
Acton Medical
ASSOCIATES
Adult & Pediatric Primary Care

# Newborn Booklet Birth to 2 years

Hightlights include....
Common Questions
Vaccine Descriptions and Charts
Physical Characteristics and Common Concerns
Head – Skin – Fingernails – Navel – and more!
**PLUS!** Routine Care & Milestone Trackers

**www.actonmedical.com**

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# Note from the CEO

## Deborah B. Kovacs, M.D.

*"Our mission is to provide convenient access to cost-effective, high-quality pediatric care in a friendly, caring, and respectful manner. We're a team of dedicated Pediatricians who united to form an independently owned private practice with a passion for delivering exceptional clinical care and medical services.*

*Pediatric patients are seen until they graduate from college, through age 22, if followed by our practice. Our adult medicine team will see new patients over 18."*

# Our Locations

## Acton

321 Main Street
Acton, MA
01720

**(978) 635-8914**

## Harvard, MA

**231 Ayer Road**
**Harvard, MA 01451**

**(978) 772-1213**

## Hudson, MA

**36 Highland Commons East Acton, MA 01749**

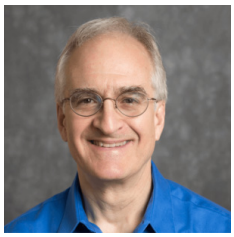
**(978) 568-1420**

## Littleton, MA

**592 King Street**
**Littleon, MA 01460**

**(978) 486-9255**

# Meet your Team of Pediatric Providers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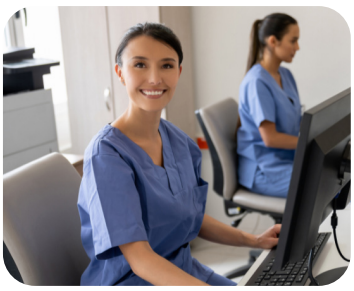
*We are dedicated to you and your family*

# Services

**Radiology:** By appointment in Acton and

**Urgent Care:** Available 7 days a week.

**Laboratory:** By appointment in all offices.

**Triage Nurses:** Available 7 days a week.

**Lactation Support:** By appointment in Acton, Harvard, Hudson, and Littleton.

We offer Radiological services in Acton and Hudson. Laboratory appointments are available in all locations! Nurses are standing by to answer your calls 24 hours a day!

# Infant Physical Characteristics and Common Concerns

**HEAD**
The fontanel (soft spot) varies in size from baby to baby and does not close until 6-18 months. It's normal to see it pulsate and bulge with crying and straining. If it bulges continuously when the baby is quiet, call our office.

**Cradle Cap** - Flaky whitish or yellowish scale that occurs on the scalp, also known as seborrheic dermatitis. Using a soft facecloth to wash with soap and water may help. Stubborn cradle cap can require baby oil to soften flakes before shampooing, and then massaging gently with a baby brush. Sometimes medicated cream is needed.

**EYES**
Babies' eyes cross and uncross often in the first weeks to months of life, please let us know if it continues past 6 months.

**Subconjunctival Hemorrhage:** Bright red spots on the white part of the eye after birth are most likely areas of burst capillaries from the force of labor. This is harmless and self resolves over a month.

**Nasolacrimal Duct Obstruction:** Yellow material may gather in the corners of the eyes due to plugged nasolacrimal ducts (tear duct). Most resolve by 12 months old. Treatment involves gently applying a warm compress and wiping the material away. If eyes get red, lids swollen, or there is excessive drainage, let us know.

**NOSE**
All babies sniffle, snort, and sneeze, this doesn't mean they have a cold. If there's drainage from the nose, use a bulb syringe or nasal aspirator to remove it and provide more comfort. A cool mist vaporizer or humidifier can help, especially in the dry heat of homes during winter. Clean humidifiers daily with diluted bleach.

**EARS**
The outer part of the ear may be cleaned with a damp cloth. Do not insert a Q-tip into the ears; this only pushes wax further in and risks hurting the baby.

**MOUTH**
This is the center of the baby's universe, yet no special care is required.

**Epstein Pearls:** Small whitish cysts occasionally seen on the palate, they are benign and go away by themselves.

**Oral Thrush:** A fungal infection that may develop in newborns. It looks like milk curds stuck on the inside of the cheeks and cannot be removed easily by a Q-tip or damp cloth. Contact us if this occurs.

**SKIN**
Your baby may appear to have dry skin in the first days of life. This represents an adjustment of the skin to the environment. Generally, moisturizers or lotions are not needed. Skin will appear normal in 2-4 weeks.

**Congenital Dermal Melanocytosis**: Bluish-gray flat birthmarks usually found on the back and buttocks at birth. They occur more commonly on darker skinned babies and most fade away between 2-3 years of age.

**Erythema Toxicum:** Rash that occurs on day 2 or 3, and comes and goes over the first 2 weeks of life. It's characterized by red blotches with small blister-like heads. The cause is unknown, self-limited and requires no treatment. If multiple persistent blisters develop, the baby should be seen.

**Milia:** Tiny white bumps on the face. These are blocked skin pores and will open and resolve on their own by 1-2 months of age. There is no required treatment.

**Neonatal Acne:** A rash resembling acne on the face or upper chest which generally appears at 4-8 weeks. It comes and goes, is especially bad when the child is agitated or hot, and goes away without treatment. This is thought to be caused by the transfer of maternal hormones just prior to birth. Do not squeeze them.

