because his mouth will be slightly open.

You may be asked to hold your child in your lap while you are placed knee-to-knee with the person applying the varnish.

How Do I Care for My Child's Teeth After Fluoride Varnish is Applied?

Here are general guidelines on how to care for your child's teeth after fluoride varnish is applied. Check with your child's doctor for any other special instructions.

- Your child can eat and drink right after the fluoride varnish is applied. But only give your child soft foods and cold or warm (not hot) foods or liquids.
- Do not brush or floss teeth for at least 4 to 6 hours. Your child's doctor may tell you to wait until the next morning to brush or floss. Remind your child to spit when rinsing, if he knows how to spit.

Remember:
Steps to good dental health include:

- Regular care by a dentist trained to treat young children
- Getting enough fluoride
- Regular brushing and flossing
- Eating right

The American Academy of Pediatrics recommends that all infants receive oral health risk assessments by 6 months of age. Infants at higher risk of early dental caries should be referred to a dentist as early as 6 months of age and no later than 6 months after the first tooth erupts or 12 months of age (whichever comes first) to establish their dental home. Every child should have a dental home established by 12 months of age.

Additional Information:

- Water Fluoridation
- Fluorosis Facts: Information for Parents & Caregivers
- FAQs Fluoride and Children

Last Updated: 11/21/2015

Getting Your Baby to Sleep

What's the best way to get my child to go to sleep?

Babies

Babies do not have regular sleep cycles until about 6 months of age. While newborns sleep about 16 to 17 hours per day, they may only sleep 1 or 2 hours at a time. As babies get older, they need less sleep. However, different babies have different sleep needs. It is normal for a 6-month-old to wake up during the night but go back to sleep after a few minutes.

Here are some suggestions that may help your baby (and you) sleep better at night:

1. **Keep your baby calm and quiet when you feed or change her during the night**. Try not to stimulate or wake her too much.
2. **Make daytime playtime**. Talking and playing with your baby during the day will help lengthen her awake times. This will help her sleep for longer periods during the night.
3. **Put your baby to bed when drowsy but still awake**. This will help your baby learn to fall asleep on her own in her own bed. Holding or rocking her until she is completely asleep may make it hard for her to go back to sleep if she wakes up during the night.
4. **Wait a few minutes before responding to your child's fussing.** See if she can fall back to sleep on her own. If she continues to cry, check on her, but don't turn on the light, play with her, or pick her up. If she gets frantic or is unable to settle herself, consider what else might be bothering her. She may be hungry, wet or soiled, feverish, or otherwise not feeling well.

Toddlers and preschoolers

Many parents find their toddler's bedtime to be the hardest part of the day. Children this age often resist going to sleep, especially if they have older siblings who are still awake.

Use the following tips to help your toddler develop good sleep habits:

1. **Set up a quiet routine before bedtime** to help your child understand that it will soon be time to go to sleep. Use this time to read him a story, listen to quiet music, or give him a bath. It may be tempting to play with your child before bed. However, active play may make your child too excited to sleep.
2. **Be consistent**. Make bedtime the same time every night. This helps your child know what to expect and helps him establish healthy sleep patterns.
3. **Allow your child to take a favorite thing to bed each night**. It's OK to let your child sleep with a teddy bear, special blanket, or some other favorite toy. These often help children fall asleep—especially if they wake up during the night. Make sure the object is safe. Look for ribbons, buttons, or other parts that may be choking hazards. Stuffing or pellets inside stuffed toys can also be dangerous.

4. **Make sure your child is comfortable**. He may like to have a drink of water, a light left on, or the door left slightly open. Try to handle your child's needs before bedtime so that he doesn't use them to avoid going to sleep.
5. **Do not let your child sleep in the same bed with you**. This can make it harder for him to fall asleep when he is alone.
6. **Do not return to your child's room every time he complains or calls out**. Instead, try the following:
    1. Wait several seconds before answering and make your response time longer each time he calls. This will give him a chance to fall asleep on his own.
    2. Reassure your child that you are there. If you need to go into the room, do not turn on the light, play with him, or stay too long.
    3. Move farther from your child's bed every time you go in, until you can reassure him verbally without entering his room.
    4. Remind him each time he calls that it's time to go to sleep.
7. **Give it time**. Helping your child develop good sleep habits can be a challenge, and it is normal to get upset when a child keeps you awake at night. Try to be understanding. A negative response by a parent can sometimes make a sleep problem worse.

Last Updated: 7/16/2018

Fever – Myths vs Facts

Many parents have false beliefs (myths) about fever. They think fever will hurt their child. They worry and lose sleep when their child has a fever. This is called fever phobia. In fact, fevers are harmless and often helpful. Let these facts help you better understand fever.

MYTH. My child feels warm, so she has a fever.
FACT. Children can feel warm for a many reasons. Examples are playing hard, crying, getting out of a warm bed or hot weather. They are "giving off heat." Their skin temperature should return to normal in about 20 minutes. About 80% of children who act sick and feel warm do have a fever. If you want to be sure, take the temperature. These are the cutoffs for fever using different types of thermometers:

- Rectal (bottom), ear or forehead temperature: 100.4° F (38.0° C) or higher
- Oral (mouth) temperature: 100° F (37.8° C) or higher
- Under the arm (Armpit) temperature: 99° F (37.2° C) or higher

MYTH. All fevers are bad for children.
FACT. Fevers turn on the body's immune system. They help the body fight infection. Normal fevers between 100° and 104° F (37.8° - 40° C) are good for sick children.

MYTH. Fevers above 104° F (40° C) are dangerous. They can cause brain damage.
FACT. Fevers with infections don't cause brain damage. Only temperatures above 108° F (42° C) can cause brain damage. It's very rare for the body temperature to climb this high. It only happens if the air temperature is very high. An example is a child left in a closed car during hot weather.

MYTH. Anyone can have a seizure triggered by fever.
FACT. Only 4% of children can have a seizure with fever.

MYTH. Seizures with fever are harmful.
FACT. These seizures are scary to watch, but they stop within 5 minutes. They don't cause any permanent harm. They don't increase the risk for speech delays, learning problems, or seizures without fever.

MYTH. All fevers need to be treated with fever medicine.
FACT. Fevers only need to be treated if they cause discomfort (makes your child feel bad). Most fevers don't cause discomfort until they go above 102° or 103° F (39° or 39.5° C).

MYTH. Without treatment, fevers will keep going higher.
FACT. Wrong, because the brain knows when the body is too hot. Most fevers from infection don't go above 103° or 104° F (39.5°- 40° C). They rarely go to 105° or 106° F (40.6° or 41.1° C). While these are "high" fevers, they also are harmless ones.

MYTH. With treatment, fevers should come down to normal.
FACT. With treatment, most fevers come down 2° or 3° F (1° or 1.5° C).

MYTH. If you can't "break the fever", the cause is serious.
FACT. Fevers that don't come down to normal can be caused by viruses or bacteria. The response to fever medicines tells us nothing about the cause of the infection.

MYTH. Once the fever comes down with medicines, it should stay down.
FACT. It's normal for fevers with most viral infections to last for 2 or 3 days. When the fever medicine wears off, the fever will come back. It may need to be treated again. The fever will go away and not return once the body overpowers the virus. Most often, this is day 3 or 4.

MYTH. If the fever is high, the cause is serious.
FACT. If the fever is high, the cause may or may not be serious. If your child looks very sick, the cause is more likely to be serious.

MYTH. The exact number of the temperature is very important.
FACT. How your child looks and acts is what's important. The exact temperature number is not.

MYTH. Oral temperatures between 98.7° and 100° F (37.1° to 37.8° C) are low-grade fevers.
FACT. These temperatures are normal. The body's normal temperature changes throughout the day. It peaks in the late afternoon and evening. A true low-grade fever is 100° F to 102° F (37.8° - 39° C).

SUMMARY. Keep in mind that fever is fighting off your child's infection. Fever is one of the good guys.

Penile Adhesions in the *Circumcised* Penis

The first few years of life it is common for the head of the penis to stick to the skin on the end of the penis shaft. This is called penile adhesions, and is not a serious problem. Usually if left alone it will self resolve by 3 years of age. Forcefully pulling back on the adhesions (stuck tissues) causes pain and bleeding and is *not* recommended.

Why does this happen?
The fat pad above the penis grows a lot during the infant years. This makes the penis appear to shrink as it is swallowed up by the fat pad. This allows the skin of the penis to rub against the head of the penis. Small irritations occur on the skin surface, causing it to stick to the surrounding tissues.

Why does it look like cottage cheese along the edge?
The cells on the surface of the glans and inside the foreskin are discarded normally, like other cells of the body. Routine cleaning can prevent the accumulation of these cells. If these cells accumulate, they form a white cheesy substance called smegma. Adhesions usually do not cause any problems and no treatment is necessary, even if smegma develops. If this happens, you might notice white pearly, cheesy, smegma coming out of the edge of the adhesion. This does not require treatment. If it becomes red and swollen, make an appointment with your doctor.

How do I prevent this from happening?
As boys build up baby fat, they tend to get a large fat pad at the base of the penis. The penis often hides in the fat pad. You should push down on the fat pad near the base of the penis to expose the penis for cleaning with bathing. If you notice that the skin starts to "stick" to the head of the penis (aka the glans), put petrolatum jelly in the area several times per day to prevent more adhesions.

