Very Important Information
Please Read!

First Visit

Date: _____

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 & Spot Vision Screens Anemia Screen w/CBC (if indicated) Lipid Panel
11 yr.	yearly	Tdap; Meningococcal #1; HPV Series; Lipid Panel; 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

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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.

Northside Pediatrics
The best care for your kids

Newborn Guidance

Congratulations on your new baby!

These first few days are a whirlwind of activity, emotion and adjustments. Here are a few tips to keep your baby safe and healthy and help you transition to this new phase in your lives.

- The first few weeks of your baby's life are a time for you to get to know one another and recover from delivery. Let anyone and everyone help with cooking, cleaning, laundry and errands while you concentrate on getting to know your baby. Getting into a routine is a process and may take 2-6 weeks. You will begin to understand your baby's cries and cues with time. Be patient.

- Your baby arrives in this world with extra fat and fluid to provide nutrition until your milk comes in. He/She will likely lose weight- up to 10% of his/her birth weight- before stabilizing and then returning to his/her birth weight by the time he/she is 2 weeks old. We will help monitor this at each visit. If you are bottle feeding, your baby will likely take ½ to 1 ounce of milk every 2-3 hours at first and gradually increase to 3-4 ounces every 3-4 hours by 2 weeks. A good indication of adequate feeding is the frequency of bowel movements and wet diapers. Expect 6 or more of each by day 5 or so if you are breast feeding. If you are bottle feeding, expect at least 6 wet diapers and at least one stool each day. And speaking of poop- these change over time, too. Initially, you will see thick, sticky, green/black meconium which will gradually change to yellow, lighter green, brown or any combination of these. White or clay colored stools is **NOT** normal and we should hear immediately if this occurs. You might also notice pinkish red staining of the diaper in the area of the urine- these are a harmless waste product called urate crystals. They clear in the first few days once your baby is feeding adequately. Little girls may experience a little vaginal bleeding in the first week or so- also normal and a result of withdrawal of mom's hormones after delivery.

- We recommend you be a "home body" for the first few weeks of your baby's life. This gives you time to get to know your baby and limits his exposure to germs. The first 6-8 weeks are a vulnerable time for him/her, so if you think he/she is sick, feel free to call to discuss your concerns. If your baby has fever- anything more than or equal to 100.4 taken rectally - **THIS IS AN EMERGENCY**. Please call our office immediately, day or night, for further instructions. We strongly recommend you and all your visitors receive the tdap vaccine. This protects against pertussis, better known as whooping cough, which can be very serious and even deadly in babies. We also highly recommend everyone be vaccinated against flu in the appropriate seasons, another dangerous infection for infants.

- Your baby can have "tummy time" right from the start but remember, always place him/her on his/her back, in his/her own sleeping space- never in bed with you. This will significantly reduce his/her risk for SIDS (*sudden infant death syndrome*) and accidental suffocation. It may take him/her awhile to get used to this position. Swaddling (wrapping him/her snugly around the chest in a thin receiving blanket or "swaddle" product) can help keep him/her calm. You can use this technique for the first few weeks but should discontinue it by 2 months for safety reasons. Also, leave his/her legs loose to avoid hip problems. Check out the information on Children's Healthcare of Atlanta's website: https://www.choa.org/swaddling.

- When you do travel, make sure your baby is secure in his/her car seat. The straps should be snug and the seat secured properly with the car's seat belt, facing backwards for the first two years of life. This is best accomplished without heavy coats or blankets under the straps. You can tuck a blanket around the baby for warmth after securing in the seat. Many fire stations perform car seat inspections to assure proper installation. Follow the manufacturer's instructions and please ask if you have any questions about proper use.

- Newborns make lots of funny noises and sometimes have irregular breathing patterns. Your baby should breathe easily and quietly the majority of the time but may sound "congested" periodically. He/She may also make some intermittent high pitched noises when feeding. Lastly, you may notice "periodic breathing," a pattern of short shallow rapid breaths alternating with deep sighs and brief pauses (<10 seconds) in breathing. As long as his/her breathing is easy and unlabored, and his/her skin color remains pink these are all normal. Any persistent noise, labored breathing or cyanosis (blueness of the face or lips) should be brought to our attention.

- Your baby's skin is very sensitive in the first few weeks. You will notice peeling occurring during this time. You may also notice fine bumps, especially on the face, some larger bumps that come and go and look like insect bites, and often patches of redness. Most of these rashes are self-limited and need no treatment. Avoid scented and colored products that may aggravate your baby's sensitive skin. You may sponge bathe daily if you like, but no submerged, tub baths until the umbilical stump falls off and the site is healed. If your baby is circumcised, this should also be well healed prior to a tub bath. Speaking of the umbilical stump, remember that no special care is required other than sponge bathing around the site. If you notice drainage, foul odor, swelling or redness around the umbilical stump then your baby should be seen.

- You are encouraged to call our office with any questions that can't wait until your next visit. Otherwise, jot these down and bring them with you. Being a new parent is like any other new job, it takes a bit to get comfortable. Together, we can help you become a confident parent with happy, healthy children!

Further reading (in your many hours of spare time!):

- Baby 411
- American Academy of Pediatrics:
  - -Heading Home with Your Newborn
  - -Your Baby's First Year
- What to Expect the First Year
- Healthychildren.org

7/2017

Northside Pediatrics FAQ

When is the office open?

- Monday through Friday, 8:30 am – 5:00 pm (First appointment 8:45 am, last appointment 4:00 pm)
    - Monday morning only, Telemed Time, 7:30 am – 8:30 am
- Saturday, 8:30 am until closing, depending on patient needs

How do I schedule an appointment?

- Well child checks can be scheduled up to 3 months in advance.
    - Call our main office line 770-928-0016 (Woodstock) or 404-256-2688 (Sandy Springs).
- Sick visits are scheduled on the same day. The sick visit phone line opens at 7:30 am weekdays and 8:00 am Saturday. It is available all day long, including the lunch hour, to quickly schedule sick visits.
    - Call our dedicated sick line 770-592-6719 (Woodstock) or 404-256-0447 (Sandy Springs).
- Please let our scheduling staff know if you have a provider you would like to see or if you prefer the first available appointment.

What should I do before my child's first appointment?

Please complete the attached medical history and family history forms. Also ask your last pediatrician to send us your child's medical record, so it can be reviewed ahead of time.

Do you have telemedicine visits?

Every Monday, Northside Peds offers Telemed Time from 7:30 – 8:30 am for quick sick visits such as pink eye, rashes, stomach bug, Fever for less than 48 hours in children 2 and up, seasonal allergies, and suspected sinus infections/colds. We also have telemedicine visits during regular hours. Please call the office to schedule. We are actively expanding this service so stay tuned for updates.

I'm not sure if my child needs to be seen. How do I figure that out?

During business hours, the Northside Peds phone nurse can help you assess symptoms, determine if your child needs a visit, and schedule an appointment if needed. Our phone nurse can also answer common questions and offer first-line home treatment options if available.

What if my child is sick outside of business hours?

Kids always seem to get sick when the office is closed. For emergency after-hour questions, we use Children Health Care of Atlanta's nurse advice line. If the nurse cannot answer your question, the on-call Northside Peds doctor or nurse practitioner will be paged and call you back.

Do you have laboratory on site?

Yes! If your child's provider orders blood work, this can be drawn on-site by our laboratory technicians. Many tests are even processed in-house, allowing for same day results and clinical decisions. Our laboratory is not open during weekends or WAM and does not draw samples ordered by non-Northside Peds providers.

Do you accept my insurance?

We accept many insurance plans – please call our office to discuss your specific plan.

We know picking a pediatrician is an important decision, and we are honored you chose us!
We look forward to meeting you in the office.

11/2020

Important Insurance Coverage Information for all Expecting or New Parents

Once your baby is born, you must call your insurance company as soon as possible to add your newborn to your insurance policy, starting on his or her birthdate.

In the past, an insurance company would cover the newborn under the mother's policy for the first 30 days of life. Unfortunately, they no longer do so, but rather require that your baby be added individually to the plan.

If you fail to add your infant to your insurance policy, your baby will be considered uninsured. Doctor's visits will be billed without insurance, and you will need to pay out-of-pocket for your baby's visit to any physician.

My Insurance Card, Not Again…?

There is a method behind the madness of our requirement of presenting your insurance card for each child each time you come to our office. Even we as doctors have to present our card each time our own kids come in!

Here's a brief primer on "insurance cards" to help you understand what's going on:

- First, we sign a contract with each insurance plan we accept. These contracts state that we must check the insurance cards at each visit. By checking the numbers and address on the card, we'll send your claim to the correct company and not delay the processing of your bill, therefore, you won't get surprised by a very large bill.

- Second, sometimes despite the fact that you are still with the same job and the same insurance company, something has changed either with the plan and/or the card (such as the billing address or co-payment amount). We always check these cards against the information in our computer to make sure there are no changes. Again, this ensures you are not stuck with the bill!

- Another situation we frequently encounter is blended families. We have families with three children on three totally different insurance plans, or two children with insurance and one without insurance in the same family. Therefore, we need to see the card for each child.

We hope that this helps you better understand why we ask for your card at each visit. By knowing that we expect the card at each visit, the reason why, and quickly providing us with your insurance card (or making sure your other family members or babysitters have the card if they bring the children), we can keep our office efficiently running and file your claims in a speedy fashion.

Please contact our office should you have any questions. Thanks for your cooperation.

Breastfeeding Your Baby: Getting Started

Getting ready for the birth of your baby is an exciting and busy time. One of the most important decisions you will make is how to feed your baby.

Deciding to breastfeed can give your baby the best possible start in life. Breastfeeding benefits you and your baby in many ways. It also is a proud tradition of many cultures.

The following are excerpts from the American Academy of Pediatrics' (AAP) booklet Breastfeeding Your Baby: Answers to Common Questions.

Benefits of Breastfeeding

In general, the longer you breastfeed, the greater the benefits you and your baby will get, and the longer these benefits will last.

Why is breastfeeding so good for my baby?