**Drooling rash:** Red rash on cheeks and chin that comes and goes due to contact with food, and acid spit up from the stomach. Rinse face with water after feeding. May also apply Vaseline or Aquaphor ointment for protection.

**Diaper Rash:** Irritation in the diaper area is very common. Zinc oxide cream, vitamin A&D ointment, or Vaseline should be used liberally on the affected area. Change diapers frequently to minimize irritation. A worsening diaper rash over 3-5 days, despite the use of creams, deserves a phone call to the nurse.

## FINGERNAILS AND TOENAILS

They are usually soft and pliable for one to two weeks after birth. Don't bother cutting them at this point because they might bleed. Once hardened, they may be cut with blunt scissors or baby nail clippers, or gently filed with an emery board. Some people find it an easier task when the baby is sleeping. Nails left uncut will break off by themselves making cutting optional. To help prevent infants from scratching themselves, mittens or socks can be placed over their hands.

## BREASTS

Male or female infants may have breast development. This is caused by the passage of maternal hormones across the placenta. You may feel lumps under the breasts around one-week of age. Swelling should be symmetric and not sore, hot, or red. Do not squeeze the breast buds. This generally resolves over the first months of life.

## NAVEL (UMBILICUS)

The belly button represents a potential for infection in the newborn. When diapering, try to keep the diaper below the belly button so it stays dry. Do not immerse the baby in a tub until the cord falls off. Give the baby a sponge bath to keep it clean as needed. Cords usually fall off within 2 weeks, but can stay on a lot longer, especially if they constantly get wet. It's common for a cord to bleed slightly during the separation process. There is no reason to be alarmed. Routine use of rubbing alcohol is not needed. Simply keep the cord dry to speed it's falling off.

## GENITALS

### Female

The vulva is an area that must be kept very clean. The proximity of the urethra (urinary outlet) to the anus creates the potential for introduction of bacteria and thus infection in the bladder. The folds of the labia should be spread open to remove accumulated debris. Always cleanfront to back using either a face cloth with water or commercial wipes.

**Swollen Labia:** The labia minora can be quite swollen in newborns due to the passage of female hormones across the placenta. The swelling resolves in 2-4 weeks.

**Vaginal Discharge:** As the maternal hormones decline in the baby's blood, a clear or white discharge can flow from the vagina during the first week of life. Occasionally, the discharge can be pink or blood-tinged. This is normal, self-limited, and should not recur after it stops.

## MALE

The circumcised penis should be kept lubricated with Vaseline until it is no longer sore or raw-looking. Gentle cleaning can be done as needed with soap and water or a commercial wipe. The penis often looks swollen, red, and irritated for the first few days after circumcision. However, it heals well in seven to ten days. Call us if bleeding persists or a discharge develops. If not circumcised, wash the penis gently as you would other parts of the body. In most cases, the foreskin cannot be retracted. Do not force it. It will resolve naturally over time.

# General Information

**1. SLEEPING**
Babies should sleep flat on their backs in their own sleep space without pillows, blankets, crib bumper, or other objects. Hats should be removed for sleep. These objects pose suffocation risks and prevent ideal heat regulation. There is an increased incidence of Sudden Infant Death Syndrome (SIDS) in babies who sleep on their stomachs.

**2. HICCUPS**
These are extremely common and rarely bother infants. They commonly occur following feeding or burping and self-resolve. Babies that have the tendency to get the hiccups probably also had them in utero. Remember that rhythmic jerking during pregnancy?

**3. NASAL CONGESTION**
Babies often sound congested but it is rarely due to illness in the first month of life. Their nose is very small so any amount of mucus can make them sound congested, making it difficult to feed or sleep well. Use a few drops of nasal saline then a bulb syringe or nasal aspirator to clear out mucus.

**4. SPITTING UP**
All babies spit up varying amounts of food and occasionally will vomit a whole meal. If the baby is gaining weight despite constant spitting, there is no need to worry. Once the baby spends most of their time sitting or standing, the problem usually clears. If it's forceful, persistent, or becomes a bothersome problem, be sure to discuss it with us.

**5. CRYING**
Your baby has many different cries and you will quickly learn to distinguish them. Crying can be caused by hunger, a wet or stool-filled diaper, gas, being too hot or too cold, being uncomfortable, or just letting off steam. Changing, rocking, walking, and of course feeding the baby if hungry, are the obvious things to do in response to crying.

Remember, even babies need to let off steam. If you are sure the baby is okay, it will not hurt them to cry for short periods of time. If you feel your baby's cry is an unusual one or they look ill, act strange, have loss of appetite for a couple of meals, or have other symptoms, call our office.

**6. BOWEL HABITS**
Every baby will establish their own bowel habits, and there is a wide range of "normal." Bowel movements can occur twice during a single feeding (up to 12 per day) or just once a week. Breastfed babies may have very frequent stools that are soft and runny. Formula-fed babies tend to have stools that are firmer and less frequent. Infant stool is often seedy and ranges in color from bright yellow/orange to green to brown.

**7. BURPING**
Babies need to burp if they swallow air while eating or as a result of crying. Small air bubbles get trapped under stomach fluid and can cause discomfort. Some babies burp easily while others do not.