As your son becomes able, teach him to clean his own penis with normal bathing.

Source: https://pediatricpartnerskc.com/Education/Illnesses-Symptoms/Penile-Adhesions

Care of the Uncircumcised Penis

At birth, boys have skin that covers the end of the penis, called the foreskin. One choice you will make for your new baby boy is whether to have him circumcised. Circumcision is a surgical procedure that removes the foreskin, exposing the tip of the penis.

If your son is not circumcised, the following are things you should know and teach your son as he gets older.

How do I clean my baby's foreskin?

In the first few months, clean your baby's penis with soap and warm water. Cotton swabs or antiseptics are not necessary. *Do not pull back the foreskin* if it's still attached.

When will the foreskin retract?

In the first several years your son's foreskin will separate from the tip of the penis. Some foreskins separate soon after birth or even before birth, but this is rare. When it happens is different for every child. It may take a few weeks, months, or years. Once this happens, the foreskin can be pulled back away from the tip of the penis. This is called *foreskin retraction.*

Most boys will be able to retract their foreskins by the time they are 5 years old, yet others will not be able to until the teen years. As a boy becomes more aware of his body, he will most likely discover how to retract his own foreskin. But foreskin retraction should never be forced. Until the foreskin fully separates, do not try to pull it back. Forcing the foreskin to retract before it is ready can cause severe pain, bleeding, and tears in the skin.

What is the white stuff under the foreskin?

When the foreskin separates from the head of the penis, skin cells are shed. These skin cells may look like white, pearl-like lumps under the foreskin. These are called *smegma.* Smegma is normal and nothing to worry about.

Is there anything special I need to teach my son?

If your son's foreskin separates before he reaches puberty, an occasional retraction with cleansing beneath will do. Once your son starts puberty, he should clean beneath his foreskin as part of his daily routine, just like washing his hair and brushing his teeth.

Teach your son to clean his foreskin in the following way:

- **Step 1:** Gently pull the foreskin back away from the end of the penis.
- **Step 2:** Rinse underneath the foreskin with soap and warm water.
- **Step 3:** Pull the foreskin back over the penis.

Is there anything else I should watch for?

While your son is still a baby, make sure the hole in the foreskin is large enough for him to urinate normally. Talk with your pediatrician if

- The urine stream is never more than a trickle.
- Your baby seems uncomfortable while urinating.
- The foreskin becomes considerably red or swollen.

From your doctor

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Web site—www.HealthyChildren.org

Your baby at 4 months

Baby's Name _____ **Baby's Age** _____ **Today's Date** _____

Milestones matter! How your baby plays, learns, speaks, acts, and moves offers important clues about his or her development. Check the milestones your baby has reached by 4 months. Take this with you and talk with your baby's doctor at every well-child visit about the milestones your baby has reached and what to expect next.

What most babies do by this age:

Social/Emotional Milestones

- ☐ Smiles on his own to get your attention
- ☐ Chuckles (not yet a full laugh) when you try to make her laugh
- ☐ Looks at you, moves, or makes sounds to get or keep your attention

Language/Communication Milestones

- ☐ Makes sounds like "oooo", "aahh" (cooing)
- ☐ Makes sounds back when you talk to him
- ☐ Turns head towards the sound of your voice

Cognitive Milestones (learning, thinking, problem-solving)

- ☐ If hungry, opens mouth when she sees breast or bottle
- ☐ Looks at his hands with interest

Movement/Physical Development Milestones

- ☐ Holds head steady without support when you are holding her
- ☐ Holds a toy when you put it in his hand
- ☐ Uses her arm to swing at toys
- ☐ Brings hands to mouth
- ☐ Pushes up onto elbows/forearms when on tummy

Other important things to share with the doctor...

- What are some things you and your baby do together?
- What are some things your baby likes to do?
- Is there anything your baby does or does not do that concerns you?
- Has your baby lost any skills he/she once had?
- Does your baby have any special healthcare needs or was he/she born prematurely?

You know your baby best. Don't wait. If your baby is not meeting one or more milestones, has lost skills he or she once had, or you have other concerns, act early. Talk with your baby's doctor, share your concerns, and ask about developmental screening. If you or the doctor are still concerned:

1. Ask for a referral to a specialist who can evaluate your baby more; and
2. Call your state or territory's early intervention program to find out if your baby can get services to help. Learn more and find the number at **cdc.gov/FindEI**.

For more on how to help your baby, visit **cdc.gov/Concerned**.

Don't wait.
Acting early can make a real difference!

CDC Centers for Disease Control and Prevention

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Help your baby learn and grow

As your baby's first teacher, you can help his or her learning and brain development. Try these simple tips and activities in a safe way. Talk with your baby's doctor and teachers if you have questions or for more ideas on how to help your baby's development.

- Respond positively to your baby. Act excited, smile, and talk to him when he makes sounds. This teaches him to take turns "talking" back and forth in conversation.
- Provide safe opportunities for your baby to reach for toys, kick at toys and explore what is around her. For example, put her on a blanket with safe toys.
- Allow your baby to put safe things in his mouth to explore them. This is how babies learn. For example, let him see, hear, and touch things that are not sharp, hot, or small enough to choke on.
- Talk, read, and sing to your baby. This will help her learn to speak and understand words later.
- Limit screen time (TV, phones, tablets, etc.) to video calling with loved ones. Screen time is not recommended for children younger than 2 years of age. Babies learn by talking, playing, and interacting with others.
- Feed only breast milk or formula to your baby. Babies are not ready for other foods, water or other drinks for about the first 6 months of life.
- Give your baby safe toys to play with that are easy to hold, like rattles or cloth books with colorful pictures for her age.
- Let your baby have time to move and interact with people and objects throughout the day. Try not to keep your baby in swings, strollers, or bouncy seats for too long.
- Set steady routines for sleeping and feeding.
- Lay your baby on her back and show her a bright-colored toy. Move the toy slowly from left to right and up and down to see if she watches how the toy moves.
- Sing and talk to your baby as you help her "exercise" (move her body) for a few minutes. Gently bend and move her arms and legs up and down.

To see more tips and activities download CDC's Milestone Tracker app.

This milestone checklist is not a substitute for a standardized, validated developmental screening tool. These developmental milestones show what most children (75% or more) can do by each age. Subject matter experts selected these milestones based on available data and expert consensus.

www.cdc.gov/ActEarly | 1-800-CDC-INFO (1-800-232-4636)

Download CDC's free *Milestone Tracker* app

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Learn the Signs. Act Early.

Your baby at 6 months

Baby's Name _____ **Baby's Age** _____ **Today's Date** _____

Milestones matter! How your baby plays, learns, speaks, acts, and moves offers important clues about his or her development. Check the milestones your baby has reached by 6 months. Take this with you and talk with your baby's doctor at every well-child visit about the milestones your baby has reached and what to expect next.

What most babies do by this age:

Social/Emotional Milestones

- ☐ Knows familiar people
- ☐ Likes to look at himself in a mirror
- ☐ Laughs

Language/Communication Milestones

- ☐ Takes turns making sounds with you
- ☐ Blows "raspberries" (sticks tongue out and blows)
- ☐ Makes squealing noises

Cognitive Milestones (learning, thinking, problem-solving)

- ☐ Puts things in her mouth to explore them
- ☐ Reaches to grab a toy he wants
- ☐ Closes lips to show she doesn't want more food

Movement/Physical Development Milestones

- ☐ Rolls from tummy to back
- ☐ Pushes up with straight arms when on tummy
- ☐ Leans on hands to support himself when sitting

Other important things to share with the doctor...

- What are some things you and your baby do together?
- What are some things your baby likes to do?
- Is there anything your baby does or does not do that concerns you?
- Has your baby lost any skills he/she once had?
- Does your baby have any special healthcare needs or was he/she born prematurely?

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Help your baby learn and grow

As your baby's first teacher, you can help his or her learning and brain development. Try these simple tips and activities in a safe way. Talk with your baby's doctor and teachers if you have questions or for more ideas on how to help your baby's development.

- Use "back and forth" play with your baby. When your baby smiles, you smile; when he makes sounds, you copy them. This helps him learn to be social.
- "Read" to your baby every day by looking at colorful pictures in magazines or books and talk about them. Respond to her when she babbles and "reads" too. For example, if she makes sounds, say "Yes, that's the doggy!"
- Point out new things to your baby and name them. For example, when on a walk, point out cars, trees, and animals.
- Sing to your baby and play music. This will help his brain develop.
- Limit screen time (TV, tablets, phones, etc.) to video calling with loved ones. Screen time is not recommended for children younger than 2 years of age. Babies learn by talking, playing, and interacting with others.
- When your baby looks at something, point to it and talk about it.
- Put your baby on her tummy or back and put toys just out of reach. Encourage her to roll over to reach the toys.
- Learn to read your baby's moods. If he's happy, keep doing what you are doing. If he's upset, take a break and comfort your baby.
- Talk with your baby's doctor about when to start solid foods and what foods are choking risks. Breast milk or formula is still the most important source of "food" for your baby.
- Learn when your baby is hungry or full. Pointing to foods, opening his mouth to a spoon, or getting excited when seeing food are signs that he is hungry. Others, like pushing food away, closing his mouth, or turning his head away from food tells you that he's had enough.
- Help your baby learn she can calm down. Talk softly, hold, rock, or sing to her, or let her suck on her fingers or a pacifier. You may offer a favorite toy or stuffed animal while you hold or rock her.
- Hold your baby up while she sits. Let her look around and give her toys to look at while she learns to balance herself.

