



North Austin  
Pediatrics, P.A.

# NEWBORN BOOKLET

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12201 Renfert Way, Suite 110  
Austin, TX 78758  
(512) 491-5125

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1401 Medical Parkway B, Suite 100  
Cedar Park, TX 78613  
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709 South Bagdad Road  
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## ABOUT OUR PRACTICE

We've been providing care in the North Austin, Cedar Park, and Leander communities for over 20 years. Our founding provider, Leighton Ellis, M.D., and team of highly-qualified pediatricians look forward to expanding our model of care to the Leander area. It is our intention to be partners with you in your child's wellness; a partnership in which our providers take the time to understand and administer to your child's needs and ensure your family has the tools and education necessary for a lifetime of health and wellbeing. All of our locations see children at all stages of their growth, from newborn to college-bound! We look forward to meeting you all and working together for a lifetime of wellness for your child.

## OUR PHYSICIANS

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### **Leighton E. Ellis, M.D.**

Dr. Ellis was born in New York City but raised in São Paulo, Brazil until the age of fourteen when her family moved to the States to further her schooling. She attended Florida Atlantic University in Boca Raton, FL and went on to complete medical school at the University of South Florida College of Medicine in Tampa. Today, Dr. Ellis has been practicing medicine in Austin for over 20 years and is the Chair of Pediatrics at St. David's North Campus Hospital. Additionally, she is the past president of the Central Texas Pediatric Physicians Alliance and has been continuously nominated one of the best doctors in Austin. She and her husband, Ken, have two sons, Kenny and Michael; they enjoy traveling, snorkeling, and cooking as a family. Dr. Ellis is certified by the American Board of Pediatrics and is a Fellow of the American Academy of Pediatrics, and she is fluent in Portuguese and Spanish.

### **Erica C. Sharp, M.D.**

Erica Sharp was born in Kingston, Jamaica and spent her early years living between the United States, England, and her native country. She received her Bachelor of Science degree in Psychology from Tulane University in New Orleans, Louisiana in 1992. After traveling in Central America, she returned to New Orleans to attend the Tulane School of Medicine from which she graduated in 1997. She subsequently completed her pediatric residency training at the University of Maryland in Baltimore before heading to Austin, Texas. Dr. Sharp has been practicing here since 2000, and joined North Austin Pediatrics, P.A. in the summer of 2004. Dr. Sharp is married to her husband, Ryan. They have a daughter, Sarah. Dr. Sharp is certified by the American Board of Pediatrics and is a Fellow of the American Academy of Pediatrics.

### **Rebekah E. Sperling, M.D.**

Rebekah Sperling was born in Baltimore, Maryland and moved to Hewitt, Texas with her family at 12-years old. She attended the University of Dallas where she received her Bachelor of Art degree in Biology in 2000. During her junior-year summer, Dr. Sperling explored Costa Rica while studying Spanish. After graduation, she attended medical school at the University of Texas Health Science Center at San Antonio. While in school, she took six weeks to go on a medical mission in Uganda. She worked with and treated the Bwindi pygmy people, educating and treating her patients for malnutrition, tropical diseases, and H.I.V. The African continent is still dear to her. Upon her graduation in 2004, Dr. Sperling moved to Providence, Rhode Island to complete her pediatric residency at Hasbro Children's Hospital an affiliate of Brown University. She is happy to have returned to Texas to begin practicing pediatrics. Dr. Sperling is married to her husband, Chris. The two have a daughter named Elizabeth Rose, and two golden retrievers. Dr. Sperling is certified by the American Board of Pediatrics and is a Fellow of the American Academy of Pediatrics.

### **Christine Q. Lam, D.O.**

Christine Lam was born and raised in Houston, Texas and attended the University of Texas at Austin where she received her Bachelor of Arts degree in English and Biology in 2003. She graduated from the University of North Texas Health Science Center – Texas College of Osteopathic Medicine in Fort Worth in 2007 and completed her pediatric residency training at the University of Texas Medical Branch in Galveston in 2010. In her free time, Dr. Lam enjoys traveling, cooking, and spending time with her husband, Jonathan (an Aggie of all things) and their two Welsh corgis, Rito and Roscoe. Dr. Lam is certified by the American Board of Pediatrics and is a Fellow of the American Academy of Pediatrics.