To burp, hold the baby on your cloth-covered shoulder and gently pat or rub their back. You can also sit the infant up on your lap with one hand under their chin for support and use the other to gently circle and pat the back. It's not essential that the baby burps if they are comfortable and happy.

**8. ACTIVITY**
Some newborn babies sleep 20 hours a day while others sleep 12. Some are extremely active and constantly kick, flail their arms and legs, and cry, while others lay passively. Some will remain in the position they are placed while others scoot around due to random movements of their legs and arms. Some babies like to be swaddled in clothing and blankets while others do not.

Your baby has their own personality from the very start. Enjoy learning about their quirks and desires. Try to mold to your baby's needs to make life easier for yourself; however, this is not always simple.

**9. FEEDING**
Your baby's primary source of nutrition for the first year of life will be breast milk or formula. During the first 4 months of life, your baby's diet should include only breast milk and/or formula.

Regular cow milk, juice, and pureed foods are not recommended this early in your child's life. Your infant will be ready to start pureed foods between 4-6 months of age.

# Feeding

Breastmilkis an ideal source of nutrition for an infant. It is easy to digest and provides antibodies to protect against some infections. If breastfeeding, new babies should be put to the breast as soon as possible after birth. Research shows that skin-to-skin contact and breastfeeding within 30 minutes of birth is beneficial for baby and mother. Early contact has been shown to help regulate temperature and breathing, adjust to the outside world, and reduce the risk of maternal hemorrhage.

The bonding and feeding times allow the baby to get colostrum. Colostrum is thick yellow milk that, while small in volume, is full of nutrients and antibodies to fight hunger and infection. In the first few days babies feed 12-16 times a day. They may cluster-feed every hour for a few hours at a time. Try to nurse at the first signs of hunger: stirring, rooting, hands in the mouth. Avoid waiting until the baby is upset or crying. Many are sleepy after birth and need to be woken every 2-3 hours to feed. Colostrum should begin transitioning ro mature milk in the first 5 days, an increase in amount and different consistency may be noticed.

Remember that while breastfeeding you're eating for two. Drink at least 64oz. of fluids per day and about 500 calories more than usual to support your milk supply. To minimize engorgement and encourage adequate supply try not to skip any feedings, especially overnight. Try to encourage a good latch and let baby finish feeding on the first breast before transferring to the second. Each feeding may last 10-20 minutes per breast.  If the baby starts to fall asleep, try to wake them by undressing to diaper, rubbing baby's back, tickling feet, or changing the diaper.

Most newborns lose up to 10% of birth weight in their first days. Once mother's milk comes in, the baby should gain 0.5-1oz. a day and be back to birth weight in 2 weeks. The best way to monitor weight gain and adequate milk intake is to watch for dirty and wet diapers. Baby may only have 1-2 dark thick meconium bowel movements in the first days. Around day 4, as milk comes in, stools increase to 3-4 per day, and will be yellow and seedy. Wet diapers increase once milk is in, expect at least 6 per day. Call our office if seeing less than 4 wet diapers per day.

# Feeding Continued

Breastfeeding can be challenging as infants and mothers learn the process and the milk supply develops. Though it can initially be uncomfortable, it shouldn't be painful. If painful red areas or cracked, bleeding nipples develop, call your obstetrician. If there is nipple soreness, the baby may not be latching well. While rewarding, breastfeeding can be overwhelming and stressful at times. If having trouble with latching, proper positioning, sore nipples, or milk supply, we can help in the office or help find a lactation consultant who can see you at home.

**FORMULA FEEDING**

There are many nutritionally complete formulas available. We recommend starting with a cow's milk-based formula such as Similac, or Enfamil. Your pediatrician may recommend a change if there is difficulty with these formulas. Most babies stay on the cow's milk-based formula in the first year.

**There are three types of formula:**

- Powder
- Concentrate
- Ready-to-Feed

Ready-to-Feed is the easiest option, and most expensive.

There is no nutritional difference between these three types of formulas, so choose what works best for your lifestyle.

Most babies begin with 1-2oz. of formula per feeding, but quickly increase to 4 or more ounces during the first 2 months of life. If your baby finishes a bottle fully, they may be signaling that they wants more.

Most babies need 24-32oz per day to have adequate growth over time. Babies differ greatly in how much they like to eat at a time. Your baby will initially eat every 3-4 hours around the clock. That will change as they grows. If they are growing well, it is fine to let them make their own schedule.

Most babies who sleep through the night eat more volume and more frequently during the day so they can sleep longer at night. If, however, your baby eats much more at night than during the day, it is fine to attempt to modify the schedule to better fit your needs.

# Common Questions

Fever in a child can be worrying for parents, and most high fevers seem to occur at night. It is important to remember that fever is anatural mechanism that helps the body fight infection. Fever is defined as a temperature of 100.4F or higher. Call our office immediately for evaluation if an infant less than 3 months has a fever. Fevers should always be measured with a rectal thermometer in children under 6 months old.

It's common for children over 3 months to have a rectal temperature of 103-104F with common childhood illnesses; this is no cause for great concern. Most of the time, a fever tells us that an infection has started. In many cases, the fever is gone in 2-3 days and is caused by a short-lived viral infection.

The focus of a child with a fever is comfort. Monitor the child's activity level, fluid intake, and overall demeanor. Accurate symptom reporting, hydration, and energy level are more important than temperature. Dress in lightweight clothing, use a light blanket, and encourage rest.