Breastfeeding is good for your baby because

1. **Breastfeeding provides warmth and closeness.** The physical contact helps create a special bond between you and your baby.
2. **Human milk has many benefits.**
   - It's easier for your baby to digest.
   - It doesn't need to be prepared.
   - It's always available.
   - It has all the nutrients, calories, and fluids your baby needs to be healthy.
   - It has growth factors that ensure the best development of your baby's organs.
   - It has many substances that formulas don't have that help protect your baby from many diseases and infections. In fact, breastfed babies are less likely to have
     - Ear infections
     - Diarrhea
     - Pneumonia, wheezing, and bronchiolitis
     - Other bacterial and viral infections, such as meningitis
   - Research also suggests that breastfeeding may help protect against obesity, diabetes, sudden infant death syndrome (SIDS), asthma, eczema, colitis, and some cancers.

Why is breastfeeding good for me?

Breastfeeding is good for your health because it helps

- Release hormones in your body that promote mothering behavior.
- Return your uterus to the size it was before pregnancy more quickly.
- Burn more calories, which may help you lose the weight you gained during pregnancy.
- Delay the return of your menstrual period to help keep iron in your body.
- Provide contraception, but only if these 3 conditions are met: (1) you are exclusively breastfeeding at daytime and nighttime and not giving your baby any other supplements, (2) it is within the first 6 months after birth, (3) your period has not returned.
- Reduce the risk of ovarian cancer and breast cancer.
- Keep bones strong, which helps protect against bone fractures in older age.

How Breastfeeding Works

When you become pregnant, your body begins to prepare for breastfeeding. Your breasts become larger and after your fourth or fifth month of pregnancy, your body is able to produce milk.

What is colostrum?

Colostrum is the first milk your body makes. It's thick with a yellow or orange tint. Colostrum is filled with all the nutrients your newborn needs. It also contains many substances to protect your baby against diseases and infections. It's very important for your baby's health to get this early milk, though it may seem like a small amount. Your baby only needs less than 1 tablespoon per feeding on the first day and about 2 tablespoons per feeding on the second day.

What's the difference between milk coming in (increase in milk production) and let-down?

Milk coming in and ***let-down*** mean different things, but both are important.

- *Milk comes in* 2 to 5 days after your baby is born. This is when colostrum increases quickly in volume and becomes milky-white transitional milk. Signs that your milk is coming in include
  - Full and tender breasts
  - Leaking of milk
  - Seeing milk around your baby's mouth
  - Hearing your baby swallow when fed

  Breast milk changes daily and will adjust to your baby's needs for the rest of the time you breastfeed. Because the color or creaminess of the milk can change daily, don't worry about how your milk looks.
- *Let-down* is the reflex that creates the flow of milk from the back of the breast to the nipple. Let-down occurs each time the baby suckles. It is triggered when you are relaxed and your baby is latched on to your breast properly. Let-down may also happen between feedings, such as when the breasts are somewhat full or when you hear a baby's cry. The first few times you breastfeed, the let-down reflex may take a few minutes. Afterward, let-down occurs faster, usually within a few seconds. Let-down occurs in both breasts at the same time. It may occur several times during each feeding.

  The signs of let-down are different for each woman. Some women feel nothing, even though breastfeeding is going fine. Other women feel
  - Cramping in the uterus. This can be strong for the first few days after delivery but often goes away after breastfeeding is well-established.
  - A brief prickle, tingle, or even slight pain in the breast.
  - A sudden feeling that breasts are heavier.
  - Milk dripping from the breast that's not being used.
  - Their baby swallowing or gulping when fed.

What is *demand* and *supply*?

The more milk your baby takes from your breast, the more milk you make. This is called *demand and supply* because the more milk your baby demands the more you will supply. Many women with small breasts worry that they won't be able to make enough milk. However, because of demand and supply, there's no relationship between breast size and how much milk is produced.

Getting Started

Babies are very alert after they are born and ready to find the breast! The more relaxed and confident you feel, the faster your milk will flow to your baby. Getting comfortable will help you and your baby get started toward a better latch-on.

How soon can I breastfeed?

You can and should breastfeed within the first hour after birth if you and your baby are physically able to do so. After delivery, your baby should be placed on your chest or stomach, skin to skin. The early smell and taste of your milk helps your baby learn to nurse. Your breast milk is all your baby needs if your baby is healthy. Other liquids, including water, sugar water and formula, will only lessen the benefits your baby receives from the early breast milk. Try to stay with your baby as much as you can. Rooming in with your baby day and night during your hospital stay has been shown to help start breastfeeding and keep it going longer.

What are different breastfeeding positions?

Always take time to get comfortable. Don't be shy about asking for help during the first feedings. It may take a few tries but with a little patience, you and your baby will succeed. The following are 3 breastfeeding positions:

Cradle hold—the traditional breastfeeding position. Firmly support your baby's back and bottom. When feeding this way, make sure your baby's entire body is facing your body, not the ceiling.

Clutch hold or football hold—may be more comfortable if you've had a cesarean delivery because it keeps the baby's weight off of the stitches.

Reclining—feeding your baby while lying down lets you relax and can be helpful if you've had a cesarean delivery or are tired.

How can I get comfortable while breastfeeding?

A few simple things can help you feel comfortable and relaxed.

- Sit on a comfortable chair with good back and arm support.
- Lie on your side in bed with your baby facing you. Place pillows to support your back and neck.
- Take deep breaths and picture yourself in a peaceful place.
- Listen to soothing music while sipping a healthy drink.
- Apply moist heat (such as warm, wet washcloths) to your breast several minutes before each feeding.
- If your home is very busy, find a quiet place where you won't be disturbed during feedings.
- If you had a cesarean delivery, use extra pillows to help position your baby.
- Try different breastfeeding positions.
- Make sure the baby is latched on correctly. (See next question.)

Early Signs of Hunger

Your baby starts to let you know when she's hungry by the following early signs or cues:

- Small movements as she starts to awaken
- Whimpering or lip-smacking
- Pulling up arms or legs toward her middle
- Stretching or yawning
- Waking and looking alert
- Putting hands toward her mouth
- Making sucking motions
- Moving fists to her mouth
- Becoming more active
- Nuzzling against your breast

Why is latch-on so important, and how is it done?

A good latch-on means that your baby has opened his mouth wide and is well back on the breast, taking both the areola and nipple far back into his mouth. Correct latch-on is very important because it

- Makes milk flow better
- Prevents sore nipples
- Keeps your baby satisfied
- Stimulates a good milk supply for baby's weight gain
- Helps to prevent engorged (overly full) breasts

You can help your baby latch on by holding your breast with your free hand. Place your fingers under your breast and with your thumb on top. Move your fingers well back from the areola so they don't get in the way. Position your baby with his entire body facing you.

Touch your nipple to the center of your baby's lower lip. This will cause your baby to open his mouth widely. This is called the *rooting reflex*. As this occurs, pull your baby onto the nipple and areola. Keep in mind that when your baby is correctly positioned, or latched on, your nipple and much of the areola are pulled well into his mouth. Your baby's lips and gums should be around the areola and not just on the nipple. Your baby's chin should be touching your breast and his nose should be close to the breast.

Support your breast and tickle your baby's lower lip with your nipple to stimulate his rooting reflex.

At first you will feel a tugging sensation. You also may feel a brief period of pain. If breastfeeding continues to hurt, pinch, or burn, your baby may not be latched on properly. Break the latch by slipping your finger into the corner of your baby's mouth, reposition, and try again. It can take several tries.

Hospital staff should watch a feeding and make suggestions. If breastfeeding continues to hurt, you may need the help of a lactation specialist. Let your pediatrician know if there's a problem.

When your baby's mouth is wide open, bring him quickly, but gently, toward your breast.

Beyond the First Feedings

How often should I nurse?

Newborns feed often and will give cues or signs when they are ready to feed. The length of each feeding varies and your baby will show signs when she is finished. Newborns are hungry at different times, with a long cluster of feedings in the late afternoon or night. Most breastfed newborns feed 8 to 12 or more times per 24 hours (once the milk has come in). If your baby isn't waking on her own during the first few weeks, wake her if more than 4 hours have passed since the last feeding. If you are having a hard time waking up your baby for feedings, let your pediatrician know.

What's the best feeding schedule for a breastfed baby?

Feeding schedules are different for every baby, but it's best to start nursing your baby before crying starts. Crying is a late sign of hunger. Whenever possible, use your baby's cues instead of the clock to decide when to nurse. It can be less frustrating for you and your baby if you learn your baby's early hunger cues. Frequent feedings help stimulate the breasts to produce milk more efficiently.

During a growth spurt (rapid growth), babies will want to nurse all the time. Remember, this is normal and temporary, usually lasting about 4 to 5 days. Keep on breastfeeding, and don't give any other liquids or foods.

How long does breastfeeding take?

Each baby feeds differently: some slower, some faster. Some feedings may be longer than others depending on your baby's appetite and the time of day. Some babies may be nursing even though they appear to be sleeping. While some infants nurse for only 10 minutes on one breast, it's quite common for others to stay on one side for much longer. It's generally good to allow your baby to decide when the feeding is over—he will let go and pull back when he is done.

If your baby has fallen asleep at your breast, or if you need to stop a feeding before your baby is done, gently break the suction with your finger. Do this by slipping a finger into the corner of your baby's mouth and cheek while he is still latched on. Never pull the baby off the breast without releasing the suction.

To stimulate both breasts, alternate which breast you offer first. Some women like to keep a safety pin on their bra strap to help remember. While you should try to breastfeed evenly on both sides, many babies seem to prefer one side over the other and nurse longer on that side. When this happens, the breast adapts its milk production to your baby's feedings.

How can I tell if my baby is hungry?

You will soon get to know your baby's feeding patterns. In addition, babies may want to breastfeed for reasons other than hunger. It's OK for you to offer these "comfort feedings" as another way of meeting your baby's needs.

Nearly all newborns are alert for about 2 hours after delivery and show interest in feeding right away. Let the hospital staff know that you plan to take advantage of this opportunity—it's very important to the breastfeeding process. After 2 hours, many newborns are sleepy and hard to wake for the next day or so.