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This milestone checklist is not a substitute for a standardized, validated developmental screening tool. These developmental milestones show what most children (75% or more) can do by each age. Subject matter experts selected these milestones based on available data and expert consensus.

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Learn the Signs. Act Early.

Start Reading to Your Child Early

How to Help Your Child Learn to Read

A baby can enjoy books by 6 months of age! Here are things you can do with your child at different ages to help your child learn to love words and books.

Birth to Age 1

- Play with your baby often. Talk, sing, and say rhymes. This helps your baby learn to talk.
- Talk with your baby, making eye contact. Give your baby time to answer in baby talk.
- Give your baby sturdy board books to look at. It's OK for a baby to chew on a book.
- Look at picture books with your baby and name things. Say "See the baby!" or "Look at the puppy!"
- Babies like board books with pictures of babies and everyday objects like balls and blocks.
- Snuggle with your baby on your lap and read aloud. Your baby may not understand the story, but will love the sound of your voice and being close to you.
- Don't let your child watch TV until age 2 or older.

1 to 3 Years of Age

- Read to your child every day. Let your child pick the book, even if it's the same one again and again!
- Younger toddlers (1 to 2 years of age) like board books with pictures of children doing everyday things (like eating and playing). They also like "goodnight" books and books with rhymes. Books should only have a few words on each page.
- Older toddlers (2 to 3 years of age) like board books and books with paper pages. They love books with rhymes and words that are repeated. Books about families, friends, animals, and trucks are also good.
- Let your child "read" to you by naming things in the book or making up a story.
- Take your child to the library. Celebrate your child getting a library card!
- Keep talking, singing, saying rhymes, and playing with your child.
- Don't let your child watch TV until age 2 or older.

Reading Tips

- Set aside time every day to read together. Reading at bedtime is a great way to get ready for sleep.
- Leave books in your children's rooms for them to enjoy on their own. Have a comfortable bed or chair, bookshelf, and reading lamp.
- Read books your child enjoys. Your child may learn the words to a favorite book. Then, let your child complete the sentences, or take turns saying the words.
- Don't drill your child on letters, numbers, colors, shapes, or words. Instead, make a game of it.

Continued on back

Continued from front

3 to 5 Years of Age

- Read ABC books with your child. Point out letters as you read.
- Preschool children like books that tell stories. They also love counting books, alphabet books, and word books. Like toddlers, they love books with rhymes and words they can learn by heart.
- Help your child recognize whole words as well as letters. Point out things like letters on a stop sign or the name on a favorite store.
- Ask your child questions about the pictures and story. Invite him or her to make up a story about what's in the book.
- Some public TV shows, videos, and computer games can help your child learn to read. But you need to be involved too. Watch or play *with* your child and talk about the program. Limit TV time to 1 or 2 hours per day. Avoid violent shows and movies. Try to stick to educational shows.
- Give your child lots of chances to use written words. Write shopping lists together. Write letters to friends or family.

Read Aloud With Your Child

Reading aloud is one of the best ways to help your child learn to read. The more excited you act when you read a book, the more your child will enjoy it.

- Use funny voices and animal noises!
- Look at the pictures. Ask your child to name things in the pictures. Talk about how the pictures go with the story. Ask what is happening in the story.
- Invite your child to join in when a line is repeated over and over.
- Show your child how things in the book are like things in your child's life.
- If your child asks a question, stop and answer it. Books can help children express their thoughts and solve problems.
- Keep reading to your child even after he or she learns to read. Children can listen and understand harder stories than they can read on their own.

Listen to Your Child Read Aloud

Once your child starts reading, have him or her read out loud. Take turns reading.

If your child asks for help with a word, give it right away. But let your child sound out words if he or she wants to.

Know when your child has had enough. Stop if your child is tired or frustrated.

Most of all, give lots of praise! You are your child's first, and most important, teacher!

The American Academy of Pediatrics (AAP) is grateful for the Reach Out and Read program's help with this handout. Reach Out and Read works with children's doctors to make promoting literacy and giving out books part of children's basic health care. This program is endorsed by the AAP. To learn more about Reach Out and Read, go to www.reachoutandread.org.

To learn more, visit the American Academy of Pediatrics (AAP) Web site at www.aap.org.

Your child's doctor will tell you to do what's best for your child.
This information should not take the place of talking with your child's doctor.

We hope the resources in this handout are helpful. The AAP is not responsible for the information in these resources. We try to keep the information up to date but it may change at any time.

Adaptation of the AAP information in this handout into plain language was supported in part by McNeil Consumer Healthcare.

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

5 Secrets to a Smarter Baby: School Readiness Can Start Now

As parents, we all want happy, healthy babies. Not only that, we want them to be smart. Growing research in early brain development shows there are some basic things you can do right now to start raising a child who is curious about the world and ready to learn. These early education activities we're talking about are simple—and screen free!

The American Academy of Pediatrics (AAP) recommends parents talk with their pediatrician about how to create a supportive, stimulating environment for their baby—starting at birth—that promotes healthy brain development and builds the social and emotional skills necessary for school readiness.

Use the "5 Rs of Early Education" in your daily activities right from birth:

1. READ together as a daily, fun, family activity.

- The AAP recommends this to build language, literacy, and social-emotional skills that last a lifetime. It's never too young to start reading with your baby. Reading to your child, research suggests, boosts activity in parts of the brain that form the building blocks of language, literacy skills and imagination.

2. RHYME, play, talk, sing, and cuddle together often throughout the day.

- The AAP encourages parents to use play to help meet their child's health and developmental milestones, beginning from birth. Need ideas? Here are some great ways to do this based on your child's age. Talk with them about things they see around them, at home, at the store, or while traveling. Enroll in quality early education programs and activities, take time to visit a children's museum or local library, and enjoy story time.

3. Build ROUTINES for meals, play, and sleep.

- This helps children know what to expect and what is expected of them. Brush, Book, Bed, for example, is a great way to structure your child's nighttime routine. Eating at least three family meals together each week is associated with healthier kids, according to a study published in *Pediatrics.*

4. REWARD everyday successes (especially for effort toward goals like helping others).

- Catch your child doing something good and praise them for it! Praise from those closest to a child is a very powerful reward. Talk with your pediatrician about how to shape and manage your child's behavior, model the good behavior, and reinforce it by using positive discipline techniques that build a child's self-regulation skills. Your child's social, emotional, and behavior skills are equally critical to school success.

5. Develop RELATIONSHIPS that are nurturing, respectful, and consistent.

- A strong parent-child relationship helps protect against the lasting effects of adverse childhood experiences (ACEs), traumatic situations that can lower a child's chance of doing well in school. As you strive to teach your child about healthy relationships and choosing friends wisely, don't forget to model them in your own life. Demonstrating good relationships skills with your spouse or partner, and taking time to nurture close friendships with others, is as important as simply talking about these skills--if not more so.

You are your baby's best teacher.

A certain toy is not necessary for your child to reach his or her next developmental milestone. There is no one app that will teach your child to read. While it's easy to fall victim to the marketing, YOU are what your child needs to start on the path toward school readiness with daily reading, rhyming, routines, rewards, and relationship building.

Additional Information:

- Is Your Preschooler Ready for Kindergarten?
- The Power of Play - How Fun and Games Help Children Thrive
- Toy Buying Tips for Babies & Young Children: AAP Report Explained
- Toy Buying Tips for Children with Special Needs
- Healthy Digital Media Use Habits for Babies, Toddlers & Preschoolers
- School Readiness (AAP Technical Report)

Last Updated: 7/23/2019

Children's Healthcare of Atlanta

STRONG4LIFE

Building resilient children at 4 months old

Resilience is the ability to handle life's ups and downs.

Babies this age are quickly learning how to interact with the world around them. This time is critical for building resilience to help mold your baby's long-term physical and emotional health. **Below are some tips to help prepare your 4-month-old for what lies ahead.**

What is happening at 4 months old?

- Your baby may recognize familiar people or places.
- Your baby may start having different types of cries for her needs if she:
  - Is tired.
  - Is in pain.
  - Doesn't feel well.
- Your baby may be reaching for interesting toys or people.

Having fun with your baby

At this age, your baby may have shared his sweet laugh! Here are some fun ways to bond with your baby and encourage those baby giggles:

- ✔ Sing with your baby and let him watch you clap your hands or make silly faces while singing.
- ✔ Blow bubbles and pop them. Gently hold his hand and pop them together.
- ✔ Take a walk and talk to your baby about what you see around you.
- ✔ Engage him in safely touching and exploring a variety of things, such as books with textured images or a shiny rattle.
- ✔ Spend screen-free time with your baby, focus on connection and make eye contact while talking, singing and playing with him.

To easily track your baby's milestones, download CDC's free Milestone Tracker app or visit **cdc.gov/milestones.**

Sleep

At this age, your baby may be getting 16 to 18 hours of sleep in a 24-hour period. This may seem like a lot, but the sleep comes in bursts. When baby is awake, you will likely be being feeding, cuddling and attending to him, so you may be extremely tired. Try to rest when baby is sleeping, and know that it is OK to ask for (or accept) help from trusted people.