Fever reducing medications such as Tylenol (acetaminophen) and Motrin (ibuprofen) should help the child feel more comfortable; aspirin should be avoided. For example, a child with a fever who is content to play does not necessarily need medication. Allow children with fever to sleep without being awakened for medicine or taking a temperature if they are comfortable. Treat all fevers in children with a history of febrile seizure. The correct dosage is based on weight, and an accurate measuring device should be used.

The focus of fever treatment should not be on maintaining a "normal" temperature but on keeping a child comfortable so they can rest and stay hydrated. Most fevers can be safely managed at home. If your child develops any of the following symptoms, you should call our office immediately:

- Fever for greater than 48 hours
- Stiff neck
- Shortness of breath
- Seizure
- Purple spots on the skin
- Temperature of 105 or higher
- Pain (e.g., ear pain or abdominal pain)

## TEETHING

Most babies get their first teeth at 6-7 months, but they can appear as early as 2 months, or as late as one year. The first tooth is typically the central lower incisor followed by the central upper incisors. In about 20% of children the lateral upper incisors come in second. Most children have all 20 of their baby teeth by the time they are 2.5 to 3 years old. Baby teeth typically begin to shed, or fall out, between 5 and 8 years of age. Teething can be uncomfortable and children may teethe for months before eruption of the tooth.

The most common symptoms of teething are:

- Drooling
- Increased saliva
- Irritability
- Loss of appetite
- Up at night
- Loose stools
- Desire to chew on everything
- Elevated temperature, below 100.4F

There is no needed treatment. Massaging gums with a clean finger can be useful, as well as cool teething rings. If the child is very uncomfortable, a dose of Tylenol can be administered. We do not recommend using teething tablets or topical gels like Orajel. Some teeth, like molars, may cause bruised or swollen gums. This is called an eruption hematoma and should resolve when the tooth comes through the gum line.

## UPPER RESPIRATORY INFECTION (URI)

Upper respiratory infections are characterized by nasal congestion, sneezing, sore throat, fever, malaise, and poor appetite. Yellow or green nasal drainage caused by the resolving inflammatory process occurs during a cold and does not imply bacterial infection. Symptoms of URI may include a fever and nasal congestion, and can lead to irritability, difficulty feeding and sleeping, and coughing that may cause vomiting. Usually, the cause for these symptoms is a viral infection such as a common cold. URI symptoms typically peak on day 3 to 5 of illness and gradually improve over 10-14 days.

First line treatment for a URI is supportive care:

- Maintaining adequate hydration and humidified air
- Saline drops in the nostrils with gentle nasal suction
- Tylenol or Motrin for fever or discomfort
- Cold medicines are not recommended for children

Children may get 2-8 URI's annually, and those attending daycare may see 50% more colds. Proper hand hygiene helps to prevent the spread of common viral infections.

## OTITIS MEDIA (EAR INFECTION)

Otitis media is a common bacterial complication that can occur around day 3 or later of the URI. A change in symptoms may be noticed like sleep disturbance, fever, or ear pain. Otitis media rarely occurs without cold symptoms. Call our office if you think your child is developing an ear infection.

## VOMITING

Viral gastroenteritis causes vomiting and can include stomach cramps and nausea. Vomiting is typically self-limited within a couple days and there is no specific treatment. The goal is rehydration of the fluid and sodium that was lost. It's important to wait at least an hour after the last episode of vomiting before starting to administer very small amounts of clear fluids like water, Pedialyte, chicken broth, or breast milk. Start by giving one teaspoon of fluid every 5 minutes, for 15 minutes (totaling 3 teaspoons), then increase to one tablespoon. If well tolerated, slowly increase the fluid volume and return to solid foods after the child has been tolerating 4-6 oz. at two feedings (4-6oz. first, then wait 5 minutes and give another 4-6oz). Some children may need a clear fluid diet for 12-24 hours. The best treatment is to let the digestive track rest with clear fluids followed by easily digested and absorbed foods. Avoid foods that are rich or spicy.

The most frequent complication of vomiting is dehydration. It's important to monitor your child for signs of dehydration such as sunken eyes, tearless crying, dry mouth, and less frequent urinary output; less than every 8 hours for ages 12+ months, and every 6 hours in infants under one year. Vomiting is typically self-limited, but can be a sign of more serious medical problems in some situations. Please call us if vomiting is associated with a recent head injury or there is:

- Blood in vomit
- Suspicion of poison ingestion
- Severe headache or stiff neck
- Significant abdominal pain
- Increased thirst or urination
- Bulging soft spot in an infant

## DIARRHEA

Diarrhea is a sudden increase in the frequency and looseness of bowel movements, and may be associated with vomiting. The number of loose stools per day is less important than recognizing a change in consistency or a deviation from a child's normal stooling patterns. Most diarrhea is caused by a viral infection of the intestines. It is helpful to remember that diarrhea is the body's way of getting rid of germs. Viral diarrhea lasts 5-14 days. Severe diarrhea occurs on the first and second days, but loose stools can persist for 1-2 weeks.