While in the hospital keeping your baby with you skin to skin will make it easier for you to recognize hunger cues and also will make it easier for your baby to be alert and feed often. Watch for the early signs of hunger. This is the time to pick your baby up, gently awaken her, check her diaper, and try to feed her. (See "Early Signs of Hunger".)

How can I tell if my baby is getting enough milk?

There are several ways you can tell whether your baby is getting enough milk. They include the following:

- Your baby has frequent wet and dirty diapers.
- Your baby appears satisfied after feeding.
- Milk is visible during feedings (leaking or dripping).
- Your baby is gaining weight after the first 4 to 5 days of life.

Your baby should have several wet or dirty diapers each day for the first few days after delivery. Beginning around the time that your milk comes in, the wet diapers should increase to 6 or more per day. At the same time, stools should start turn¬ing green, then yellow. There should be 3 or more stools per 24 hours. Typically, once breastfeeding is going well, breastfed babies have a yellow stool during or after each feeding. As your baby gets older, stools may occur less often, and after a month, may even skip a number of days. If stools are soft, and your baby is feeding and acting well, this is quite normal.

Your baby's feeding patterns are an important sign that he is feeding enough. If you add up all the feedings over the course of the day, your baby should feed at least 8 to 12 times a day. Remember, newborns feed often and will give cues or signs when they are ready to feed. The length of each feeding varies and your baby will show signs when she is finished.

When feeding well with good latch-on, the infant will suckle deeply, you will hear some swallowing, and the feeding won't be painful. The baby should appear satisfied and/or sleep until time for the next feeding. If your baby sleeps for stretches of longer than 4 hours in the first 2 weeks, wake him for a feeding. If your baby will not waken enough to eat at least 8 times per day, call your pediatrician.

Your child will be weighed at each doctor's visit. This is one of the best ways to tell how much milk your baby is getting. The AAP recommends that babies be seen for an office visit (or home visit) between 3 to 5 days of age to check on breastfeeding and baby's weight. During the first week, most infants lose several ounces of weight, but they should be back up to their birth weight by the end of the second week. Once your milk supply is established, your baby should gain between ½ and 1 ounce per day during the first 3 months.

Breastfeeding: A Natural Gift

Breast milk gives your baby more than just good nutrition. It also provides important substances to fight infection. Breastfeeding has medical and psychological benefits for both of you. For many mothers and babies, breastfeeding goes smoothly from the start. For others, it takes a little time and several attempts to get the process going effectively. Like anything new, breastfeeding takes some practice. This is perfectly normal. If you need help, ask the doctors and nurses while you are still in the hospital, your pediatrician, a lactation specialist, or a breastfeeding support group.

For more information about breastfeeding, read the AAP book *New Mother's Guide to Breastfeeding*.

Illustrations by Anthony Alex LeTourneau.

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

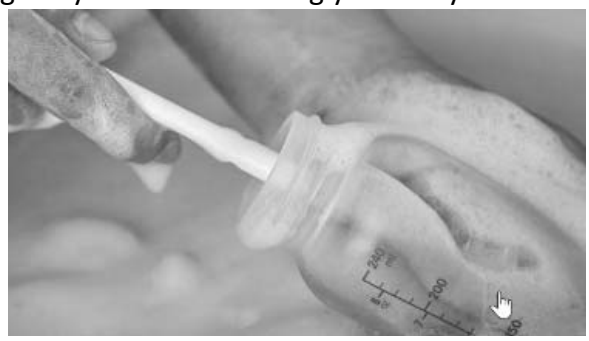
The American Academy of Pediatrics is an organization of 60,000 primary care pediatricians, pediatric medical subspecialists, and pediatric surgical specialists dedicated to the health, safety, and well-being of infants, children, adolescents, and young adults.

American Academy of Pediatrics
Web site— www.Healthy Children.org

How to Sterilize and Warm Baby Bottles Safely

Parents and pediatricians today are not as concerned with sterilizing bottles and water as they were a generation ago, but many are now having second thoughts in light of recent reports of contaminated city water supplies and increased concern over food safety.

- For starters, always wash your hands before handling baby bottles or feeding your baby.
- If you use disposable plastic bottle liners and ready-to-use formula, you still need to make sure the nipples are clean. Scrub them in hot, soapy water, then rinse to get rid of all traces of soap; some experts recommend boiling them for 5 minutes.
- Always wash and thoroughly rinse and dry the top of the formula can before you open it; make sure the can opener, mixing cups, jars, spoons, and other equipment are clean.



Glass Bottles & Formula Safety

If you use regular glass bottles and concentrated or powdered formula, you must make sure that the bottles and water added to the formula are germ free. You don't need to boil the bottles; you can put them, along with mixing cups and other equipment used to prepare formula, in a dishwasher that uses heated water and has a hot drying cycle. Or you can wash the bottles in hot, soapy water and rinse thoroughly. This alone should kill most germs.

Mixing with Water

Water for mixing infant formula must be from a safe water source as defined by the state or local health department. If you are concerned or uncertain about the safety of 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. Warmed water should be tested in advance to make sure it is not too hot for the baby. 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 because no additional refrigeration or warming would be required.

Storing Prepared Formula

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

Last Updated: 8/7/2018

Amount and Schedule of Formula Feedings

- **After the first few days:** Your formula-fed newborn will take from 2 to 3 ounces (60–90 mL) of formula per feeding and will eat every three to four hours on average during her first few weeks. (Breastfed infants usually take smaller, more frequent feedings than formula-fed infants).
- **During the first few weeks:** If your baby sleeps longer than four to five hours and starts missing feedings, wake her up and offer a bottle.
- **By the end of the first month:** Your baby will be up to at least 4 ounces (120 mL) per feeding, with a fairly predictable schedule of feedings about every four hours.

- **By six months:** Your baby will consume 6 to 8 ounces (180–240 mL) at each of four or five feedings in twenty-four hours.

On average, your baby should take in about 2½ ounces (75 mL) of formula a day for every pound (453 g) of body weight. But he probably will regulate his intake from day to day to meet his own specific needs. So instead of going by fixed amounts, let him tell you when he's had enough. If he becomes fidgety or easily distracted during a feeding, he's probably finished. If he drains the bottle and continues smacking his lips, he might still be hungry. There are high and low limits, however. Most babies are satisfied with 3 to 4 ounces (90–120 mL) per feeding during the first month and increase that amount by 1 ounce (30 mL) per month until they reach a maximum of about 7 to 8 ounces (210–240 mL). If your baby consistently seems to want more or less than this, discuss it with your pediatrician. Your baby should drink no more than 32 ounces (960 mL) of formula in twenty-four hours. Some babies have higher needs for sucking and may just want to suck on a pacifier after feeding.

Initially it is best to feed your formula-fed newborn on demand, or whenever he cries because he's hungry. As time passes, he'll begin to develop a fairly regular timetable of his own. As you become familiar with his signals and needs, you'll be able to schedule his feedings around his routine.

Between two and four months of age (or when the baby weighs more than 12 lb. [5.4 kg]), most formula-fed babies no longer need a middle-of-the-night feeding, because they're consuming more during the day and their sleeping patterns have become more regular (although this varies considerably from baby to baby). Their stomach capacity has increased, too, which means they may go longer between daytime feedings—occasionally up to four or five hours at a time. If your baby still seems to feed very frequently or consume larger amounts, try distracting him with play or with a pacifier. Sometimes patterns of obesity begin during infancy, so it is important not to overfeed your baby.

The most important thing to remember, whether you breastfeed or bottlefeed, is that your baby's feeding needs are unique. No book—or website—can tell you precisely how much or how often he needs to be fed or exactly how you should handle him during feedings. You will discover these things for yourself as you and your baby get to know each other.

Additional Information from HealthyChildren.org:

- How Often and How Much Should Your Baby Eat?
- Is Your Baby Hungry or Full? Responsive Feeding Explained (Video)
- Remedies for Spitty Babies

Last Updated: 7/24/2018

Baby's First Days: Bowel Movements & Urination

Urination

Your baby may urinate as often as every one to three hours or as infrequently as four to six times a day. If she's ill or feverish, or when the weather is extremely hot, her usual output of urine may drop by half and still be normal. Urination should never be painful. If you notice any signs of distress while your infant is urinating, notify your pediatrician, as this could be a sign of infection or some other problem in the urinary tract.

In a healthy child, urine is light to dark yellow in color. (The darker the color, the more concentrated the urine; the urine will be more concentrated when your child is not drinking a lot of liquid.) Sometimes you'll see a pink stain on the diaper that you may mistake for blood. In fact, this stain is usually a sign of highly concentrated urine, which has a pinkish color. As long as the baby is wetting at least four diapers a day, there probably is no cause for concern, but if the pinkish staining persists, consult your pediatrician.

The presence of actual blood in the urine or a bloody spot on the diaper is never normal, and your pediatrician should be notified. It may be due to nothing more serious than a small sore caused by diaper rash, but it also could be a sign of a more serious problem. If this bleeding is accompanied by other symptoms, such as abdominal pain or bleeding in other areas, seek medical attention for your baby immediately.

Bowel Movements

Beginning with the first day of life and lasting for a few days, your baby will have her first bowel movements, which are often referred to as meconium. This thick black or dark-green substance filled her intestines before birth, and once the meconium is passed, the stools will turn yellow-green.

If your baby is breastfed, her stools soon should resemble light mustard with seedlike particles. Until she starts to eat solid foods, the consistency of the stools may range from very soft to loose and runny. If she's formula-fed, her stools usually will be tan or yellow in color. They will be firmer than in a baby who is breastfed, but no firmer than peanut butter.

Whether your baby is breastfed or bottle-fed, hard or very dry stools may be a sign that she is not getting enough fluid or that she is losing too much fluid due to illness, fever, or heat. Once she has started solids, hard stools might indicate that she's eating too many constipating foods, such as cereal or cow's milk, before her system can handle them. (Whole cow's milk is not recommended for babies under twelve months.)