### **Kristen K. Pickering, M.D.**

Kristen Pickering was born and raised in Houston, Texas. In 2008, she graduated from Texas A&M University where she received her Bachelor of Science degree in Genetics & Chemistry. In her college years, she worked as a tutor in math and algebra and spent multiple summers as a counselor at Camp Independence, a week-long retreat for children with Type I Diabetes in San Antonio, Texas. After college, she attended medical school at the University of Texas Medical Branch in Galveston from which she graduated in 2012. In 2015, she completed her pediatric residency training here in Austin at Dell Children's Medical Center at the University of Texas Dell Medical School. During her residency, she was involved in the Texas Pediatric Society as Resident Chair for the committees on Early Childhood Development and Childhood Obesity.

In addition to quality primary care, Dr. Pickering has special interests in childhood growth and development. In Dr. Pickering's time away from the office, she enjoys exploring Austin's parks and trails with her husband, Kyle, an engineer. Dr. Pickering is certified by the American Board of Pediatrics and is a Fellow of the American Academy of Pediatrics.

### **Chelsea N. Johnson, M.D.**

Chelsea Johnson was born at Bethesda Naval Hospital while her dad was stationed in Maryland as a navy pilot before moving to Keller, TX where she began springboard and platform diving. She was fortunate enough to represent the USA at Junior World Championships and continue diving as a Division I athlete for Purdue University. She developed a passion for medicine while in college and graduated with a Bachelor of Science degree in Health Science. She proceeded to the University of Texas Medical School at Houston followed by a pediatric residency at Yale University. During residency, she volunteered in the Yale Pediatric Refugee Clinic through which she made several international trips to hospitals in Brazil and Tanzania. Her passions are global health and newborn medicine. Chelsea looks forward to life in Austin with her husband, Ian Patterson, who is also a pediatrician. The two have a cat, Rafiki (Swahili for friend—named after experiencing the beautiful language and people of Tanzania). Outside of medicine, Chelsea and her husband enjoy being active and outdoors. They support division rivals, Houston Texans and Indianapolis Colts; therefore, they expect to have marital hardship twice a year. Dr. Johnson is certified by the American Board of Pediatrics.

### **Rebecca Baine, M.D.**

Rebecca Baine was born in Austin and was raised in north Houston. She graduated cum laude from the University of Texas in 2011 with a Bachelor of Science degree in Biology and Neuroscience. During college Dr. Baine journeyed to the Dominican Republic on a medical mission trip where her passion for healing was cemented. Dr. Baine went on to attend medical school at the University of Texas Medical Branch (UTMB) where she focused her studies on childhood preventative care. Upon completing her studies at UTMB, Dr. Baine returned to her adopted hometown of Austin to join the pediatrics residency program at Dell Children's Medical Center at the University of Texas Dell Medical Center. While in residency Dell Children's Medical Center awarded Dr. Baine the Karen Teal Award to recognize her commitment to compassionate care. Dr. Baine joined North Austin Pediatrics in 2018 and is an active member of the Travis County Medical Society and the American Academy of Pediatrics. Dr. Baine enjoys traveling the world, exploring Austin, and learning to cook gourmet meals. She sees patients in our Austin and Cedar Park offices.

### **Ian Patterson, MD**

Dr. Patterson is originally from Southern Indiana and completed his undergraduate degree at Purdue University where he met his wife, Dr. Johnson. Upon graduation, he attended medical school at the University of Texas Medical School at Houston and completed his residency at Yale-New Haven Hospital in Connecticut.

In his free time, Dr. Patterson enjoys hiking, running, and traveling with his wife. He is also fluent in Spanish. He is certified by the American Board of Pediatrics and is a Fellow of the American Academy of Pediatrics. He sees patients in our Cedar Park and Leander offices.