Dehydration is the most common complication of acute watery diarrhea in children. To help prevent dehydration, it's important to try to decrease the frequency of bowel movements and help hydrate your child by encouraging them to drink more fluids. Avoid soft drinks and juice because they can exacerbate diarrhea, so push starchy or binding foods like bananas, rice, applesauce, or toast. Avoid spicy or heavy foods. For breast and formula fed babies, continue to offer small, more frequent feeds as tolerated and monitor their diapers for adequate hydration. Consider using diaper cream to help prevent diaper rash in young children.

**IMPORTANT:** Call the office if these symptoms occur:

- blood or mucus in stool
- signs of dehydration
- severe discomfort,
- diarrhea persists for more than 2 weeks.

**TICK BITES**

Young children are frequently exposed to ticks when they play outside. Tick checks are encouraged after coming inside from outdoor play or hikes. Check under your child's clothing, in their hair, and behind their ears. Checking for ticks regularly may improve the chances to prevent a tick bite.

If a tick is found, note how long it has been attached, the location of the tick bite, and size of the insect. An engorged or puffy tick has likely been attached longer than a tiny tick that is not engorged. It is helpful to recognize the type of tick: a deer tick is about the size of a poppy seed whereas a dog tick is closer to that of a pencil eraser (sizes are before tick becomes engorged).

An embedded tick should be removed immediately. The best approach is to use sharp tweezers to grab the tick as close to the child's skin as possible. Apply steady firm pressure to lift the tick up and away from the skin. Grasp the head of the tick and avoid squeezing its body. Do not try to burn or suffocate the tick.

Sometimes it's not possible to remove all of the tick and a small amount is still seen in the skin. It is unnecessary to pull out the remains if this happens. Once the body has been removed, the tick can no longer transmit disease, and your child's body will likely extrude the piece on its own. Continuing to dig and irritate the skin may cause your child unnecessary physical or emotional trauma as well as increasing the risk for skin infection.

It is important to monitor children in the weeks following a tick bite for the following;

- Fever
- Joint pain
- Malaise or fatigue
- Erythema Migrans – round or oval rash, red and target-shaped, usually seen within 28 days of bite near site or elsewhere on the body

# Over the Counter Medication Dosing

**IBUPROFEN (Advil/Motrin)**
**Every 6 hour dosing**
******for children 6 months or older only******

| Weight | Dose | Infant Suspension 50 mg/1.25 ml | Children's Suspension 100mg/5 ml | | 50 mg Chewable Tablets | 100 mg Jr. Strength Chewable, or Jr. Strength Caplets |
|---|---|---|---|---|---|---|
| 13-16 lbs | 50 mg | 1.25 ml | ---- | | ---- | ---- |
| 17-21 lbs | 75 mg | 1.875 ml | ---- | | ---- | ---- |
| 22-27 lbs | 100 mg | 2.5 ml (2 x 1.25) | 1 teaspoon | 5 ml | ---- | ---- |
| 28-32 lbs | 125 mg | 3.125 ml (1.25+1.875) | 1 ¼ teaspoon | 6.25 ml | ---- | ---- |
| 33-38 lbs | 150 mg | 3.75 ml (3 x 1.25) | 1 ½ teaspoon | 7.5 ml | 3 | ---- |
| 39-43 lbs | 175 mg | ---- | 1 ¾ teaspoon | 8.75 ml | 3 | ---- |
| 44-54 lbs | 200 mg | ---- | 2 teaspoon | 10 ml | 4 | 2 |
| 55-65 lbs | 250 mg | ---- | 2 ½ teaspoon | 12.5 ml | 5 | 2 |
| 66-76 lbs | 300 mg | ---- | 3 teaspoon | 15 ml | 6 | 3 |
| 77-87 lbs | 350 mg | ---- | 3 ½ teaspoon | 17.5 ml | 7 | 3 |
| > 87 lbs | 400 mg | ---- | 4 teaspoon | 20 ml | 8 | 4 |

**TYLENOL (Acetaminophen)**
**Every 4 hour dosing**
******Not for children <8 weeks unless recommended by MD******

| Weight | Dose | Infant Suspension 160mg/5ml | Children's Suspension 160mg/5ml | | 80 mg Chewable Tablets | 160 mg Jr. Strength Tablets |
|---|---|---|---|---|---|---|
| 6-11 lbs | 40 mg | 1.25 ml | ¼ teaspoon | 1.25 ml | ---- | ---- |
| 12-17 lbs | 80 mg | 2.5 ml | ½ teaspoon | 2.5 ml | ---- | ---- |
| 18-23 lbs | 120 mg | 3.75 ml | ¾ teaspoon | 3.75 ml | ---- | ---- |
| 24-35 lbs | 160 mg | 5 ml | 1 teaspoon | 5 ml | 2 | ---- |
| 36-40 lbs | 240 mg | 7.5 ml | 1 ½ teaspoon | 7.5 ml | 3 | ---- |
| 41-46 lbs | 280 mg | 8.75 ml | 1 ¾ teaspoon | 8.75 ml | 3 | ---- |
| 47-58 lbs | 320 mg | 10 ml | 2 teaspoon | 10 ml | 4 | 2 |
| 59-69 lbs | 400 mg | 12.5 ml | 2 ½ teaspoon | 12.5 ml | 5 | 2 ½ |
| 70-81 lbs | 480 mg | 15 ml | 3 teaspoon | 15 ml | 6 | 3 |
| 82-93 lbs | 560 mg | 17.5 ml | 3 ½ teaspoon | 17.5 ml | 7 | 3 ½ |
| > 93 lbs | 640 mg | 20 ml | 4 teaspoon | 20 ml | 8 | 4 |