Here are some other important points to keep in mind about bowel movements:

- Occasional variations in color and consistency of the stools are normal. For example, if the digestive process slows down because the baby has had a particularly large amount of cereal that day or foods requiring more effort to digest, the stools may become green; or if the baby is given supplemental iron, the stools may turn dark brown. If there is a minor irritation of the anus, streaks of blood may appear on the outside of the stools. However, if there are large amounts of blood, mucus, or water in the stool, call your pediatrician immediately. These symptoms may indicate an intestinal condition that warrants attention from your doctor.
- Because an infant's stools are normally soft and a little runny, it's not always easy to tell when a young baby has mild diarrhea. The telltale signs are a sudden increase in frequency (to more than one bowel movement per feeding) and unusually high liquid content in the stool. Diarrhea may be a sign of intestinal infection, or it may be caused by a change in the baby's diet. If the baby is breastfeeding, she can even develop diarrhea because of a change in the mother's diet.
- The main concern with diarrhea is the possibility that dehydration can develop. If fever is also present and your infant is less than two months old, call your pediatrician. If your baby is over two months and the fever lasts more than a day, check her urine output and rectal temperature; then report your findings to your doctor so he can determine what needs to be done. Make sure your baby continues to feed frequently. As much as anything else, if she simply looks sick, let your doctor know.

The frequency of bowel movements varies widely from one baby to another. Many pass a stool soon after each feeding. This is a result of the gastrocolic reflex, which causes the digestive system to become active whenever the stomach is filled with food.

By three to six weeks of age, some breastfed babies have only one bowel movement a week and still are normal. This happens because breastmilk leaves very little solid waste to be eliminated from the child's digestive system. Thus, infrequent stools are not a sign of constipation and should not be considered a problem as long as the stools are soft (no firmer than peanut butter), and your infant is otherwise normal, gaining weight steadily, and nursing regularly.

If your baby is formula-fed, she should have at least one bowel movement a day. If she has fewer than this and appears to be straining because of hard stools, she may be constipated. Check with your pediatrician for advice on how to handle this problem.

Last Updated: 8/1/2009
Source: Caring for Your Baby and Young Child: Birth to Age 5 (Copyright © 2009 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.

Siblings

Welcoming a new baby to the home is a
joyous time but can be overwhelming for everyone.

Below are some tips to smooth the transition for brothers and sisters:

Talk about it! Parents get 9 months to mentally prepare for another little one, so make sure your toddler has the same chance to acclimate. Talk about what having a baby in the house might be like and what changes to expect. Will he be promoted to a big kid bed? Will sitting in mommy's lap be shared with the new baby? Reading books together about becoming a big sister or brother or visiting friends with infants > 2 months old can also introduce the new role.

Practice makes perfect. Let big brother or sister care for a baby doll. Show him safe practices such as baby sleeping on her back and gently holding and soothing baby. This baby doll also comes in useful once the real deal arrives. Your toddler can feed her baby doll right next to you (keeping her occupied while you're tied up!).

Real responsibilities. Have you noticed that your toddler loves to be helpful? Find ways to let your toddler truly contribute to caring for baby. Create a "diaper bag" for your toddler to be in charge of, stocked with diapers, wipes and a burp cloth. When it is time for a diaper change, have your toddler bring his big kid diaper bag and hand you the needed supplies.

One step forward, two steps back. Some kids will show signs of regression (toilet training accidents, not sleeping through the night, tantrums) after a new baby arrives. Remember these backslides are common and likely temporary as your toddler adjusts to having a new baby at home. With that in mind, avoid tackling major milestones (such as potty training, discontinuing thumb sucking) around the time of baby's due date.

Time management. A new baby is certainly time consuming, but try to set aside dedicated "Big Kid Time" for the older children as well. Just 15 minutes of individual story time, a quick park trip, or craft project, can go a long way in minimizing melt-downs and jealousy. Focused big brother or sister time reminds them of their importance to the family.

Safety first! Limit spread of viruses from your toddler with good handwashing. Encourage your toddler to touch or kiss baby's tiny toes instead of her face or nose. Older children may be able to hold baby when sitting on the couch, but should be closely supervised.

Outnumbered? A growing family means splitting attention between multiple kids of different ages. Recognize that toddlers and even elementary school kids still need close supervision, and you may need adult back up to help out (especially in the early sleep deprived days)!

Baby Heart Rate and Oxygen Monitoring

All your friends have them…
People on Facebook swear they have saved their cousin's baby…
You got one as a baby shower gift…

What is true when it comes to the new "smart" baby monitors such as the Owlet? Are they as smart as their glossy websites and brochures state?

- If you look closely at the "fine print" on their websites, the companies disclose that these devices are "not to be used as medical devices," so they have not undergone the rigorous testing medical devices undergo to show they are useful.

- Studies in true medical journals have shown these monitors do **not** provide any increase in safety vs children who don't use them, and provide a false sense of security to parents who use them.

- Another thing we see is the alarms often go off when there are no problems and keep the parents up at night, or coming to the doctor's office (where they may catch germs) for unwarranted reasons.

What does work to avoid sudden infant death syndrome (SIDS)?

- First, always place your infant on their back to sleep! By promoting infants sleeping on their backs over the last two decades, SIDS has decreased by almost 70%.

- Second, cribs for infants and babies should be boring: no toys, stuffed animals, blankets, pillows, or bumpers in the crib. Also, no co-sleeping should be done in mom and dad's bed, or on the couch or chairs with caretakers.

- Finally, breast feeding and not smoking wrap up ways that help infants avoid SIDS. Save your money for the college fund and avoid buying items which won't help protect your baby like these monitors. Do the things we do know help avoid SIDS like the above items.

Let us know if you have any further questions!

4/2017

Safe Sleep and Your Baby:
How Parents Can Reduce the Risk of SIDS and Suffocation

About 3,500 babies die each year in the United States during sleep because of unsafe sleep environments. Some of these deaths are caused by entrapment, suffocation, or strangulation. Some infants die of sudden infant death syndrome (SIDS). However, there are ways for parents to keep their sleeping baby safe.

Read on for more information from the American Academy of Pediatrics (AAP) on how parents can create a safe sleep environment for their babies. This information should also be shared with anyone who cares for babies, including grandparents, family, friends, babysitters, and child care center staff.

Note: These recommendations are for healthy babies up to 1 year of age. A very small number of babies with certain medical conditions may need to be placed to sleep on their stomach. Your baby's doctor can tell you what is best for your baby.

What you can do

- **Place your baby to sleep on his back for every sleep.**
  - Babies up to 1 year of age should always be placed on their back to sleep during naps and at night. However, if your baby has rolled from his back to his side or stomach on his own, he can be left in that position if he is already able to roll from tummy to back and back to tummy.
  - If your baby falls asleep in a car safety seat, stroller, swing, infant carrier, or infant sling, he should be moved to a firm sleep surface as soon as possible.
  - Swaddling (wrapping a light blanket snuggly around a baby) may help calm a crying baby. If you swaddle your baby, be sure to place him on his back to sleep. Stop swaddling your baby when he starts to roll.
- **Place your baby to sleep on a firm sleep surface.**
  - The crib, bassinet, portable crib, or play yard should meet current safety standards. Check to make sure the product has not been recalled. Do not use a crib that is broken or missing parts or that has drop-side rails. For more information about crib safety standards, visit the Consumer Product Safety Commission Web site at www.cpsc.gov.
  - Cover the mattress with a tight-fitting sheet.
  - Do not put blankets or pillows between the mattress and fitted sheet.
  - Never put your baby to sleep on a sofa, a cushioned chair, a water bed, a cushion, or a sheepskin.
- **Keep soft objects, loose bedding, or any objects that could increase the risk of entrapment, suffocation, or strangulation out of the crib.**
  - Pillows, quilts, comforters, sheepskins, bumper pads, and stuffed toys can cause your baby to suffocate. Note: Research has not shown us when it's 100% safe to have these objects in the crib; however, most experts agree that these objects pose little risk to healthy babies after 12 months of age.
- **Place your baby to sleep in the same room where you sleep but not the same bed.** Do this for at least 6 months but preferably up to 1 year of age. Room sharing decreases the risk of SIDS by as much as 50%.
  - Keep the crib or bassinet within an arm's reach of your bed. You can easily watch or breastfeed your baby by having your baby nearby.
  - The AAP cannot make a recommendation for or against the use of bedside sleepers or in-bed sleepers until more studies are done.
  - Babies who sleep in the same bed as their parents are at risk of SIDS, suffocation, or strangulation. Parents can roll onto babies during sleep, or babies can get tangled in the sheets or blankets.
- **Breastfeed as much and for as long as you can.** This helps reduce the risk of SIDS.
  - The AAP 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.
- **Schedule and go to all well-child visits.** Your baby will receive important immunizations.
  - Recent evidence suggests that immunizations may have a protective effect against SIDS.
- **Keep your baby away from smokers and places where people smoke.** This helps reduce the risk of SIDS.
  - If you smoke, try to quit. However, until you can quit, keep your car and home smoke-free. Don't smoke inside your home or car, and don't smoke anywhere near your baby, even if you are outside.
- **Do not let your baby get too hot.** This helps reduce the risk of SIDS.
  - Keep the room where your baby sleeps at a comfortable temperature.
  - In general, dress your baby in no more than one extra layer than you would wear. Your baby may be too hot if she is sweating or if her chest feels hot.
  - If you are worried that your baby is cold, use a wearable blanket, such as a sleeping sack, or warm sleeper that is the right size for your baby. These are made to cover the body and not the head.
- **Offer a pacifier at nap time and bedtime.** This helps reduce the risk of SIDS.
  - If you are breastfeeding, wait until breastfeeding is going well before offering a pacifier. This usually takes 3 to 4 weeks. If you are not breastfeeding, you can start a pacifier as soon as you like.
  - It's OK if your baby doesn't want to use a pacifier. Some babies don't like to use pacifiers.
  - If the pacifier falls out after your baby falls asleep, you don't have to put it back in.
  - Do not use pacifiers that attach to infant clothing.
  - Do not use pacifiers that are attached to objects, such as stuffed toys and other items that may be a suffocation or choking risk.

- **Do not use home cardiorespiratory monitors to help reduce the risk of SIDS.**
  - Home cardiorespiratory monitors can be helpful for babies with breathing or heart problems, but they have not been found to reduce the risk of SIDS.
- **Use caution when using products that claim to reduce the risk of SIDS.**
  - Products such as wedges, positioners, special mattresses, and specialized sleep surfaces have not been shown to reduce the risk of SIDS.