### **Melissa Delario, MD**

Melissa Delario is a lifelong Texan, born and raised in DFW. Dr. Delario graduated from Texas Christian University with a Bachelor of Arts degree in Biology with Honors in 2000. While in college she began volunteering with the Child Life department which lead to her interest and devotion to the healthcare of children. After college she attended medical school at the University of Texas Health Science Center at San Antonio where she stayed to complete a residency in pediatrics. She was appointed Chief of Residents for the year following her residency training. Dr. Delario then pursued a fellowship in pediatric hematology and oncology at Texas Children's Cancer Center/Baylor College of Medicine in Houston, graduating in 2011. During medical school, residency and beyond she volunteered as medical staff at camps for children with medical and special needs, gaining a unique perspective into the daily lives of these children. After completing her training, she worked in the specialties of pediatric hematology/oncology and neurology prior to transitioning to outpatient pediatrics in 2019. Dr. Delario joined North Austin Pediatrics at the end of 2021. Dr. Delario and her husband Justin, a physician in Round Rock, enjoy spending time (especially at the beach) with their three children. Dr. Delario is certified by the American Board of Pediatrics and is a Fellow of the American Academy of Pediatrics. She sees patients in our Leander location.

### **Rhiannon Ringo, PA-C**

Rhiannon Ringo, PA-C was born in San Angelo, Texas. She has enjoyed the opportunity to take care of patients of all ages living in our community for over 15 years. Prior to Physician Assistant school she was a Registered Respiratory Therapist, and she has a special interest in pulmonary diseases including asthma. She attended school at the University of Texas Rio Grande Valley and has previously worked in pediatrics taking care of children from birth to 21 for seven years prior to joining North Austin Pediatrics. In her time as a Physician Assistant, she has worked in Pediatrics, Family medicine, ENT, Allergy and Immunology and Gastroenterology. She enjoys hiking, Olympic weightlifting and spending time with her family. Rhiannon has been married to her husband for over twenty years and they have a son, a daughter and a mischievous cat named Shadow. Rhiannon is certified by the National Commission on Certification of Physician Assistants (NCCPA) and sees patients in our Cedar Park office.

### **Nicole Villamaria, MD**

Nicole Villamaria is originally from Houston, Texas and moved to Austin while pursuing her undergraduate degree at The University of Texas. She received a Bachelor of Science and Arts in Nutritional Sciences and Business Foundations. During college, Dr. Villamaria cycled from Austin, TX to Anchorage, AK with the organization Texas 4000 in support of cancer research. Following her passion for medicine, she attended Texas A&M College of Medicine and completed pediatric residency at The University of Texas at Austin Dell Medical School. During her residency, she participated in a cultural immersion and medical Spanish program in Puebla, Mexico. She also discovered a passion for encouraging breastfeeding mothers and is an International Board-Certified Lactation Consultant. Beyond her professional life, Dr. Villamaria cherishes her free time with her husband, enjoying outdoor activities such as running, hiking, and playing tennis. She started at North Austin Pediatrics in August 2023 and sees patients in our Leander office.

# HELPFUL HINTS TO MAKE YOUR VISIT GO MORE SMOOTHLY

Bring your child’s immunization record and insurance card to all visits. Also, any records from other physicians, medications, or addresses that we may need would be appreciated.

Bring plenty of bottles and diapers, as some visits, especially well-child visits, may be lengthy. We will make every attempt to be on time, but expect a 15 to 45 minute wait if you are being worked in or if there has been a need to accommodate another sick child. If you will be having someone else bring your child to the office, we require a signed note from the parent or guardian. We highly discourage this for well visits.

Please notify us of cancellations 24 hours in advance. There is a \$50 charge for a missed appointment.

## OFFICE HOURS

Monday - Friday 8:00 a.m. - 5:00 p.m. | | Saturday 8:00 a.m. - 11:00 a.m.  
Sunday and Holidays by arrangement with on call doctor  
Closed for lunch 12:00 p.m. - 1:00 p.m.  
Phone Hours: Monday through Friday 7:45 a.m. - 4:30 p.m.