**BENADRYL (Diphenhydramine)**
**Every 6 hour dosing**
******Not for children <6 months unless recommended by MD******

| Weight D | ose | Children's Suspension 12.5mg/5ml | | 12.5mg Chewable Tablets | 25mg Adult Tabs/Caps/Liqui-Gels |
|---|---|---|---|---|---|
| 12-15 lbs | 6.25 mg | ½ teaspoon | 2.5 ml | ---- | ---- |
| 16-20 lbs | 9.38 mg | ¾ teaspoon | 3.75ml | ---- | ---- |
| 21-30 lbs | 12.5 mg | 1 teaspoon | 5 ml | 1 | ---- |
| 31-40 lbs | 18.75 mg | 1 ½ teaspoon | 7.5ml | ---- | ---- |
| 41-60 lbs | 25 mg | 2 teaspoon | 10 ml | 2 | 1 |
| 61-80 lbs | 37.5 mg | 3 teaspoon | 15 ml | 3 | ---- |
| >80 lbs | 50 mg | 4 teaspoon | 20ml | 4 | 2 |

**Table 1** COVID-19 vaccination recommendations have changed. Find the latest recommendations at www.cdc.gov/covidschedule

## Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2023

**These recommendations must be read with the notes that follow.** For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars.
To determine minimum intervals between doses, see the catch-up schedule (Table 2).

| Vaccine | Birth | 1 mo | 2 mos | 4 mos | 6 mos | 9 mos | 12 mos | 15 mos | 18 mos | 19–23 mos | 2–3 yrs | 4–6 yrs | 7–10 yrs | 11–12 yrs | 13–15 yrs | 16 yrs | 17–18 yrs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hepatitis B (HepB) | 1st dose | ← 2nd dose → | | | ← 3rd dose → | | | | | | | | | | | | |
| Rotavirus (RV): RV1 (2-dose series), RV5 (3-dose series) | | | 1st dose | 2nd dose | See Notes | | | | | | | | | | | | |
| Diphtheria, tetanus, acellular pertussis (DTaP <7 yrs) | | | 1st dose | 2nd dose | 3rd dose | | | ← 4th dose → | | | | 5th dose | | | | | |
| *Haemophilus influenzae* type b (Hib) | | | 1st dose | 2nd dose | See Notes | | ← 3rd or 4th dose, See Notes → | | | | | | | | | | |
| Pneumococcal conjugate (PCV13, PCV15) | | | 1st dose | 2nd dose | 3rd dose | | ← 4th dose → | | | | | | | | | | |
| Inactivated poliovirus (IPV <18 yrs) | | | 1st dose | 2nd dose | ← 3rd dose → | | | | | | | 4th dose | | | | | See Notes |
| COVID-19 (1vCOV-mRNA, 2vCOV-mRNA, 1vCOV-aPS) | | | | | 2- or 3- dose primary series and booster (See Notes) | | | | | | | | | | | | |
| Influenza (IIV4) | | | | | Annual vaccination 1 or 2 doses | | | | | | | | Annual vaccination 1 dose only | | | | |
| or | | | | | | | | | | | | | or | | | | |
| Influenza (LAIV4) | | | | | | | | | | | Annual vaccination 1 or 2 doses | | Annual vaccination 1 dose only | | | | |
| Measles, mumps, rubella (MMR) | | | | | See Notes | | ← 1st dose → | | | | | 2nd dose | | | | | |
| Varicella (VAR) | | | | | | | ← 1st dose → | | | | | 2nd dose | | | | | |
| Hepatitis A (HepA) | | | | | See Notes | | 2-dose series, See Notes | | | | | | | | | | |
| Tetanus, diphtheria, acellular pertussis (Tdap ≥7 yrs) | | | | | | | | | | | | | | 1 dose | | | |
| Human papillomavirus (HPV) | | | | | | | | | | | | | | See Notes | | | |
| Meningococcal (MenACWY-D ≥9 mos, MenACWY-CRM ≥2 mos, MenACWY-TT ≥2 years) | | | ← See Notes → | | | | | | | | | | | 1st dose | | 2nd dose | |
| Meningococcal B (MenB-4C, MenB-FHbp) | | | | | | | | | | | | | | See Notes | | | |
| Pneumococcal polysaccharide (PPSV23) | | | | | | | | | | | See Notes | | | | | | |
| Dengue (DEN4CYD; 9-16 yrs) | | | | | | | | | | | | | | Seropositive in endemic dengue areas (See Notes) | | | |

Range of recommended ages for all children
Range of recommended ages for catch-up vaccination
Range of recommended ages for certain high-risk groups
Recommended vaccination can begin in this age group
Recommended vaccination based on shared clinical decision-making
No recommendation/ not applicable

Acton Medical
ASSOCIATES
Adult & Pediatric Primary Care

# Birth to 24 month

# Guidance and Milestone Tracking

# 2 WEEKS

**Height:**_____ **Weight:**_____ **Head Circumference:**_____

**Anticipatory Guidance**

Vitamin D: If exclusively breast fed, or taking under 32oz. of formula daily, Vitamin D supplementation is needed. The recommended daily dosage is 400 international units through the first year of life.