What expectant moms can do

- Schedule and go to all prenatal doctor visits.
- Do not smoke, drink alcohol, or use drugs while pregnant or after the birth of your newborn.
- Stay away from smokers and places where people smoke.
- Hold your newborn skin to skin while breastfeeding. If you can, breastfeed as soon as you can after birth. Skin-to-skin contact is also beneficial for bottle-fed newborns.

What sleepy parents need to know

- It is safer to feed your baby on your bed than on a sofa or cushioned chair. Make sure to remove pillows, blankets, or other soft bedding, in case you fall asleep while feeding. If you do fall asleep, move your baby back into her own bed as soon as you awake.
- Be careful not to fall asleep on a sofa or cushioned chair while holding your baby.

Remember Tummy Time

Give your baby plenty of "tummy time" when she is awake. This will help strengthen neck muscles and help prevent flat spots on the head. Always stay with your baby during tummy time, and make sure she is awake.

From your doctor

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

The American Academy of Pediatrics (AAP) is an organization of 66,000 primary care pediatricians, pediatric medical subspecialists, and pediatric surgical specialists dedicated to the health, safety, and well-being of all infants, children, adolescents, and young adults.

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Web site— www.HealthyChildren.org

Inclined Sleepers and Other Baby Registry Items to Avoid

Having a baby is an incredibly exciting time! Many parents set up baby registries and want the very best for their newborns. With so many new products in stores, however, setting up a registry can seem like an overwhelming task. It's important to know that some popular products, like inclined sleepers, are not necessary because they can be dangerous for infants.

Each year, more than 3,600 infants die unexpectedly during sleep from accidental suffocation, SIDS, or unknown causes. To help prevent these deaths, the American Academy of Pediatrics (AAP) recommends that infants sleep on flat and firm surfaces--separate from adults or others, and without any bumpers, soft bedding or stuffed toys. Inclined infant sleeper products with raised padding and soft sides, as well as crib bumpers, can cause a baby to suffocate.

In fact, while still sold in many stores, these products are linked to dozens of deaths. The AAP also warns against products intended for infant bedsharing with parents.

Here's more information about these dangerous infant sleep products and why they should stay *off* the registry:

Inclined sleepers and positioners
Sometimes called baby nests, docks, pods, loungers, rockers or nappers, infant positioners and inclined sleepers are popular “must have" items on baby registry lists. However, these products are unregulated and have no safety standards. From January 2005 through June 2019, the Consumer Product Safety Commission (CPSC) received reports of 1,108 incidents, including 73 infant deaths related to inclined sleepers. It states that sleep products that incline more than 10 degrees are not safe for sleep, and that soft and plush sleep surfaces also are dangerous.

In most of these cases, according to the U.S. Food and Drug Administration, the babies suffocated after rolling on to their stomachs, unable to lift their heads. The soft padding can interfere with breathing when an infant's face presses against them. In addition, infants placed in these products may fall asleep in a chin-to-chest position--which can restrict the airway—or roll out of the devices and become trapped under them.

Crib bumpers
Crib bumpers were longtime staples of nursery décor, originally intended to cushion babies from the crib slats. However, the AAP advises against using crib bumpers because of the risk of suffocation, entrapment, and strangulation. Plus, older babies may use the bumpers to stand on and climb out of the crib, creating a fall risk. Crib bumpers have been tied to at least 48 infant deaths during the past three decades.

In addition to the traditional padded bumpers, stores now sell mesh bumpers and vertical crib liners. However, even mesh bumpers can become loose and pose a strangulation risk. Babies can also become trapped between them and the crib mattress.

There is no evidence that bumpers—of any kind--prevent injury in young infants.
Cribs today are regulated by the CPSC and have updated safety standards, with slats closer together to prevent baby's head from getting stuck. This means that bumpers are not only dangerous, but unnecessary. For parents concerned about a child's leg getting stuck between crib slats, the AAP recommends using a wearable blanket or sleeping sack that is the correct size for their baby.

Why are these products still sold?
Unfortunately, while the CPSC warns against the use of inclined sleepers, nests, docks and crib bumpers, it hasn't acted to ban them from being sold. The AAP continues to urge the CPSC to ban these dangerous infant sleep-related products.

The good news is that some stores and online retailers, as well some cities and states, have already stopped selling or have banned inclined sleepers and crib bumpers. In addition, some companies have issued voluntary recalls of these products.

Congress is considering legislation that would create a national ban on infant inclined sleep products and padded crib bumpers. In December 2019, the U.S. House of Representatives passed the Safe Sleep for Babies Act of 2019 (H.R. 3172). The bill then moved on to the Senate, which will have to pass the legislation for it to become law.

Remember
Even in areas where inclined sleepers, nests, docks and crib bumpers are banned, these dangerous products might still turn up at secondhand stores or garage sales. It is important to check the CPSC website to see if products have been recalled before using them. Also, check and make sure anyone who watches your child knows about recalled and unsafe products. If you have any questions about safe sleep products for your baby, talk to your pediatrician.

Additional Information:

- How to Keep Your Sleeping Baby Safe: AAP Policy Explained
- Help Your Baby Sleep Safely So You Can Sleep Soundly
- Ask the Pediatrician: What is the safest sleep solution for my baby with reflux?
- Safe Sleep: Charlie's Story

Last Updated: 2/21/2020
Source: By: Dina DiMaggio, MD, FAAP

Swaddling: Is it Safe?

New parents often learn how to swaddle their infant from the nurses in the hospital. A blanket wrapped snuggly around your baby's body can resemble the mother's womb and help soothe your newborn baby. The American Academy of Pediatrics (AAP) says that when done correctly, swaddling can be an effective technique to help calm infants and promote sleep .

But if you plan to swaddle your infant at home, you need to follow a few guidelines to make sure you are doing it safely.

Back to Sleep

To reduce the risk of Sudden Infant Death Syndrome, or SIDS, it's important to place your baby to sleep on his back, every time you put him to sleep. This may be even more important if your baby is swaddled. Some studies have shown an increased risk of SIDS and accidental suffocation when babies are swaddled if they are placed on their stomach to sleep, or if they roll onto their stomach, says Rachel Moon, MD, FAAP, chair of the task force that authored the AAP's safe sleep recommendations.

When to Stop Swaddling

"I would stop swaddling by age 2 months, before the baby intentionally starts to try to roll," Dr. Moon says. "If babies are swaddled, they should be placed only on their back and monitored so they don't accidentally roll over."

Know the Risks

Parents should know that there are some risks to swaddling, Dr. Moon says. Swaddling may decrease a baby's arousal, so that it's harder for the baby to wake up. "That is why parents like swaddling – the baby sleeps longer and doesn't wake up as easily," she said. "But we know that decreased arousal can be a problem and may be one of the main reasons that babies die of SIDS."

AAP Safe Sleep Recommendations

The AAP recommends parents follow the safe sleep recommendations every time they place their baby to sleep for naps or at nighttime:

- Place your baby on her back to sleep, and monitor her to be sure she doesn't rollover while swaddled.
- Do not have any loose blankets in your baby's crib. A loose blanket, including a swaddling blanket that comes unwrapped, could cover your baby's face and increase the risk of suffocation.
- Use caution when buying products that claim to reduce the risk of SIDS. Wedges, positioners, special mattresses and specialized sleep surfaces have not been shown to reduce the risk of SIDS, according to the AAP.
- Your baby is safest in her own crib or bassinet, not in your bed.

- Swaddling can increase the chance your baby will overheat, so avoid letting your baby get too hot. The baby could be too hot if you notice sweating, damp hair, flushed cheeks, heat rash, and rapid breathing.
- Consider using a pacifier for naps and bedtime.
- Place the crib in an area that is always smoke-free.

Keep Hips Loose

Babies who are swaddled too tightly may develop a problem with their hips. Studies have found that straightening and tightly wrapping a baby's legs can lead to hip dislocation or hip dysplasia, an abnormal formation of the hip joint where the top of the thigh bone is not held firmly in the socket of the hip.

The Pediatric Orthopaedic Society of North America, with the AAP Section on Orthopaedics, promotes "hip-healthy swaddling" that allows the baby's legs to bend up and out.

How to Swaddle Correctly

1. To swaddle, spread the blanket out flat, with one corner folded down.
2. Lay the baby face-up on the blanket, with her head above the folded corner.
3. Straighten her left arm, and wrap the left corner of the blanket over her body and tuck it between her right arm and the right side of her body.
4. Then tuck the right arm down, and fold the right corner of the blanket over her body and under her left side.
5. Fold or twist the bottom of the blanket loosely and tuck it under one side of the baby.
6. Make sure her hips can move and that the blanket is not too tight. "You want to be able to get at least two or three fingers between the baby's chest and the swaddle," Dr. Moon explains.

Swaddling in Child Care

Some child care centers may have a policy against swaddling infants in their care. This is because of the increased risks of SIDS or suffocation if the baby rolls over while swaddled, in addition to the other risks of overheating and hip dysplasia.

"We recommend infants wait to enter a child care center until they are about three months old, and by then swaddling should have been phased out because the babies are more active and rolling," said Danette Glassy, MD, FAAP, chair of the AAP Section on Early Education and Child Care and the AAP representative on a panel that wrote guidelines for child care providers.

The guidelines, *Caring for Our Children, National Health and Safety Performance Standards*, which are jointly published by the National Resource Center for Health and Safety in Child Care and Early Education, the AAP and the American Public Health Association, do not ban swaddling in child care centers, but they say swaddling is not necessary or recommended. As a result, some child care centers, and the states where they are located, are implementing more forceful recommendations against swaddling in child care settings.

“Compared to a private home, where one or two people are caring for an infant, a child care center usually has a number of caregivers, who may have variations in their swaddling technique,” Dr. Glassy says. “This raises a concern because studies show babies who are not usually swaddled react differently when swaddled for the first time at this older age.” They may have a harder time waking up, which increases their risk of SIDS.