Follow the ABCs of safe sleep *(alone, on their backs, in a crib) to reduce the risk of sudden infant death syndrome (SIDS).*

Communicating with your baby

It's important to start talking about feelings with your baby even at this young age, so that he can express those feelings on his own later.

- ✔ **Stay calm.** Babies pick up on your feelings, too, and he may be tense or fussy if you are feeling tense. Parenting can be very stressful, but you have to make sure that stress doesn't impact your relationship with your baby. Pause and take a deep breath before interacting with your baby.
- ✔ **Have a "conversation" with your baby.** When he is crying, gently talk to him and say things like, "You seem sad because you are sleepy. It is time for nap." You cannot spoil a baby by holding him and responding to his needs.
- ✔ **Observe and talk with your baby** about what is happening around him, particularly the feelings of other people.

Vaccine Schedule and Flu Reminder

Age	Immunizations Due	Influenza Vaccine
2 wk	Hepatitis B (if not given at birth)	-
2 mo	Hep B #2, Pentacel #1, Prevnar #1, Rotavirus #1	-
4 mo	Pentacel #2, Prevnar #2, Rotavirus #2	-
6 mo	Pentacel #3, Prevnar #3, Rotavirus #3	First flu season: 2 doses of vaccine, given 28 days apart
9 mo	Hep B #3	
12 mo	MMR #1, Var #1	
15 mo	Prevnar #4, Hep A #1	Annually
18 mo	Pentacel #4	Annually
2 yo	Hep A #2	Annually
30 mo	-	Annually
3 yo	-	Annually
4 yo	MMR #2, Var #2, Quadracel	Annually
5-10 yo	-	Annually
11 yo	Tdap, MCV, HPV x 2	Annually
12-15 yo	-	Annually
16 yo	MCV	Annually
17-20 yo	-	Annually
21 yo	Td	Annually

Pentacel: *Diphtheria, Tetanus & acellular Pertussis* (DTaP), Hep: *Hepatitis*, *Haemophilus Influenza type B* (Hib), *Inactivated poliovirus* (IPV); Prevnar: *Pneumococcal conjugate*; MMR: *Measles, mumps, rubella*; VAR: *Varicella*; Quadracel: *DTaP, IPV*; Tdap: *Tetanus, diphtheria & acellular pertussis*; MCV: *Meningococcal*; HPV: *Human papillomavirus*; Td: *Tetanus-Diphtheria*

Don’t forget your flu shot - every fall, give us a call!

The annual flu vaccine is an important part of your regularly scheduled vaccines. Every year, millions of people get sick with the flu. A subset of those infected end up hospitalized or even dying. The flu vaccine is your first line of defense in preventing flu. While the flu vaccine certainly reduces your risk of contracting flu, it does not guarantee that you will not catch the flu. However, children and teens with the flu vaccine on board prior to illness are less likely to end up hospitalized or dying from influenza. For those unlucky enough to get flu despite having the vaccine, their illness course is not as severe as those without the vaccine.

If you have questions about the annual flu vaccine, do not hesitate to ask! We strongly recommend the vaccine and want to make sure our patients are optimally protected during flu season.

Influenza (Flu) Vaccine (Inactivated or Recombinant): *What you need to know*

Many vaccine information statements are available in Spanish and other languages. See www.immunize.org/vis

Hojas de información sobre vacunas están disponibles en español y en muchos otros idiomas. Visite www.immunize.org/vis

1. Why get vaccinated?

Influenza vaccine can prevent **influenza (flu)**.

Flu is a contagious disease that spreads around the United States every year, usually between October and May. Anyone can get the flu, but it is more dangerous for some people. Infants and young children, people 65 years and older, pregnant people, and people with certain health conditions or a weakened immune system are at greatest risk of flu complications.

Pneumonia, bronchitis, sinus infections, and ear infections are examples of flu-related complications. If you have a medical condition, such as heart disease, cancer, or diabetes, flu can make it worse.

Flu can cause fever and chills, sore throat, muscle aches, fatigue, cough, headache, and runny or stuffy nose. Some people may have vomiting and diarrhea, though this is more common in children than adults.

In an average year, **thousands of people in the United States die from flu**, and many more are hospitalized. Flu vaccine prevents millions of illnesses and flu-related visits to the doctor each year.

2. Influenza vaccines

CDC recommends everyone 6 months and older get vaccinated every flu season. **Children 6 months through 8 years of age** may need 2 doses during a single flu season. **Everyone else** needs only 1 dose each flu season.

It takes about 2 weeks for protection to develop after vaccination.

There are many flu viruses, and they are always changing. Each year a new flu vaccine is made to protect against the influenza viruses believed to be likely to cause disease in the upcoming flu season.

Even when the vaccine doesn't exactly match these viruses, it may still provide some protection.

Influenza vaccine **does not cause flu**.

Influenza vaccine may be given at the same time as other vaccines.

3. Talk with your health care provider

Tell your vaccination provider if the person getting the vaccine:

- Has had an **allergic reaction after a previous dose of influenza vaccine**, or has any **severe, life-threatening allergies**
- Has ever had **Guillain-Barré Syndrome** (also called "GBS")

In some cases, your health care provider may decide to postpone influenza vaccination until a future visit.

Influenza vaccine can be administered at any time during pregnancy. People who are or will be pregnant during influenza season should receive inactivated influenza vaccine.

People with minor illnesses, such as a cold, may be vaccinated. People who are moderately or severely ill should usually wait until they recover before getting influenza vaccine.

Your health care provider can give you more information.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

4. Risks of a vaccine reaction

- Soreness, redness, and swelling where the shot is given, fever, muscle aches, and headache can happen after influenza vaccination.
- There may be a very small increased risk of Guillain-Barré Syndrome (GBS) after inactivated influenza vaccine (the flu shot).

Young children who get the flu shot along with pneumococcal vaccine (PCV13) and/or DTaP vaccine at the same time might be slightly more likely to have a seizure caused by fever. Tell your health care provider if a child who is getting flu vaccine has ever had a seizure.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

5. What if there is a serious problem?

An allergic reaction could occur after the vaccinated person leaves the clinic. If you see signs of a severe allergic reaction (hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness, or weakness), call **9-1-1** and get the person to the nearest hospital.

For other signs that concern you, call your health care provider.

Adverse reactions should be reported to the Vaccine Adverse Event Reporting System (VAERS). Your health care provider will usually file this report, or you can do it yourself. Visit the VAERS website at **www.vaers.hhs.gov** or call **1-800-822-7967**. *VAERS is only for reporting reactions, and VAERS staff members do not give medical advice.*

6. The National Vaccine Injury Compensation Program

The National Vaccine Injury Compensation Program (VICP) is a federal program that was created to compensate people who may have been injured by certain vaccines. Claims regarding alleged injury or death due to vaccination have a time limit for filing, which may be as short as two years. Visit the VICP website at **www.hrsa.gov/vaccinecompensation** or call **1-800-338-2382** to learn about the program and about filing a claim.

7. How can I learn more?

- Ask your health care provider.
- Call your local or state health department.
- Visit the website of the Food and Drug Administration (FDA) for vaccine package inserts and additional information at **www.fda.gov/vaccines-blood-biologics/vaccines**.
- Contact the Centers for Disease Control and Prevention (CDC):
  - Call **1-800-232-4636** (**1-800-CDC-INFO**) or
  - Visit CDC's website at **www.cdc.gov/flu**.

Q&A THE FACTS ABOUT CHILDHOOD VACCINES: WHAT YOU SHOULD KNOW

Volume 11
Summer 2020

Q. How can parents sort out conflicting information about vaccines?
A. Decisions about vaccine safety must be based on well-controlled scientific studies.

Parents are often confronted with "scientific" information found on television, on the internet, in magazines and in books that conflicts with information provided by healthcare professionals. But few parents have the background in microbiology, immunology, epidemiology and statistics to separate good scientific studies from poor studies. Parents and physicians benefit from the expert guidance of specialists with experience and training in these disciplines.

Committees of these experts are composed of scientists, clinicians and other caregivers who are as passionately devoted to our children's health as they are to their own children's health. They serve the Centers for Disease Control and Prevention (cdc.gov/vaccines), the American Academy of Pediatrics (aap.org), the American Academy of Family Physicians (aafp.org), the American College of Obstetricians and Gynecologists (acog.org), and the National Foundation of Infectious Diseases (nfid.org), among other groups. These organizations provide excellent information to parents and healthcare professionals through their websites. Their task is to determine whether scientific studies are carefully performed, published in reputable journals and, most importantly, reproducible. Information that fails to meet these standards is viewed as unreliable.

When it comes to issues of vaccine safety, these groups have served us well. They were the first to figure out that intestinal blockage was a rare consequence of the first rotavirus vaccine, and the vaccine was quickly discontinued. And, they recommended a change from the oral polio vaccine, which was a rare cause of paralysis, to the polio shot when it was clear that the risks of the oral polio vaccine outweighed its benefits.

These groups have also investigated possible relationships between vaccines and asthma, diabetes, multiple sclerosis, SIDS and autism. No studies have reliably established a causal link between vaccines and these diseases — if they did, the questioned vaccines would be withdrawn from use.