Safe Sleep: Lay baby flat on their back without pillows, blankets, stuffed animals, crib bumpers, or other objects. Remove hats during sleep. These precautions reduce the risk of SIDS (Sudden Infant Death Syndrome).

Fever: A rectal temperature of 100.4F is a fever and can be a sign of a serious bacterial infection. Infants under 1 month should be seen immediately in the Emergency Department (ED). Babies 1-2 months should also be seen, but call us first to determine if an ED visit or in-office evaluation is most appropriate.

Car Safety: Infants should be secured in a rear-facing car seat in the back of the car. Do not include extra layers between the infant and car seat straps, like a snow suit or bunting.

# 2 MONTHS

**Height:** _____ **Weight:** _____**Head Circumference:** _____

**Developmental Milestones**

- Social smile
- Eyes follows across midline

**Vaccines**

- Voxelis (DTaP-IPV-HepB - Hib)
- Prevnar
- Rotateq

**Anticipatory Guidance**

Safe Sleep**:** Like first 7 weeks, infants should remain in their safe sleep space to reduce the risk of SIDS. (Sudden Infant Death Syndrome).

Tummy Time: Supervised awake time on tummies helps progress gross motor skills.

# 4 MONTHS

**Height:**_____**Weight:**_____**Head Circumference:** _____

**Developmental Milestones**

- Laughs
- Rolls over
- Looks at you when name is called

**Vaccines**

- Pediarix (DTaP-IPV-HepB - Hib)
- Prevnar
- Rotateq

**Anticipatory Guidance**:

Solid Foods: Most babies start solids at 4-6 months. Indications that they're ready include good head control, sitting with some support, showing interest in others' eating activities, reaching for objects and putting them in their mouth, and the ability to swallow a spoonful of cereal without too much tongue thrusting.

Foods to Avoid: Honey and cow's milk

Foods that promote a healthy immune system: Eggs, fish, nut and peanut proteins; introduction of common allergens at this age has been shown to decrease the incidence of food allergies in children.

Safe Sleep: Safe sleep practices are recommended. Do not swaddle arms when your baby begins to roll. Babies should still be placed on their back for every sleep.

Teething: The average age for teething is 6-7 months. Cool teething rings, gum massage, and acetaminophen may help the pain. We do not advise using teething tablets or topical medications.

> "AVOID HONEY AND COW'S MILK"

# 6 MONTHS

**Height:**_____ **Weight:**_____ **Head Circumference:**_____

**Developmental Milestones**

- Sits with support
- Rolls both directions
- Transfers objuects from one hand to the other

**Vaccines**

- Vaxelis (DTaP-IPV-HepB - Hib)
- Prevnar
- Rotateg

**Anticipatory Guidance**

Fluoride Supplementation: For children without fluoride in their drinking water

Cups: Introduce water in a cup with a lid or straw at meals. Straws are recommended by speech therapists to help develop speech muscles. Prevent tooth decay by avoiding bottles at nap and bedtime.

Solid Foods: Introducing solids teaches different tastes and textures and how to move food in the mouth. It can take babies 10-15 tries before they like solids. Breastmilk or formula still provides the most nutrition. In the next 3 months, move toward 3 solid meals per day.

Safe Sleep: Safe sleep practices are recommended. Do not swaddle arms when your baby begins to roll. Baby should still be placed on their back for every sleep.

Teething: Babies can begin teething although the average age is 6-7 months. Cool teething rings, gum massage, and acetaminophen may help the pain. We do not advise using teething tablets or topical medications.

Foods to Avoid: Honey and cow's milk

Foods that promote a healthy immune system: Eggs, fish, nut and peanut proteins; introduction of common allergens at this age has been shown to decrease the incidence of food allergies in children.

# 9 MONTHS

**Height:** _____ **Weight:**_____ **Head Circumference:**_____

**Developmental Milestones**

- Pull to stand
- Babbles
- Creeps and crawls

**Labs(**Obtained at 9 months or 12 months)

- Lead screening
- Anemia screening

**Anticipatory Guidance**

Finger Foods: Start with foods that turn to mush such as baby crackers and puffs. As your baby learns to tolerate these without gagging, move on to crumbly foods like cheerios. Once this skill is mastered you can try soft fruits, soft vegetables, and small cooked pasta.

Separation Anxiety: One of the first emotional milestones a child reaches is separation anxiety. It may seem like something is wrong when a child who usually interacts calmly with new people suddenly tenses up if strangers are close, but it is normal for this age.

Children are learning that objects are unique and permanent. They also understand that there's only one of you. Knowing this may cause them distress when you're out of sight because they are unsure of your return. Separation anxiety peaks around 10 months and disappears at 2 years. It's a special time but can be very trying.

Object Permanence:
Your child will start to have awareness that their favorite toys, people, and things still exist even when those people or items are out of sight. Prior to hitting this milestone, your child thought that a toy was gone forever when it was not within their view. At this age children love to play peek-a-boo and hide-and-seek. They are delighted to find hidden objects and people.

# 12 MONTHS

**Height:** _____ **Weight:** _____ **Head Circumference:**_____

**Developmental Milestones**

- Cruises
- Pincer grasp
- Says "mama," "dada," or similar name
- Waves and follows simple instructions, like "Give me the book"
- Starting to stand alone

**Vaccines**

- MMR
- Varicella
- Hepatitis A

**Anticipatory Guidance:**

Dental: Brush teeth twice daily with a grain of fluoride toothpaste. Avoid bottles during naps and bedtime. Initial dental visit takes place between 12-18 months and every 6 months thereafter.