### North Austin Office

Medical Oaks Pavilion  
12201 Renfert Way, Suite 110  
Austin, Texas 78758  
Phone: 512-491-5125  
Fax: 888-833-7248

### Cedar Park Office

Cedar Park Regional Medical Center  
Medical Professional Building  
1401-B Medical Parkway, Ste 100  
Cedar Park, TX 78613  
Phone: 512-259-0900  
Fax: 855-727-1552

### After Hours call:

“MedLink”  
512-660-5396

### Leander Office

709 South Badad Road  
Leander, TX 78641  
Phone: 512-260-0101  
Fax: 855-862-9297

## GENERAL TIPS FOR PHONE CALLS

**Appointments:** If you know that you want to schedule an appointment, please do so. You don’t have to speak with a nurse first, and waiting for a return call might cause you to miss the earliest appointment time available.

**Routine questions:** For routine questions, please call during office hours. Our nurses return phone calls as soon as possible between patients. If you prefer to speak to your doctor or nurse practitioner, please ask. However, this might delay the return call until lunchtime or after 5 p.m.

**Office Hours: Monday-Friday 8:00 a.m. - 5:00 p.m.**  
**Phone Hours: 7:45 a.m.-4:30 p.m.**

**Medical apps and nurse lines:** We recommend the KidsDoc phone app by HealthyChildren.org as a symptom checker and advice app for parents. We also have this symptom checker on our website as well. Also, your medical insurance plan payer usually always as nurse advice lines that are provided with your policy and calls are usually free of charge thru your insurance payer's nurse lines.

**Urgent questions after-hours:** Call MedLink at 512-660-5396.

Important: after talking to MedLink, press \*87 to deactivate call blocking to receive the doctor's call. There is a physician available 24 hours a day, 7 days a week for after-hours emergencies. There are also nurses available at the Triage 4 Pediatrics for questions that can't wait until the next business day. You will be billed a \$35.00 fee for after-hours physician calls and \$25.00 fee for after-hours nurse calls. Most insurance companies do not cover these charges, but the billing department can provide you with an itemized statement of charges if you would like to file your own claim. Some insurance companies have a nurse help line. The number is on your insurance card. These nurses use the same triage protocol as the Triage 4 Pediatrics and are an acceptable free alternative.

**Life-threatening emergencies:** When moments count, call 911.

**Poisoning or overdose:** Call the Poison Control Center first at 1-800-222-1222, then call your physician.

**Before you call:** Please take your child's temperature if calling for advice regarding an illness. If your child is less than 12 weeks old, please take the temperature rectally.

**Return calls:** If your child is sick, we will try our best to return your call within the hour. If you have a general child care question, we will return your call by the end of the day. Should we fail to return your call within a reasonable amount of time, please call us again as a safeguard against telephone trouble, wrong numbers, and human error.

Please stay by your phone after you call for advice. If you miss the nurse's return call, please call back as soon as possible. She will return your call as soon as she returns the other calls that were waiting. If you must leave, please call and let us know when you will return or leave an alternate number. Keep a pencil and paper as well as your pharmacy phone number handy in case we need to give instructions or call out a prescription.

**Prescription refills:** Please call your pharmacy rather than our office for refills. Your pharmacy will fax a refill request to our office even if your prescription states "no refills available." This allows your provider to review your child's medical record and refill prescriptions quickly and efficiently. Please allow 24-48 hours.

## HOSPITAL DISCHARGE

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Please be sure to ask that a copy of the baby's History and Physical be faxed to us at Austin 888-833-7248, Cedar Park 855-727-1552 and Leander 855-862- 9297 and make an appointment for 2-4 days after discharge.

# FEEDING YOUR NEWBORN

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## BREASTFEEDING

**Breast Care:** Always wear a supportive bra, even at night. To protect your baby from infections, wash or sanitize your hands immediately before breastfeeding; your breasts and nipples do not need any special disinfection other than your usual daily shower or bath with plain water. Don't use soap—it's too drying. To prevent sore, cracked nipples, rub a few drops of breast milk on your nipples and areola after each feeding and allow them to air-dry completely before replacing your bra and nursing pads.