Q. Are vaccines still necessary?
A. Although several of the diseases that vaccines prevent have been dramatically reduced or eliminated, vaccines are still necessary:

• *To prevent common infections*

Some diseases are so common that a choice not to get a vaccine is a choice to get infected. For example, choosing not to get the pertussis (whooping cough) vaccine is a choice to risk a serious and occasionally fatal infection.

• *To prevent infections that could easily re-emerge*

Some diseases can easily re-emerge with relatively small decreases in immunization rates (for example, measles, mumps and *Haemophilus influenzae* type b, or Hib). We have seen this with measles and mumps. Unvaccinated children are more likely to be infected.

• *To prevent infections that are common in other parts of the world*

Although some diseases have been completely eliminated (polio) or virtually eliminated (diphtheria) from this country, they still occur commonly in other parts of the world. Children are still paralyzed by polio and sickened by diphtheria in other areas of the world. Because there is a high rate of international travel, outbreaks of these diseases are only a plane ride away.

Centers for Disease Control and Prevention. *Epidemiology and Prevention of Vaccine-Preventable Diseases*. 13th Edition. Hamborsky J, Kroger A, and Wolfe S. eds. Washington, DC: Public Health Foundation; 2015 and Supplement, 2017.

Q. Do vaccines contain additives?
A. Many vaccines contain trace quantities of antibiotics or stabilizers.

Antibiotics are used during the manufacture of vaccines to prevent inadvertent contamination with bacteria or fungi. Trace quantities of antibiotics are present in some vaccines. However, the antibiotics contained in vaccines (neomycin, streptomycin or polymyxin B) are not those commonly given to children. Therefore, children with allergies to antibiotics such as penicillin, amoxicillin, sulfa or cephalosporins can still get vaccines.

Gelatin is used to stabilize live, "weakened" viral vaccines and is also contained in many food products. People with known allergies to gelatin contained in foods may have severe allergic reactions to the gelatin contained in vaccines. However, this reaction is extremely rare.

Offit PA, Jew RK. Addressing parents' concerns: Do vaccines contain harmful preservatives, adjuvants, additives, or residuals? *Pediatrics.* 2003;112:1394-1401.

American Academy of Pediatrics. In Kimberlin DW, ed. *Red Book: 2018 Report of the Committee on Infectious Diseases*. 31st Edition. Elk Grove Village, IL.

Q. Are vaccines made using fetal cells?
A. Viruses require cells in which to reproduce. This means to make viral vaccines, the viruses must be grown in cells in the laboratory. In a few cases, the types of cells chosen were from pregnancies that were terminated electively. The scientists made this decision for two reasons. First, viruses that infect people reproduce best in cells from people. Second, cells isolated from a fetus are not likely to contain viruses because the womb is sterile.

The fetal cells used to grow vaccine viruses were isolated from two elective abortions that occurred in the early 1960s. The cells have been grown in the laboratory since then, and no additional abortions are needed to make the vaccines.

The vaccines made using these cell lines include the chickenpox, rubella (part of MMR), hepatitis A, and rabies (one version) vaccines.

Q. Are vaccines safe?
A. Because vaccines are given to people who are not sick, they are held to the highest standards of safety. As a result, they are among the safest things we put into our bodies.

How does one define the word safe? If safe is defined as "free from any negative effects," then vaccines aren't 100% safe. All vaccines have possible side effects. Most side effects are mild, such as fever, or tenderness and swelling where the shot is given. But some side effects from vaccines can be severe. For example, the pertussis vaccine is a very rare cause of persistent, inconsolable crying, high fever or seizures with fever. Although these reactions do not cause permanent harm to the child, they can be quite frightening.

If vaccines cause side effects, wouldn't it be "safer" to just avoid them? Unfortunately, choosing to avoid vaccines is not a risk-free choice — it is a choice to take a different and much more serious risk. Discontinuing the pertussis vaccine in countries like Japan and England led to a tenfold increase in hospitalizations and deaths from pertussis. And declines in the number of children receiving measles vaccine in the United Kingdom and the United States have led to increases in cases of measles.

When you consider the risk of vaccines and the risk of diseases, vaccines are the safer choice.

Plotkin S, et al. *Vaccines*. 7th Edition. Philadelphia, PA: W.B. Elsevier, 2017.

Q. How can a "one-size-fits-all" approach to vaccines be OK for all children?
A. The recommended immunization schedule is not the same for all children.

In fact, recommendations for particular vaccines often vary based upon individual differences in current and long-term health status, allergies and age. Each vaccine recommendation, often characterized by a single line on the immunization schedule, is supported by about 25 to 40 additional pages of specific instructions for healthcare providers who administer vaccines. In addition, an approximately 190-page document titled "General Best Practice Guidelines for Immunization" serves as the basis for all vaccine administration. The recommendations are updated as needed by the CDC, and a comprehensive update is published every few years.

continued>

Children's Hospital of Philadelphia®
Vaccine Education Center

Q&A THE FACTS ABOUT CHILDHOOD VACCINES: WHAT YOU SHOULD KNOW

Q. Is the amount of aluminum in vaccines safe?

A. Yes. All of us have aluminum in our bodies and most of us are able to process it effectively. The two main groups of people who cannot process aluminum effectively are severely premature infants who receive large quantities of aluminum in intravenous fluids and people who have long-term kidney failure and receive large quantities of aluminum, primarily in antacids. In both cases, the kidneys are not working properly or at all and the people are exposed to large quantities of aluminum over a long period of time.

The amount of aluminum in vaccines given during the first six months of life is about 4 milligrams, or four-thousandths of a gram. A gram is about one-fifth of a teaspoon of water. In comparison, breast milk ingested during this period will contain about 10 milligrams of aluminum, and infant formulas will contain about 40 milligrams. Soy-based formulas contain about 120 milligrams of aluminum.

When studies were performed to look at the amount of aluminum injected in vaccines, the levels of aluminum in blood did not detectably change. This indicates that the quantity of aluminum in vaccines is minimal as compared with the quantities already found in the blood.

Baylor NW, Egan W, Richman P. Aluminum salts in vaccines – U.S. perspective. *Vaccine*. 2002;20:S18-S23.

Bishop NJ, Morley R, Day JP, Lucas A. Aluminum neurotoxicity in preterm infants receiving intravenous-feeding solutions. *New Engl J Med*. 1997;336:1557-1561.

Committee on Nutrition: Aluminum toxicity in infants and children. *Pediatrics*. 1996;97:413-416.

Ganrot PO. Metabolism and possible health effects of aluminum. *Env. Health Perspective*. 1986;65:363-441.

Keith LS, Jones DE, Chou C. Aluminum toxicokinetics regarding infant diet and vaccinations. *Vaccine*. 2002;20:S13-S17.

Pennington JA. Aluminum content of food and diets. *Food Additives and Contam*. 1987;5:164-232.

Simmer K, Fudge A, Teubner J, James SL. Aluminum concentrations in infant formula. *J Peds and Child Health*. 1990;26:9-11.

Q. Do vaccines cause autism?

A. Carefully performed studies clearly disprove the notion that vaccines cause autism.

Because the signs of autism may appear in the second year of life, at around the same time children receive certain vaccines, and because all causes of autism are unknown, some parents wondered whether vaccines might be at fault. These concerns focused on three hypotheses — autism is caused by the measles-mumps-rubella (MMR) vaccine; thimerosal, an ethylmercury-containing preservative used in vaccines; or receipt of too many vaccines too soon.

A large body of medical and scientific evidence strongly refutes these notions. Multiple studies have found that vaccines do not cause autism. These studies included hundreds of thousands of children, occurred in multiple countries, were conducted by multiple investigators, and were well controlled.

To see summaries of some of these studies and other studies related to vaccine safety concerns, visit vaccine.chop.edu/safety-references.

To find the most up-to-date information about the causes of autism, visit the Autism Science Foundation website, autismsciencefoundation.org.

Q. Does my child still need to get vaccines if I am breastfeeding?

A. Yes. The types of immunity conferred by breastfeeding and immunization are different. Specifically, the antibodies that develop after immunization are made by the baby's own immune system and, therefore, will remain in the form of immunologic memory; this is known as active immunity. In contrast, antibodies in breast milk were made by the maternal immune system, so they will provide short-term protection, but will not last more than a few weeks. These antibodies are usually not as diverse either, so the baby may be protected against some infections but remain susceptible to others. Immunity generated from breast milk is called passive immunity. Passive immunity was practiced historically when patients exposed to diphtheria were given antitoxin produced in horses; antitoxins to snake venoms are also an example of passive immunity.

Q. Do children get too many shots?

A. Newborns commonly manage many challenges to their immune systems at the same time.

Because some children could receive as many as 27 vaccine doses by the time they are 2 years old and as many as six shots in a single visit to the doctor, many parents wonder whether it is safe to give children so many vaccines.

Although the mother's womb is free from bacteria and viruses, newborns immediately face a host of different challenges to their immune systems. From the moment of birth, thousands of different bacteria start to live on the surface of the skin and intestines. By quickly making immune responses to these bacteria, babies keep them from invading the bloodstream and causing serious diseases.