Tantrums: Children frequently have tantrums as they learn new skills and move toward more independence. It is important to recognize common tantrum triggers like hunger and sleepiness. Use praise to reinforce good behavior and a simple firm "no" to discourage bad behavior such as biting or hitting. It is very normal for children to try out good and bad behaviors at this age.

Routines: By creating a daily routine children learn what to expect. It is helpful to have consistent routines for bedtime, naptime, and mealtime. At bedtime and naptime, encourage your child to get in their crib while awake so they can make the transition from awake to asleep on their own. Adjust routines to the child's development and behavior.

Safety – Childproofing at home to avoid falls, burns, or poisoning. Never leave a child unsupervised in the bathtub. Hot water heater should be set to no higher than 120F to prevent an accidental burn. If you have a pool, there should be a circumferential locked fence in order to prevent accidental drowning. Continue to keep your child in a rear-facing car seat until they reach the highest weight or height allowed for use by the manufacturer of your car seat. Rear-facing through at least the age of 2 years old provides the best protection for your child's neck, spine, and head in the event of a crash.

# 15 MONTHS

**Height**: _____ **Weight**: _____**Head Circumference**:_____

**Developmental Milestones**:

- Walking
- Follows directions like "come here"
- 1-5 words in vocabulary

**Vaccines:**

- Hib
- Prevnar
- DTap

**Anticipatory Guidance**:

Communication – Your child may only have a few words, but they understand many. Your child's understanding of language will be increased through conversations, songs, and books. Speak to your child frequently using simple phrases. Give them the language for what they are trying to express, e.g. "You want the blue cup."

Power Struggles - There are frequent conflicts between parents and toddlers which can manifest in a tantrum. Try to avoid these conflicts by distracting your toddler or offering an alternative activity. For example, when reading allow your child to choose the book and turn the pages. Try to be consistent when using the word "no". Set limits for your toddler by using distraction or gentle restraint. Appropriate discipline is important because it teaches your child right from wrong.

"THERE ARE FREQUENT CONFLICTS BETWEEN PARENTS AND TODDLERS WHICH CAN MANIFEST IN A TANTRUM."

# 18 MONTHS

**Height:** _____ **Weight:** _____ **Head Circumference:**_____

**Developmental Milestones:**

- Walks upstairs with help
- 10-20 words in the vocabulary
- Points to some body parts
- Engages with others to play

**Vaccines**:

- Hepatitis A

**Anticipatory Guidance**:

Behavior – Your child's emerging independence may also lead to some stranger anxiety. Your child may be curious but also anxious in new situations. It is common for children to cling to their parents in new situations. When your child is upset try to distract them by changing the activity, book, or toy. Reinforce appropriate behaviors and accomplishments with praise. Be specific when setting limits. When your child engages in unwanted behavior be direct and tell them what you want them to do instead. Keep time-outs brief, just 1-2 minutes, and only use them for troublesome behaviors.

Toilet Training – The average age for a child to be potty trained during the day is 2.5 years. Indicators that a child is ready to toilet train include being dry for longer periods during the day, knowing the difference between a wet and dry diaper, ability to pull pants up and down, eagerness to learn, and ability to indicate that they are about to have a bowel movement. It is helpful to read picture books about using the toilet. Children can also observe parents or siblings to learn the routine.

Media – The AAP recommends that children *18 months* and younger do not watch any television or screens other than video-chatting with family or friends.

Safety and Accident Prevention - Continue to keep your child in a rear-facing car seat until they reach the highest weight or height allowed for use by the manufacturer of your car seat. Rear-facing provides the best protection for your child's neck, spine, and head in the event of a crash.

# 2 years

**Height:_____ Weight: _____Head Circumference:_____**

**Developmental Milestones:**

- Puts 2 or more words together
- Follows two step commands
- Names at least 1 color
- Jumps off the ground with 2 feet

**Labs:**

- Lead/Hematocrit

**Anticipatory Guidance:**

Behavior – The power struggles of toddlerhood often continue. Give your child choices between 2 good things in snacks, books, and toys so they feel like they have some control over the situation (e.g. Would you like an apple or banana for snack?). Praise your child for positive behavior. Listen to your child and treat them with respect; expect others to as well.

Media – It is better for toddlers to play than to watch TV. Children 2 years and older should watch no more than 1-2 hours of screen time each day. If your child is watching a TV, be sure to watch along with them and engage them in conversation about the programming.

Safety - Continue to keep your child in a rear-facing car seat until they reach the highest weight or height allowed for use by the manufacturer of your car seat. Rear-facing provides the best protection for your child's neck, spine, and head in the event of a crash. If you choose to turn your child forward facing, they should remain in their forward facing car seat until at least age 5-years but preferably as long as they are within the height and weight limits of the car seat.

Toilet Training – The average age for a child to be potty trained during the day is 2.5 years. Indicators that a child is ready to toilet train include: being dry for longer periods during the day, knowing the difference between a wet and dry diaper, ability to pull pants up and down, eagerness to learn, and ability to indicate that they are about to have a bowel movement. It is helpful to read picture books about using the toilet. Children can also observe parents or siblings to learn the routine.