“The difference in the advice for swaddling at home or the hospital nursery, versus in a child care center, really comes down to the age of the child and the setting,” Dr. Glassy says. “A newborn can be swaddled correctly and placed on his back in his crib at home, and it can help comfort and soothe him to sleep. When the child is older, in a new environment, with a different caregiver, he is learning to roll, and perhaps he hasn’t been swaddled before, swaddling becomes more challenging and risky.”

Last Updated: 1/12/2017

Jaundice and Your Newborn

Congratulations on the birth of your new baby!

To make sure your baby's first week is safe and healthy, it is important that

1. You find a pediatrician you are comfortable with for your baby's ongoing care.
2. Your baby is checked for jaundice in the hospital.
3. If you are breastfeeding, you get the help you need to make sure it is going well.
4. Make sure your baby is seen by a doctor or nurse at 3 to 5 days of age.
5. If your baby is discharged before age 72 hours, your baby should be seen by a doctor or nurse within 2 days of discharge from the hospital.

Q: What is jaundice?

A: Jaundice is the yellow color seen in the skin of many newborns. It happens when a chemical called *bilirubin* builds up in the baby's blood. Jaundice can occur in babies of any race or color.

Q: Why is jaundice common in newborns?

A: Everyone's blood contains bilirubin, which is removed by the liver. Before birth, the mother's liver does this for the baby. Most babies develop jaundice in the first few days after birth because it takes a few days for the baby's liver to get better at removing bilirubin.

Q: How can I tell if my baby is jaundiced?

A: The skin of a baby with jaundice usually appears yellow. The best way to see jaundice is in good light, such as daylight or under fluorescent lights. Jaundice usually appears first in the face and then moves to the chest, abdomen, arms, and legs as the bilirubin level increases. The whites of the eyes may also be yellow. Jaundice may be harder to see in babies with darker skin color.

Q: Can jaundice hurt my baby?

A: Most babies have mild jaundice that is harmless, but in unusual situations the bilirubin level can get very high and might cause brain damage. This is why newborns should be checked carefully for jaundice and treated to prevent a high bilirubin level.

Q: How should my baby be checked for jaundice?

A: If your baby looks jaundiced in the first few days after birth, your baby's doctor or nurse may use a skin or blood test to check your baby's bilirubin level. However, because estimating the bilirubin level based on the baby's appearance can be difficult, some experts recommend that a skin or blood test be done even if your baby does not appear jaundiced. A bilirubin level is always needed if jaundice develops before the baby is 24 hours old. Whether a test is needed after that depends on the baby's age, the amount of jaundice, and whether the baby has other factors that make jaundice more likely or harder to see.

Q: Does breastfeeding affect jaundice?

A: Jaundice is more common in babies who are breastfed than babies who are formula-fed, but this occurs mainly in newborns who are not nursing well. If you are breastfeeding, you should nurse your baby at least 8 to 12 times a day for the first few days. This will help you produce enough milk and will help to keep the baby's bilirubin level down. If you are having trouble breastfeeding, ask your baby's doctor or nurse or a lactation specialist for help. Breast milk is the ideal food for your baby.

Q: When should my newborn get checked after leaving the hospital?

A: It is important for your baby to be seen by a nurse or doctor when the baby is between 3 and 5 days old, because this is usually when a baby's bilirubin level is highest. This is why, if your baby is discharged before age 72 hours, your baby should be seen within 2 days of discharge. The timing of this visit may vary depending on your baby's age when released from the hospital and other factors.

Q: Which babies require more attention for jaundice?

A: Some babies have a greater risk for high levels of bilirubin and may need to be seen sooner after discharge from the hospital. Ask your doctor about an early follow-up visit if your baby has any of the following:

- A high bilirubin level before leaving the hospital
- Early birth (more than 2 weeks before the due date)
- Jaundice in the first 24 hours after birth
- Breastfeeding that is not going well
- A lot of bruising or bleeding under the scalp related to labor and delivery
- A parent, brother, or sister who had high bilirubin and received light therapy

Q: When should I call my baby's doctor?

A: Call your baby's doctor if

- Your baby's skin turns more yellow.
- Your baby's abdomen, arms, or legs are yellow.
- The whites of your baby's eyes are yellow.
- Your baby is jaundiced and is hard to wake, fussy, or not nursing or taking formula well.

Q: How is harmful jaundice prevented?

A: Most jaundice requires no treatment. When treatment is necessary, placing your baby under special lights while he or she is undressed will lower the bilirubin level. Depending on your baby's bilirubin level, this can be done in the hospital or at home. Jaundice is treated at levels that are much lower than those at which brain damage is a concern. Treatment can prevent the harmful effects of jaundice. Putting your baby in sunlight is not recommended as a safe way of treating jaundice. Exposing your baby to sunlight might help lower the bilirubin level, but this will only work if the baby is completely undressed. This cannot be done safely inside your home because your baby will get cold, and newborns should never be put in direct sunlight outside because they might get sunburned.

Q: When does jaundice go away?

A: In breastfed babies, jaundice often lasts for more than 2 to 3 weeks. In formula-fed babies, most jaundice goes away by 2 weeks. If your baby is jaundiced for more than 3 weeks, see your baby's doctor.

From your doctor

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

The American Academy of Pediatrics is an organization of 60,000 primary care pediatricians, pediatric medical subspecialists, and pediatric surgical specialists dedicated to the health, safety, and well-being of infants, children, adolescents, and young adults.

American Academy of Pediatrics
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Bathing Your Baby

Bathing your baby is an experience many parents treasure. It's a great time to bond, distraction-free, as your tiny new family member enjoys the sensation of warm water on their skin. Yet this common parenting ritual often comes with questions, and sometimes anxiety, about when and how to do it well.

Here are some frequently asked questions from parents about topics related to baby bath timing, frequency, safety, and more.

When should newborns get their first bath?
The timing of your baby's very first bath has changed over the last few years. While most institutions used to bathe babies within an hour or two of birth, many are changing their policies.

The World Health Organization (WHO) recommends delaying baby's first bath until 24 hours after birth—or waiting at least 6 hours if a full day isn't possible for cultural reasons.

Why wait?
Here are some reasons why it is now recommended to delay baby's first bath:

- **Body temperature and blood sugar: Babies who get baths right away may be more likely to become cold and develop hypothermia. The minor stress of an early bath can also make some babies more likely to have a drop in blood sugar (hypoglycemia).**

- **Bonding and breastfeeding: Taking the baby away for a bath too soon can interrupt skin-to-skin care, mother-child bonding, and early breastfeeding success. One study showed a 166% increase in hospital breastfeeding success after implementing a 12-hour delay in baby's first bath compared to those bathed within the first couple hours.**

- **Dry skin: Vernix, a waxy white substance that coats a baby's skin before birth, acts as a natural moisturizer and may have anti-bacterial properties. Learn more about vernix here. According to the American Academy of Pediatrics (AAP), it's best to leave vernix on a newborns' skin for a while to help prevent their delicate skin from drying out. This is especially important for preemies, as their skin is highly prone to injury.**

Note: Babies of mothers with HIV or the Hepatitis viruses will still be bathed after the initial breastfeed in order to decrease risk to hospital staff and family members.

How often do babies need a bath once they are home?
Newborns don't need a bath every day. They rarely sweat or get dirty enough to need a full bath that often.

Three baths per week during baby's first year may be enough. Bathing more frequently can dry out your baby's skin.

Can my baby have a bath before the umbilical cord falls off?
Only give your newborn sponge baths until the stump of the umbilical cord falls off, which usually happens by about one or two weeks of age. If it remains beyond that time, there may be other issues at play. See the baby's doctor if the cord has not dried up and fallen off by the time the baby is two months old. Learn more here.

How to give a sponge bath
A sponge bath is like a regular bath, except you don't put your baby in the water.

Baby sponge bath safety tips:

- **Get supplies ready before you begin. Have a basin of water, a damp washcloth rinsed in soap-free water, a dry towel, and anything else you might need within reach before you begin.**

- **Lay baby on a flat surface that is comfortable for both of you—a changing table, bed, floor, or counter next to the sink will do. Pad hard surfaces with a blanket or fluffy towel. If your baby is on a surface above the floor, always use a safety strap or keep one hand on her to prevent falls.**

- **Start washing the face first. Use the dampened cloth to wash her face, being careful not to get water into her eyes or mouth. Then, dip it in the basin of water before washing the rest of her body and, finally, the diaper area.**

- **Keep baby warm. During the sponge bath, wrap your baby in a dry towel and uncover only the parts of her body you are actively washing. Pay special attention to creases under the arms, behind the ears, around the neck, and, especially with a girl, in the genital area.**

When is my baby ready for a regular bath?
Once the umbilical area is healed, you can try placing your baby directly in the water. His first baths should be as gentle and brief as possible. He may protest a little. (If this happens go back to sponge baths for a week or two, then try the bath again). Babies usually make it clear when they're ready.