In fact, babies are capable of responding to millions of different viruses and bacteria because they have billions of immunologic cells circulating in the bodies. Therefore, vaccines given in the first two years of life are a raindrop in the ocean of what an infant's immune system successfully encounters and manages every day.

Offit PA, et al. Addressing parents' concerns: Do vaccines weaken or overwhelm the infant's immune system? *Pediatrics*. 2002;109:124-129.

Q. What is the harm of separating, spacing out or withholding some vaccines?

A. Although the vaccine schedule can look intimidating, it is based upon the best scientific information available and is better tested for safety than any alternative schedules.

Experts review studies designed to determine whether the changes are safe in the context of the existing schedule. These are called concomitant use studies.

Separating, spacing out or withholding vaccines causes concern because infants will be susceptible to diseases for longer periods of time. When a child should receive a vaccine is determined by balancing when the recipient is at highest risk of contracting the disease and when the vaccine will generate the best immune response.

Finally, changing the vaccine schedule requires additional doctor's visits. Research measuring cortisol, a hormone associated with stress, has determined that children do not experience more stress when receiving two shots as compared with one shot. Therefore, an increased number of visits for individual shots will mean an increase in the number of stressful situations for the child without benefit. In addition, there is an increased potential for administration errors, more time and travel needed for appointments, potentially increased costs and the possibility that the child will never get some vaccines.

Cohn M, Langman RE. The protection: the unit of humoral immunity selected by evolution. *Immunol Rev*. 1990;115:9-147.

Offit PA, Quarels J. Gerber MA, et al. Addressing parents' concerns: Do multiple vaccines overwhelm or weaken the infant's immune system? *Pediatrics*. 2002;109:124-129.

Ramsay DS, Lewis M. Developmental changes in infant cortisol and behavioral response to inoculation. *Child Dev*. 1994;65:1491-1502.

Tonegawa S, Steinberg C, Dube S, Bernardini A. Evidence for somatic generation of antibody diversity. *Proc Natl Acad Sci USA*. 1974;71:4027-4031.

This information is provided by the Vaccine Education Center at Children's Hospital of Philadelphia. The Center is an educational resource for parents and healthcare professionals and is composed of scientists, physicians, mothers and fathers who are devoted to the study and prevention of infectious diseases. The Vaccine Education Center is funded by endowed chairs from Children's Hospital of Philadelphia. The Center does not receive support from pharmaceutical companies.

Children's Hospital of Philadelphia®
Vaccine Education Center

Learn more: vaccine.chop.edu

Your Child's First Vaccines:
What You Need to Know

Many Vaccine Information Statements are available in Spanish and other languages. See www.immunize.org/vis

Hojas de información sobre vacunas están disponibles en español y en muchos otros idiomas. Visite www.immunize.org/vis

The vaccines included on this statement are likely to be given at the same time during infancy and early childhood. There are separate Vaccine Information Statements for other vaccines that are also routinely recommended for young children (measles, mumps, rubella, varicella, rotavirus, influenza, and hepatitis A).

Your child is getting these vaccines today:

☐ DTaP ☐ Hib ☐ Hepatitis B ☐ Polio ☐ PCV13

(Provider: Check appropriate boxes.)

1 Why get vaccinated?

Vaccines can prevent disease. Most vaccine-preventable diseases are much less common than they used to be, but some of these diseases still occur in the United States. **When fewer babies get vaccinated, more babies get sick.**

Diphtheria, tetanus, and pertussis

- Diphtheria (D) can lead to difficulty breathing, heart failure, paralysis, or death.
- Tetanus (T) causes painful stiffening of the muscles. Tetanus can lead to serious health problems, including being unable to open the mouth, having trouble swallowing and breathing, or death.
- Pertussis (aP), also known as "whooping cough," can cause uncontrollable, violent coughing which makes it hard to breathe, eat, or drink. Pertussis can be extremely serious in babies and young children, causing pneumonia, convulsions, brain damage, or death. In teens and adults, it can cause weight loss, loss of bladder control, passing out, and rib fractures from severe coughing.

Hib (*Haemophilus influenzae* type b) disease

Haemophilus influenzae type b can cause many different kinds of infections. These infections usually affect children under 5 years old. Hib bacteria can cause mild illness, such as ear infections or bronchitis, or they can cause severe illness, such as infections of the bloodstream. Severe Hib infection requires treatment in a hospital and can sometimes be deadly.

Hepatitis B

Hepatitis B is a liver disease. Acute hepatitis B infection is a short-term illness that can lead to fever, fatigue, loss of appetite, nausea, vomiting, jaundice (yellow skin or eyes, dark urine, clay-colored bowel movements), and pain in the muscles, joints, and stomach. Chronic hepatitis B infection is a long-term illness that is very serious and can lead to liver damage (cirrhosis), liver cancer, and death.

Polio

Polio is caused by a poliovirus. Most people infected with a poliovirus have no symptoms, but some people experience sore throat, fever, tiredness, nausea, headache, or stomach pain. A smaller group of people will develop more serious symptoms that affect the brain and spinal cord. In the most severe cases, polio can cause weakness and paralysis (when a person can't move parts of the body) which can lead to permanent disability and, in rare cases, death.

Pneumococcal disease

Pneumococcal disease is any illness caused by pneumococcal bacteria. These bacteria can cause pneumonia (infection of the lungs), ear infections, sinus infections, meningitis (infection of the tissue covering the brain and spinal cord), and bacteremia (bloodstream infection). Most pneumococcal infections are mild, but some can result in long-term problems, such as brain damage or hearing loss. Meningitis, bacteremia, and pneumonia caused by pneumococcal disease can be deadly.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

2 DTaP, Hib, hepatitis B, polio, and pneumococcal conjugate vaccines

Infants and children usually need:

- 5 doses of **diphtheria, tetanus, and acellular pertussis vaccine (DTaP)**
- 3 or 4 doses of **Hib vaccine**
- 3 doses of **hepatitis B vaccine**
- 4 doses of **polio vaccine**
- 4 doses of **pneumococcal conjugate vaccine (PCV13)**

Some children might need fewer or more than the usual number of doses of some vaccines to be fully protected because of their age at vaccination or other circumstances.

Older children, adolescents, and adults with certain health conditions or other risk factors might also be recommended to receive 1 or more doses of some of these vaccines.

These vaccines may be given as stand-alone vaccines, or as part of a combination vaccine (a type of vaccine that combines more than one vaccine together into one shot).

3 Talk with your health care provider

Tell your vaccine provider if the child getting the vaccine:

For all vaccines:

- Has had an **allergic reaction after a previous dose of the vaccine**, or has any **severe, life-threatening allergies**.

For DTaP:

- Has had an **allergic reaction after a previous dose of any vaccine that protects against tetanus, diphtheria, or pertussis.**
- Has had a **coma, decreased level of consciousness, or prolonged seizures within 7 days after a previous dose of any pertussis vaccine (DTP or DTaP).**
- Has **seizures or another nervous system problem.**
- Has ever had **Guillain-Barré Syndrome** (also called GBS).
- Has had **severe pain or swelling after a previous dose of any vaccine that protects against tetanus or diphtheria.**

For PCV13:

- Has had an **allergic reaction after a previous dose of PCV13, to an earlier pneumococcal conjugate vaccine known as PCV7, or to any vaccine containing diphtheria toxoid** (for example, DTaP).

In some cases, your child's health care provider may decide to postpone vaccination to a future visit.

Children with minor illnesses, such as a cold, may be vaccinated. Children who are moderately or severely ill should usually wait until they recover before being vaccinated.

Your child's health care provider can give you more information.

4 Risks of a vaccine reaction

For DTaP vaccine:

- Soreness or swelling where the shot was given, fever, fussiness, feeling tired, loss of appetite, and vomiting sometimes happen after DTaP vaccination.
- More serious reactions, such as seizures, non-stop crying for 3 hours or more, or high fever (over 105°F) after DTaP vaccination happen much less often. Rarely, the vaccine is followed by swelling of the entire arm or leg, especially in older children when they receive their fourth or fifth dose.
- Very rarely, long-term seizures, coma, lowered consciousness, or permanent brain damage may happen after DTaP vaccination.

For Hib vaccine:

- Redness, warmth, and swelling where the shot was given, and fever can happen after Hib vaccine.

For hepatitis B vaccine:

- Soreness where the shot is given or fever can happen after hepatitis B vaccine.

For polio vaccine:

- A sore spot with redness, swelling, or pain where the shot is given can happen after polio vaccine.

For PCV13:

- Redness, swelling, pain, or tenderness where the shot is given, and fever, loss of appetite, fussiness, feeling tired, headache, and chills can happen after PCV13.
- Young children may be at increased risk for seizures caused by fever after PCV13 if it is administered at the same time as inactivated influenza vaccine. Ask your health care provider for more information.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

5 What if there is a serious problem?

An allergic reaction could occur after the vaccinated person leaves the clinic. If you see signs of a severe allergic reaction (hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness, or weakness), call **9-1-1** and get the person to the nearest hospital.

For other signs that concern you, call your health care provider.

Adverse reactions should be reported to the Vaccine Adverse Event Reporting System (VAERS). Your health care provider will usually file this report, or you can do it yourself. Visit the VAERS website at **www.vaers.hhs.gov** or call **1-800-822-7967**. *VAERS is only for reporting reactions, and VAERS staff do not give medical advice.*

6 The National Vaccine Injury Compensation Program

The National Vaccine Injury Compensation Program (VICP) is a federal program that was created to compensate people who may have been injured by certain vaccines. Visit the VICP website at **www.hrsa.gov/vaccinecompensation** or call **1-800-338-2382** to learn about the program and about filing a claim. There is a time limit to file a claim for compensation.

7 How can I learn more?

- Ask your health care provider.
- Call your local or state health department.
- Contact the Centers for Disease Control and Prevention (CDC):
  - Call **1-800-232-4636** (**1-800-CDC-INFO**) or
  - Visit CDC's website at **www.cdc.gov/vaccines**

Rotavirus Vaccine:
What You Need to Know

Many Vaccine Information Statements are available in Spanish and other languages. See www.immunize.org/vis

Hojas de información sobre vacunas están disponibles en español y en muchos otros idiomas. Visite www.immunize.org/vis

1 Why get vaccinated?

Rotavirus vaccine can prevent **rotavirus disease**.

Rotavirus causes diarrhea, mostly in babies and young children. The diarrhea can be severe, and lead to dehydration. Vomiting and fever are also common in babies with rotavirus.

2 Rotavirus vaccine

Rotavirus vaccine is administered by putting drops in the child's mouth. Babies should get 2 or 3 doses of rotavirus vaccine, depending on the brand of vaccine used.

- The first dose must be administered before 15 weeks of age.
- The last dose must be administered by 8 months of age.

Almost all babies who get rotavirus vaccine will be protected from severe rotavirus diarrhea.

Another virus called porcine circovirus (or parts of it) can be found in rotavirus vaccine. This virus does not infect people, and there is no known safety risk. For more information, see **http://wayback.archive-it.org/7993/20170406124518/https:/www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/ucm212140.htm**.

Rotavirus vaccine may be given at the same time as other vaccines.

3 Talk with your health care provider

Tell your vaccine provider if the person getting the vaccine:

- Has had an **allergic reaction after a previous dose of rotavirus vaccine**, or has any severe, life-threatening allergies.
- Has a **weakened immune system**.
- Has **severe combined immunodeficiency** (SCID).
- Has had a type of bowel blockage called **intussusception**.

In some cases, your child's health care provider may decide to postpone rotavirus vaccination to a future visit.

Infants with minor illnesses, such as a cold, may be vaccinated. Infants who are moderately or severely ill should usually wait until they recover before getting rotavirus vaccine.

Your child's health care provider can give you more information.

4 Risks of a vaccine reaction

- Irritability or mild, temporary diarrhea or vomiting can happen after rotavirus vaccine.

Intussusception is a type of bowel blockage that is treated in a hospital and could require surgery. It happens naturally in some infants every year in the United States, and usually there is no known reason for it. There is also a small risk of intussusception from rotavirus vaccination, usually within a week after the first or second vaccine dose. This additional risk is estimated to range from about 1 in 20,000 US infants to 1 in 100,000 US infants who get rotavirus vaccine. Your health care provider can give you more information.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

5 What if there is a serious problem?

For intussusception, look for signs of stomach pain along with severe crying. Early on, these episodes could last just a few minutes and come and go several times in an hour. Babies might pull their legs up to their chest. Your baby might also vomit several times or have blood in the stool, or could appear weak or very irritable. These signs would usually happen during the first week after the first or second dose of rotavirus vaccine, but look for them any time after vaccination. If you think your baby has intussusception, contact a health care provider right away. If you can't reach your health care provider, take your baby to a hospital. Tell them when your baby got rotavirus vaccine.

An allergic reaction could occur after the vaccinated person leaves the clinic. If you see signs of a severe allergic reaction (hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness, or weakness), call **9-1-1** and get the person to the nearest hospital.

For other signs that concern you, call your health care provider.

Adverse reactions should be reported to the Vaccine Adverse Event Reporting System (VAERS). Your health care provider will usually file this report, or you can do it yourself. Visit the VAERS website at **www.vaers.hhs.gov** or call **1-800-822-7967**. *VAERS is only for reporting reactions, and VAERS staff do not give medical advice.*

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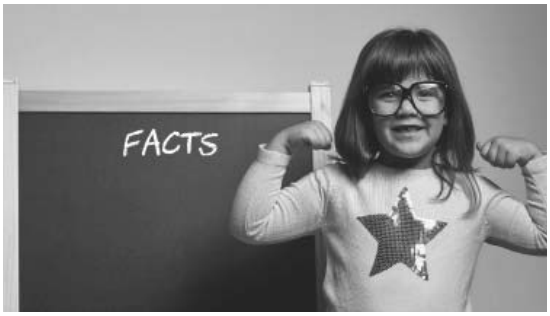
Vaccine Safety: The Facts

Some people have expressed concerns about vaccine safety. **The fact is vaccines save lives and protect against the spread of disease.** If you decide not to immunize, you're not only putting your child at risk to catch a disease that is dangerous or deadly but also putting others in contact with your child at risk. Getting vaccinated is much better than getting the disease.



Indeed, some of the most devastating diseases that affect children have been greatly reduced or eradicated completely thanks to vaccination. **Today, we protect children and teens from 16 diseases that can have a terrible effect on their young victims if left unvaccinated.**

Your pediatrician knows that you care about your child's health and safety. That's why you need to get all the scientific facts from a medical professional you can trust before making any decisions based on stories you may have seen or heard on TV, the Internet, or from other parents.

Your pediatrician cares about your child, too, and wants you to know that...

- **Vaccines work.** They have kept children healthy and have saved millions of lives for more than 50 years. Most childhood vaccines are 90% to 99% effective in preventing disease. And if a vaccinated child does get the disease, the symptoms are usually less serious than in a child who hasn't been vaccinated. There may be mild side effects, like swelling where the shot was given, but they do not last long. And it is rare for side effects to be serious.
- **Vaccines are safe.** Before a vaccine is licensed in the United States, the Food and Drug Administration (FDA) reviews all aspects of development, including where and how the vaccine is made and the studies that have been conducted in people who received the vaccine. The FDA will not license a vaccine unless it meets standards for effectiveness (how well the vaccine works) and safety. Results of studies get reviewed again by the Centers for Disease Control and Prevention (CDC), the American Academy of Pediatrics, and the American Academy of Family Physicians before a licensed vaccine is officially recommended to be given to children. Every lot of vaccine is tested to ensure quality (including safety) before the vaccine reaches the public. In addition, FDA regularly inspects places where vaccines are made.

  Watch the Journey of Your Child's Vaccine @ https://youtu.be/Fcvgp6gNh6o.
  Learn about the three phases of clinical trials, vaccine licensing and manufacturing, how a vaccine is added to the U.S. Recommended Immunization Schedule, and how FDA and CDC monitor vaccine safety after the public begins using the vaccine.

- **Vaccines are necessary.** Your pediatrician believes that your children should receive all recommended childhood vaccines. In the United States vaccines have protected children and continue to protect children from many diseases. However, in many parts of the world many vaccine-preventable diseases that are rarely seen in the United States are still common. Since some vaccine-preventable diseases still occur in the United States and others may be brought

into the United States by Americans who travel abroad or from people visiting areas with current disease outbreaks, it's important that your children are vaccinated.
- **Vaccines are studied.** To monitor the safety of vaccines after licensure, the FDA and the CDC created the Vaccine Adverse Event Reporting System (VAERS). All doctors must report certain side effects of vaccines to VAERS. Parents can also file reports with VAERS. For more information about VAERS, visit www.vaers.hhs.gov or call the toll-free VAERS information line at 800/822-7967. Other systems exist to further study vaccine safety concerns if they are identified in VAERS by FDA and CDC.

Protection for everyone

Just as important as the initial vaccinations are the booster shots. These are designed to continue immunity by building on the previous vaccines' effectiveness. Unfortunately, some parents forget or skip the boosters, which undercut the effectiveness of a very important concept in vaccination: *herd immunity*. Herd immunity is the benefit everyone receives from a vaccinated population once immunization reaches a critical level. When enough people are vaccinated, everyone—including those who are too young or too sick to be immunized—receives some protection from the spread of diseases. However, relying on herd immunity to keep your child safe is risky. The more parents that follow this way of thinking, the fewer vaccinated children we will have, and the more likely a serious disease will return and infect all of those unvaccinated.

In the rare case that a child has serious side effects to a vaccine, parents can contact the National Vaccine Injury Compensation Program (VICP) at 800/338-2382 or www.hrsa.gov/vaccinecompensation. This federal program was created to help pay for the care of people who have been harmed.

If you have any additional questions or concerns, feel free to ask your pediatrician.

Additional Information & Resources:

- Vaccine Studies: Examine the Evidence
- Vaccines Your Child Needs
- Weighing the Risks and Benefits
- www.fda.gov (Food and Drug Administration)
- www.cdc.gov/vaccines (Centers for Disease Control and Prevention)

Last Updated: 10/10/2018
Source: Adapted from Healthy Children E-Magazine, Back to School 2012

Tips for a Less Stressful Shot Visit

Making the choice to vaccinate your child is vital for their health and well-being. Even so, getting shots can still be stressful for you and your little one. Fortunately, there are simple ways you can support your child before, during, and after shots.