Baby bathtub safety tips:

- **Use an infant tub or sink. The US Consumer Product Safety Commission recommends a hard plastic baby bathtub that has a sloped, textured surface or sling that keeps your baby from sliding. Only use an infant bath tub manufactured on or after October 2, 2017 so it meets current safety standards. Some parents find it easiest to bathe a newborn in a bathinette, sink, or plastic tub lined with a clean towel. Yes, a sink! Sometimes easiest is best; just be careful. Sinks are slippery and have all sorts of things sticking out like faucets and handles.**

    - **Avoid using bath seats. These seats provide support so a child can sit upright in an adult bathtub. Unfortunately, they can easily tip over. A child can fall into the bathwater and drown.**

- **Use touch supervision. Have a towel and other bath supplies within reach so you can keep a hand on your baby at all times. If you've forgotten something or need to answer the phone or door during the bath, you must take the baby with you.**

    - **Start practicing infant water safety now: Never leave a baby alone in the bath, even for an instant. Most child drownings inside the home occur in bathtubs, and more than half of bathtub deaths involve children under 1 year of age.**

- **Check the water temperature. Fill the basin with 2 inches of water that feels warm—not hot—to the inside of your wrist or elbow. If you're filling the basin from the tap, turn the cold water on first (and off last) to avoid scalding yourself or your child. The American Academy of Pediatrics (AAP) recommends that the hottest temperature at the faucet should be no more than 120 degrees Fahrenheit to help avoid burns. In many cases you can adjust your water heater setting to not go above this temperature. Tap water that's too hot can quickly cause burns serious enough to require a hospital visit or even surgery. In fact, hot water scalds are the top cause of burns among babies and young children.**

- **Keep baby warm. Once you've undressed your baby, place her in the water immediately so she doesn't get chilled. Use one of your hands to support her head and the other to guide her in, feet first. Talk to her encouragingly, and gently lower the rest of her body until she's in the tub. Most of her body and face should be well above the water level for safety, so you'll need to pour warm water over her body frequently to keep her warm.**

- **Use soap sparingly. Soaps can dry out your baby's skin. If a cleanser is needed for heavily soiled areas, use only mild, neutral-pH soaps without additives. Rinse soap from the skin right away. Wash baby's hair two or three times a week using a mild shampoo or body wash.**

    - **You may see some scaly patches on your baby's scalp called cradle cap—a harmless condition that appears in many babies. You can loosen the scales with a soft-bristled brush while shampooing in the bathtub, but it's also okay to leave it alone if it doesn't bother you. It's unlikely to bother your baby, and she will outgrow it.**

- **Clean gently. Use a soft cloth to wash your baby's face and hair, being careful not to scrub or tug the skin. Massage her entire scalp gently, including the area over her fontanelles (soft spots). When you rinse shampoo from her head, cup your hand across her forehead so the suds run toward the sides, not into her eyes. If some suds do get into her eyes, use the wet washcloth to wipe them with plain, lukewarm water. Wash the rest of her body from the top down.**

- **Have fun in the tub. If your baby enjoys her bath, give her some extra time to splash and play in the water. The more fun your child has in the bath, the less she'll be afraid of the water. Bathing should be a very relaxing and soothing experience, so don't rush unless she's unhappy.**

    - **Young infants don't really need bath toys, since just being in the water is usually exciting enough. Once a baby is old enough for the bathtub, however, toys become key. Containers, floating toys, even waterproof books make wonderful distractions as you cleanse your baby.**

- **Get out and dry off. When bath time is finished, promptly wrap a towel around your baby's head and body to help her stay warm while she is still wet. Bathing a baby of any age is wet work, so you may want to wear a terry-cloth apron or hang a towel over your shoulder to keep yourself dry. Gently pat baby dry and apply a small amount of fragrance-free, hypoallergenic moisturizing lotion right after a bath to help prevent dry skin or eczema.**

Remember…
Knowing the basics can make bathing your infant a breeze. Just make sure your baby stays comfortable and safe during bath time—and don't forget to soak up all the special moments that come with it!

Additional Information:

- Infant Water Safety: Protect Your New Baby from Drowning
- 5 Bathroom Safety Tips for Infants & Young Children
- Baby Birthmarks & Rashes

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Source: By: Dipesh Navsaria, MPH, MSLIS, MD, FAAP; American Academy of Pediatrics (Copyright © 2019)

Baby Sunburn Prevention

Why is a baby at special risk from sunburn?

A baby's skin is more delicate and thinner than an adult's and burns and irritates more easily. Even dark-skinned babies may be sunburned. Babies cannot tell you if they are too hot or beginning to burn and cannot get out of the sun without an adult's help. Babies also need an adult to dress them properly and to apply sunscreen.

Prevention Tips

Learn how to stop sunburn before it happens and keep your baby happy, safe, and smiling:

- Babies younger than 6 months should be kept out of direct and indirect sunlight because of the risk of heat stroke. Particularly, avoid having a baby out between 10 a.m. and 2 p.m. when the sun's rays are strongest.
- Keep babies in the shade as much as possible. For example, they should be moved under a tree, beach umbrella, or stroller canopy. However, it is important to note that although on reflective surfaces, an umbrella or canopy may reduce UVR exposure by only 50%.
- Dress babies in lightweight cotton clothing with long sleeves and long pants and a sun hat with a wide brim.
- Sunscreen may be applied to babies younger than 6 months to small areas of skin uncovered by clothing and hats. Remember to cover all exposed areas of a baby's skin, including the face, back of the hands, back of the neck, tips of the ears, and tops of the feet.
- Apply the protection 15 to 30 minutes before going out. Keep in mind that no sunscreens are truly waterproof, and thus they need to be reapplied every one and a half to two hours, particularly if a baby goes into the water. Consult the instructions on the bottle.

Last Updated 11/21/2015

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.

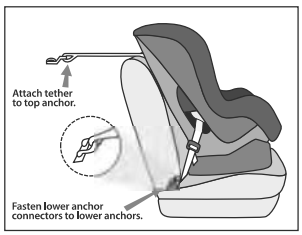

Figure 1. Car safety seat with LATCH (lower anchors and tethers for children).

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.

American Academy of Pediatrics
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Your baby at 2 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 2 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

- ☐ Calms down when spoken to or picked up
- ☐ Looks at your face
- ☐ Seems happy to see you when you walk up to her
- ☐ Smiles when you talk to or smile at her

Language/Communication Milestones

- ☐ Makes sounds other than crying
- ☐ Reacts to loud sounds

Cognitive Milestones (learning, thinking, problem-solving)

- ☐ Watches you as you move
- ☐ Looks at a toy for several seconds

Movement/Physical Development Milestones

- ☐ Holds head up when on tummy
- ☐ Moves both arms and both legs
- ☐ Opens hands briefly

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!

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.
- Talk, read, and sing to your baby to help her develop and understand language.
- Spend time cuddling and holding your baby. This will help him feel safe and cared for. You will not spoil your baby by holding or responding to him.
- Being responsive to your baby helps him learn and grow. Limiting your screen time when you are with your baby helps you be responsive.
- Take care of yourself. Parenting can be hard work! It's easier to enjoy your new baby when you feel good yourself.
- Learn to notice and respond to your baby's signals to know what she's feeling and needs. You will feel good and your baby will feel safe and loved. For example, is she trying to "play" with you by making sounds and looking at you, or is she turning her head away, yawning, or becoming fussy because she needs a break?
- Lay your baby on his tummy when he is awake and put toys at eye level in front of him. This will help him practice lifting his head up. Do not leave your baby alone. If he seems sleepy, place him on his back in a safe sleep area (firm mattress with no blankets, pillows, bumper pads, or toys).
- 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.
- Learn when your baby is hungry by looking for signs. Watch for signs of hunger, such as putting hands to mouth, turning head toward breast/bottle, or smacking/licking lips.
- Look for signs your baby is full, such as closing her mouth or turning her head away from the breast/bottle. If your baby is not hungry, it's ok to stop feeding.
- Do not shake your baby or allow anyone else to—ever! You can damage his brain or even cause his death. Put your baby in a safe place and walk away if you're getting upset when he is crying. Check on him every 5–10 minutes. Infant crying is often worse in the first few months of life, but it gets better!
- Have routines for sleeping and feeding. This will help your baby begin to learn what to expect.

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.

Children's Healthcare of Atlanta

STRONG4LIFE

Building resilient children from birth

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

Your baby was born ready to explore and understand the world around her. 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 your newborn build resilience.**

What is happening with your new baby?

- Your baby may be eating every two to three hours.
- Your baby may seem jumpy and may startle for no reason, or startle and cry at loud noises.

Bonding with your baby

Help your baby feel safe and secure by holding, offering lots of gentle touch, cuddling, smiling and making eye contact. This interaction helps to promote the bond between you and baby, and is also good for brain development.

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).*

Tips for stressed-out new parents

Take care of yourself

- Eat a balanced diet.
- Drink plenty of water.
- Get sleep whenever you can.

Set boundaries

If the number of visitors wanting to see you and your new baby is overwhelming, set firm limits on when and how you would like to interact with extended family and friends, to prevent feeling burned out or dazed.

Connect with loved ones

Spend time connecting with, and expressing your feelings and love for, your other children, your partner, and other family and friends. This will help you feel connected and loved during this exhausting time.

Have a routine

Try to follow a simple routine of self-care each day (such as brushing your teeth, showering and eating), feeding baby and getting rest. But remember to be flexible and forgiving of yourself if you can't do it all.

Practice self-compassion

Even if this isn't your first child, this period of adjustment is difficult! Be forgiving of yourself and remember that you are learning what your new normal is. You and your newest, tiniest family member are learning together.

Communicating with your baby

It's important to start talking about feelings with your baby, even as a newborn, so that she can express those feelings on her own later.

- You can talk about feelings when comforting her.
- Find ways to comfort your baby when she is crying, such as:
  - Rubbing her back
  - Gently rocking her
  - Making a "shush" noise with your mouth
  - Sitting with her in a quiet, dark space if she is feeling overstimulated
  - Swaddling her

Remember, your baby is still brand-new to this world. It is impossible to spoil a baby at this young age. Comforting your newborn when she cries will help build a sense of trust and security between you and your baby.

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

Volume 11
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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.

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Vaccine Education Center

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Immunizations: What You Need to Know

Vaccines (immunizations) keep children healthy. Vaccines are safe. Vaccines are effective. Vaccines save lives.

However, parents may still have questions about why vaccines are needed, and some parents may be concerned about vaccine safety because they have been misinformed.

Read on for answers from the American Academy of Pediatrics (AAP) to some common questions parents have about vaccines. The AAP is a source you can trust for reliable medical information.

Q: What vaccines does my child need?

A: Children need all the following vaccines to stay healthy:

- **Hepatitis A and hepatitis B vaccines** to help protect against serious liver diseases.
- **Rotavirus vaccine** to help protect against the most common cause of diarrhea and vomiting in infants and young children. Rotavirus is the most common cause of hospitalizations in young infants due to vomiting, diarrhea, and dehydration.
- **DTaP and Tdap vaccines** to help protect against diphtheria, tetanus (lockjaw), and pertussis (whooping cough).
- **Hib vaccine** to help protect against *Haemophilus influenzae* type b (a cause of spinal meningitis and other serious infections).
- **Pneumococcal vaccine** to help protect against bacterial meningitis, pneumonia, and infections of the blood.
- **Polio vaccine** to help protect against a crippling viral disease that can cause paralysis.
- **Influenza vaccine** to help protect against influenza (flu), a potentially fatal disease. This vaccine is recommended for all people beginning at 6 months and older.
- **MMR vaccine** to help protect against measles, mumps, and rubella (German measles), all highly contagious and potentially very serious diseases.
- **Varicella vaccine** to help protect against chickenpox and its many complications, including flesh-eating strep, staph toxic shock, and encephalitis (an inflammation of the brain).
- **Meningococcal vaccine** to help protect against very serious bacterial diseases that affect the blood, brain, and spinal cord.
- **HPV (human papillomavirus) vaccine** to prevent cancers of the mouth and throat, cervix, and genitals.

Remember, vaccines prevent diseases and save lives. It's important to follow the schedule recommended by the AAP. Contact your child's doctor if you have any questions.

Q: Why are some of these vaccines still needed if the diseases are not as common anymore?

A: Many of these diseases are not as common as they once were because of vaccines. However, the bacteria and viruses that cause them still exist and can still make children very sick.

For example, before the Hib vaccine was developed in the 1980s, there were about 20,000 cases of Hib disease in the United States a year. Today there are fewer than 100 cases a year. However, the bacteria that causes Hib disease still exists. That is why children still need the vaccine to be protected.

In the United States, vaccines protect children from many diseases. However, in many parts of the world vaccine-preventable diseases are still common. Because diseases may be brought into the United States by Americans who travel abroad or by people visiting areas with current disease outbreaks, it's important that your child is vaccinated.

Q: Chickenpox is not a fatal disease, so why is the vaccine needed?

A: Chickenpox is usually mild. However, there can be serious complications. In fact, before the vaccine was licensed in 1995, there were about 4 million cases, 11,000 hospitalizations, and 100 deaths each year from chickenpox. Chickenpox is also very contagious. Most children feel miserable and miss 1 week or more of school when infected. It is because of the vaccine that the number of cases of chickenpox and its complications, including deaths, have gone down so dramatically.

Q: Does my baby need immunizations if I am breastfeeding?

A: Yes. While breastfeeding gives some protection against many diseases (and is the best nutrition for your baby), it is not a substitute for vaccines. In fact, breastfeeding and vaccines work well together. Studies show that breastfed babies respond better to vaccines and get better protection from them than babies who are not breastfed. And breastfeeding during or right after immunizations may help calm babies upset by the shots.

Q: Do vaccines even work? It seems like most of the people who get these diseases have been vaccinated.

A: Yes. Vaccines work very well. Millions of children have been protected against serious illnesses because they were immunized. Most childhood vaccines are 90% to 99% effective in preventing disease. Children who aren't vaccinated are much more likely to get a disease if they are exposed to it. And if a vaccinated child does get the disease, the symptoms are usually milder with fewer complications than in a child who hasn't been vaccinated.

Q: When should my child get immunized?

A: Children should get most of their shots during their first 2 years of life. This is because many of these diseases are the most severe in the very young. Most newborns receive their first shot (hepatitis B) at birth before leaving the hospital, and more are given at well-child checkups in the first 6 months of life. Other shots are given before children go to school. Older children and teens need vaccines to continue to protect them throughout adolescence and early adulthood. (Parents and caregivers also need vaccines so that they can prevent bringing infections home to their children and to keep themselves healthy so that they can care for their children!)

Children who are not immunized or who are behind on their shots are at risk of getting many of these diseases. They can also spread these diseases to others who have not yet been immunized. Ask your child's doctor if your child is up-to-date. Keep track of the vaccines each child receives and bring this information to each doctor visit.

Q: What side effects will my child have after getting a vaccine? Are they serious?

A: There may be mild side effects, such as swelling, redness, and tenderness where the shot was given, but they do not last long. Your child may also have a slight fever and be fussy for a short time afterward. Your doctor may suggest giving your child pain medicine to help relieve discomfort. It is very rare for side effects to be serious. However, you should call your child's doctor if you have any concerns after vaccines are given.

Q: Should some children not be immunized?

A: Children with certain health problems may need to avoid some vaccines or get them later. In most cases, children with cancer, those taking oral or injected steroids for lung or kidney conditions, or those who have problems with their immune systems should not get vaccines that are made with live viruses. To protect these children, it is very important for others to be vaccinated. On the other hand, a child with a minor illness, such as low-grade fever, an ear infection, cough, a runny nose, or mild diarrhea, can safely be immunized.

Q: Does the MMR vaccine cause autism?

A: No! The MMR vaccine does not cause autism spectrum disorder (ASD). Many research studies have been done to address this issue. There may be confusion because children with ASD are often diagnosed between 18 and 30 months of age—around the same time the MMR vaccine is given. This has led some people to assume that the vaccine is the cause. Increasing evidence shows that even though the symptoms of ASD may not be visible until the second year of life or later, ASD starts before a baby is born.

Q: Do vaccines cause SIDS?

A: No! Babies get many of their first vaccines between 2 and 4 months of age. This is also the peak age for sudden infant death syndrome (SIDS), which is why some people feel they might be related. However, careful scientific studies have confirmed that vaccinations not only do not cause SIDS but may help prevent it.

Q: How do we know vaccines are safe?

A: The safety and effectiveness of vaccines are under constant study. Because vaccines are designed to be given routinely during well-child care visits, they must be safe. Safety testing begins as soon as a new vaccine is considered, continues until it is approved by the US Food and Drug Administration (FDA), and is monitored indefinitely after licensure. The AAP works closely with the Centers for Disease Control and Prevention (CDC) to make recommendations for vaccine use.

Q: What is thimerosal and does it cause neurologic problems?

A: In the 1930s a preservative called thimerosal was added to vaccines to prevent contamination of vaccines. Thimerosal contains very small amounts of mercury, but it is in a different form than the potentially harmful mercury we are all exposed to in the environment. Even after many studies, the type of mercury in thimerosal has never been shown to cause health problems other than rare allergic reactions in some people. Thimerosal does not cause neurologic problems. Since 2001 all vaccines for infants either are thimerosal-free or contain only trace amounts of the preservative. Many are available in single-dose, preservative-free forms.

Q: Is it safe to give more than one vaccine at a time?

A: Yes! Your child's immune system is capable of handling multiple vaccines. Many years of experience and careful research have shown that routine childhood vaccines can be given together safely and effectively. Side effects are not increased when vaccines are given together.

Q: Where can I find more information?

A: Be sure your information comes from reliable and accurate sources. You cannot trust everything you find on the Internet. Credible sources include

American Academy of Pediatrics
www.HealthyChildren.org

CDC-INFO Contact Center (English and Spanish)
800/232-4636 (800/CDC-INFO)

CDC Vaccines & Immunizations
www.cdc.gov/vaccines

Children's Hospital of Philadelphia Vaccine Education Center
www.chop.edu/centers-programs/vaccine-education-center

Immunization Action Coalition
www.immunize.org

Infectious Diseases Society of America
www.idsociety.org

Listing of resources does not imply an endorsement by the American Academy of Pediatrics (AAP). The AAP is not responsible for the content of external resources. Information was current at the time of publication.

From Your Doctor

American Academy of Pediatrics
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The American Academy of Pediatrics (AAP) is an organization of 66,000 primary care pediatricians, pediatric medical subspecialists, and pediatric surgical specialists dedicated to the health, safety, and well-being of infants, children, adolescents, and young adults.

An Important Immunization Message from the AAP

Measles is not a mild disease. Neither is whooping cough, Hib meningitis, or rotavirus. These are diseases that cause parents to make worried middle-of-the-night phone calls to their doctor, race to the emergency department, and spend days nursing a sick and miserable child. And this suffering is completely avoidable with vaccines.

As a pediatrician, I recommend and do what is in the best interest of my patient based on the scientific evidence. As a parent, I do whatever I can to prevent illness in my child.

As a physician, giving parents the advice that it's ok to skip vaccines, or that measles is not a big deal, is harmful and dangerous. It ignores the fact that immunizations are one of the most effective strategies we have for preventing disease.

To be perfectly clear, there is no "alternative" immunization schedule. Delaying vaccines only leaves a child at risk of disease for a longer period of time … it does not make vaccinating safer. There is no alternative if you want the optimal protection for your child.

Why This is Important:
The ability to prevent suffering is one of the things that mean the most to me as a pediatrician. My colleagues share this belief. I have heard from many pediatricians who are working exceptionally hard in their communities to protect our most vulnerable children from the real threat that these diseases pose.

Why Pediatricians Worry:
The science is overwhelming that vaccines are safe and effective. But pediatricians worry that parents' doubts about vaccines will prevent families from getting their children the immunizations they need. We worry that parents won't realize the urgency to vaccinate on time. We worry about families who lack access to medical care or transportation and fall behind on their child's immunization schedule. These gaps in the shield of protection that immunizations provide leave our entire communities more vulnerable, including children who are too young to benefit from vaccines and those who cannot be vaccinated due to medical problems.

Because we worry about the children in our care, pediatricians spend hours each day counseling families and answering their questions about vaccines. A study published in *Pediatrics* surveyed more than 500 pediatricians across the country and found 93 percent of them have some parents in their practice who ask to spread out their child's vaccines. Delaying vaccines puts these children at additional risk. The vast majority of pediatricians reported they continue to work with these families in hopes they will agree to timely vaccinations.

The Best Way to Protect Your Child:
The recommended schedule of immunizations has been researched and documented to be the most effective and safe way to protect children. The vaccines are carefully timed to provide protection when children are most vulnerable, and when the vaccines will produce the strongest response from the child's immune system.

The American Academy of Pediatrics, and its 67,000 members, urges parents to make the decision to immunize. Pediatricians strongly recommend timely vaccinations because of what we know to be true: Vaccines are simply the best way to protect our children from these viruses and bacteria that can cause real and devastating harm. Just as you would never leave home without buckling your child into a car seat, vaccines will protect your child from infectious diseases that are impossible to anticipate. We all have enough worries in our lives. Let's give ourselves the peace of mind that we have done everything we can to protect our children from these preventable diseases.

Additional Information:

- Protecting Your Baby from a Measles Outbreak
- How Do Vaccines Work
- 14 Diseases You Almost Forgot About Thanks to Vaccines

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