Help children see vaccines as a good thing. Never threaten your child with shots, by saying "If you misbehave I will have the nurse give you a shot." Instead, remind children that vaccines can keep them healthy.

Ways to soothe your baby:

- *Swaddling*
- *Skin-to-skin contact*
- *Offering a sweet beverage, like juice (when the child is older than 6 months)*
- *Breastfeeding*

Your health care professional may cool or numb the injection site to reduce the pain associated with your child's shots.

Before Getting Shots

Come prepared! Take these steps before your child gets a shot to help make the immunization visit less stressful on you both.

- Read any vaccine materials you received from your child's health care professional and write down any questions you may have.
- Find your child's personal immunization record and bring it to your appointment. An up-to-date record tells your doctor exactly what shots your child has already received.
- Pack a favorite toy or book, and a blanket that your child uses regularly to comfort your child.

For older children

- Be honest with your child. Explain that shots can pinch or sting, but that it won't hurt for long.
- Engage other family members, especially older siblings, to support your child.
- Avoid telling scary stories or making threats about shots.

At the Doctor's Office

If you have questions about immunizations, ask your child's doctor or nurse. Before you leave the appointment, ask your child's doctor for advice on using non-aspirin pain reliever and other steps you can take at home to comfort your child.

Try these ideas for making the shots easier on your child.

- Distract and comfort your child by cuddling, singing, or talking softly.
- Smile and make eye contact with your child. Let your child know that everything is ok.
- Comfort your child with a favorite toy or book. A blanket that smells familiar will help your child feel more comfortable.
- Hold your child firmly on your lap, whenever possible.

The Centers for Disease Control and Prevention (CDC), the American Academy of Family Physicians (AAFP), and the American Academy of Pediatrics (AAP) adapted this information from *Be There for Your Child during Shots*, California Department of Public Health Immunization Branch.

CS218609

For older children

- Take deep breaths with your child to help "blow out" the pain.
- Point out interesting things in the room to help create distractions.
- Tell or read stories.
- Support your child if he or she cries. Never scold a child for not "being brave."

Remember to schedule your next visit! Staying current with your child's immunizations provides the best protection against disease.

Once your child has received all of the shots, be especially supportive. Hold, cuddle, and, for infants, breastfeed or offer a bottle. A soothing voice, combined with praise and hugs will help reassure your child that everything is ok.

After the Shots

Sometimes children experience mild reactions from vaccines, such as pain at the injection site, a rash or a fever. These reactions are normal and will soon go away. The following tips will help you identify and minimize mild side effects.

- Review any information your doctor gives you about the shots, especially the Vaccine Information Statements or other sheets that outline which side effects might be expected.
- Use a cool, wet cloth to reduce redness, soreness, and swelling in the place where the shot was given.
- Reduce any fever with a cool sponge bath. If your doctor approves, give non-aspirin pain reliever.
- Give your child lots of liquid. It's normal for some children to eat less during the 24 hours after getting vaccines.
- Pay extra attention to your child for a few days. If you see something that concerns you, call your doctor.

Take a moment to read the Vaccine Information Sheet your health care professional gives you during your visit. This sheet has helpful information and describes possible side effects your child may experience.

VACCINES FOR CHILDREN PROGRAM (VFC)

INFORMATION FOR PARENTS FROM CDC

GET HELP PAYING FOR YOUR CHILD'S VACCINES!

How can I get help paying for my child's vaccines?

Since 1994, parents have been protecting their children through the VFC Program. This program provides free vaccines to children whose parents need help paying for them.

Is my child eligible for the VFC Program?

Your child is eligible if it is before his or her 19th birthday, and if he or she is one of the following:

- Medicaid-eligible
- Uninsured
- American Indian or Alaska Native
- Underinsured (Underinsured children are only eligible for VFC Vaccines through Federally Qualified Health Centers and Rural Health Clinics.)

What do you mean by "underinsured?"

Underinsured means your child has health insurance, but it won't cover the vaccine(s) because:

- It doesn't cover any vaccines.
- It doesn't cover certain vaccines.
- It covers vaccines, but it has a fixed dollar limit or cap for vaccines. Once that fixed dollar amount has been reached, your child is eligible.

Where can I go to get my child vaccinated?

Ask your doctor if he or she is a VFC Program provider. There are over 40,000 doctors enrolled in the VFC Program nationwide.

How much will I have to pay?

All vaccines are free through the VFC Program, saving you $100 or more on some vaccines. Even though you're saving a great deal of money by getting free vaccines, there can be other costs to the VFC visit:

- Doctors can charge a fee to give each shot. However, VFC vaccines cannot be denied to an eligible child if the family cannot afford the fee.
- There can be a fee for the office visit.
- There can be fees for non-vaccines services, like an eye exam or a blood test.

My child's doctor isn't a VFC provider. Where can I take my child for vaccines?

If your child's doctor isn't a VFC provider, you can take your child to one of the following places to get VFC vaccines:

- Public Health Clinic
- Federally Qualified Health Center (FQHC)
- Rural Health Clinic (RHC)

The best place to take your child depends on where you live and how your child is eligible for the VFC Program. Before you go, contact your state's VFC coordinator and ask where you should take your child for vaccines. You can find your state's VFC coordinator at this website: **www.cdc.gov/vaccines/programs/vfc/contacts-state.html**. Or call **1-800-CDC-INFO (232-4636)**. Ask for the phone number for your state's VFC coordinator.

For more information about the VFC Program, you can go to CDC's VFC webpage at **www.cdc.gov/vaccines/programs/vfc/** or call **1-800-CDC-INFO (232-4636)** and ask for information about the VFC Program.

Last Reviewed Feb 2016

May 2011 CS204495-C

Tylenol or Motrin before or after vaccines?

Studies have shown that only about 5-7% of children have fevers after childhood vaccines. Other studies have shown that pre-treating children before vaccines or treating Tylenol (acetaminophen) or Motrin (ibuprofen) after vaccines can make the vaccines not work as well.

Therefore, **Northside Pediatrics** does not recommend pre-treating children with Tylenol or Motrin, or routinely giving them after the vaccines have been given. If your child *is* I n the small percentage of children that has a fever greater than 101 and/or acts irritable after vaccines and regular comfort measures do not help, then it is ok to use Tylenol or Motrin sparingly. Please refer to our dosing charts below.

Kitchen Spoons Are Not Accurate Measures

PLEASE DO NOT USE KITCHEN SPOONS TO ADMINISTER ANY MEDICATION, THESE ARE NOT ACCURATE.
USE A SYRINGE OR MEDICINE CUP PROVIDED WITH THE MEDICATION.

Acetaminophen (Tylenol or another brand): How much to give?

Give every 4 to 6 hours, as needed, no more than 5 times in 24 hours (unless directed to do otherwise by your healthcare provider.)

CHILD'S WEIGHT	CHILD'S AGE	INFANT'S NEW FORMULATION OR CHILDREN'S LIQUID 160 mg in each 5 mL	JUNIOR STRENGTH 160 mg in each tab
6-11 lbs (2.7-5 kg)	0-3 mos	Advised dose* 1.25 mL	
12-17 lbs (5.5-7.7 kg)	4-11 mos	2.5 mL	
18-23 lbs (8.2-10.5 kg)	12-23 mos	3.75 mL	
24-35 lbs (10.9-15.9 kg)	2-3 yrs	5 mL	
36-47 lbs (16.4-21.4 kg)	4-5 yrs	7.5 mL	
48-59 lbs (21.8-26.8 kg)	6-8 yrs	10 mL	2 tablets
60-71 lbs (27.3-32.3 kg)	9-10 yrs	12.5 mL	2 ½ tablets
72-95 lbs (32.7-43.2 kg)	11 yrs	15 mL	3 tablets

Ibuprofen (Advil, Motrin, or another brand): How much to give?

Give every 6 to 8 hours, as needed, no more than 4 times in 24 hours (unless directed to do otherwise by your healthcare provider.)

CHILD'S WEIGHT	CHILD'S AGE	INFANTS' DROPS 50 mg in each 1.25 mL	CHILDREN'S LIQUID 100 mg in each 5 mL	CHILDREN'S CHEWABLES OR JUNIOR TABLETS 100 mg in each tab
less than 11 lbs (2.7-5 kg)	0-5 mos	**Not recommended for babies less than 6 mos old**	**Not recommended for babies less than 6 mos old**	
12-17 lbs (5.5-7.7 kg)	6-11 mos	1.25 mL	Advised dose* _____	
18-23 lbs (8.2-10.5 kg)	12-23 mos	1.875 mL	Advised dose* _____	
24-35 lbs (10.9-15.9 kg)	2-3 yrs	2.5 mL	5 mL	1 tablet
36-47 lbs (16.4-21.4 kg)	4-5 yrs	4 mL	7.5 mL	1 ½ tablets
48-59 lbs (21.8-26.8 kg)	6-8 yrs		10 mL	2 tablets
60-71 lbs (27.3-32.3 kg)	9-10 yrs		12.5 mL	2 ½ tablets
72-95 lbs (32.7-43.2 kg)	11 yrs		15 mL	3 tablets

***HEALTHCARE PROVIDER: PLEASE FILL IN THE ADVISED DOSE.**

Immunization Action Coalition▪www.immunize.org/catg.d/p4015.pdf

5/2017