**Latching On:** With your fingers under your breast and your thumb resting on top (the "C" hold), gently compress the breast behind the nipple and areola (to make it more "bite-sized"); then stroke your baby's lower lip with your nipple. He will open his mouth and turn his head toward the nipple; this is called the "rooting reflex." When his mouth is wide open, guide the nipple and a large portion of the surrounding areola quickly into his mouth. If your infant has difficulty grasping your nipple to feed, try rolling the nipple with your finger and thumb to get the nipple more erect. Check to see that his upper and lower lips are flared outward (not inverted) on the areola. If he doesn't latch on properly, take the baby off the breast by inserting your little finger into the corner of his mouth to release the seal. Then try again until you achieve a proper latch. A proper latch helps the milk flow properly and stimulates a good milk supply; it also prevents complications like sore nipples, breast engorgement and breast infections (mastitis).

**What to expect:** For the first 2-3 days, your breasts will produce colostrum which is rich in protein and protective antibodies. Around the third day, the breast milk volume and fat content will increase. This is often referred to as "your milk coming in."

**Engorgement:** When your milk "comes in," your breasts might feel very full and hard. If the fullness is excessive and uncomfortable, it is called "engorgement." Frequent feedings (every 2 to 3 hours) can help prevent and relieve engorgement. Cold compresses after feedings can also help relieve engorgement. Don't be discouraged! Engorgement is a temporary problem.

**Nipple tenderness:** Nipple tenderness or pain is also common during the first 3-5 days of breastfeeding. This pain is felt when the baby initially latches onto the breast and takes the first few sucks. You can apply pure lanolin cream, such as Lansinoh, directly to tender nipples after feedings. An improper latch can also contribute to nipple tenderness. If the pain is severe or prolonged, we recommend that you consult a lactation consultant for help.

**Feedings:** When you begin nursing, allow the baby to nurse both breasts, alternating the breast that you start with. After your milk supply is well established, around 7-10 days, you might find that your infant is satisfied to nurse on only one breast during each feeding; however, it's better to nurse both breasts at every feeding. It is important to nurse at least 15 minutes on each breast: this time frame allows your baby to get the foremilk, which has water and nutrients, and the hindmilk, which has more fat and calories to satisfy your baby's appetite.

**Feed on demand:** Most infants are happy to nurse every 2-4 hours. Supplementation with formula is discouraged unless there is a medical need. After feedings are well established and your baby has regained his birth weight, you may allow your baby to sleep as long as possible between feedings at night unless your pediatrician states otherwise.

**Milk supply:** The hormone that regulates milk production is stimulated by breastfeeding. The more often you breastfeed and empty your breasts, the more milk you will produce. Notice that it's the frequency (how often you feed) and not the duration (how long you nurse on each breast) that counts. Be sure that your baby does not "snack" frequently (every hour or "constantly") or use your breast as a pacifier, as this will interfere with the normal "supply and demand" signals for milk production. The goal is to empty each breast at every feeding in order to send the hormonal message to refill them.

Most newborns lose several ounces during the first few days of life. After that time, your baby should steadily gain weight at a rate of about ½-1 ounce (15-30 grams) per day.

The number of wet diapers and the color of your baby's stools can also help you assess whether or not your infant is obtaining sufficient breast milk. Most infants urinate 1 to 3 times a day during the first 2-3 days. By 3-4 days of age, when the milk supply has increased, the number of wet diapers will increase to 6-8 or more per 24 hours and the stool color will change from green to yellow.

Your milk supply is also dependent on your ability to get adequate rest, good nutrition and plenty of fluids (about 2 quarts a day). Allow your family and friends to provide meals and help with other family responsibilities so that you don't become worn out. You'll soon be your energetic old self, but realistically expect your recovery to take 2-4 weeks.

**Growth spurts:** During growth spurts, your baby will suddenly seem hungry every 1-2 hours around the clock. This "cluster feeding" is designed to stimulate the hormone that increases your milk production. You need not worry that you suddenly aren't producing enough milk, and you can expect your baby to resume her normal schedule within a day or two. Growth spurts typically happen around the following ages: 10 days-2 weeks; 5-6 weeks; 2 ½-3 months; and 4 ½-6 months.

## **YOUR DIET AND BREASTFEEDING**

In general, while breastfeeding, eat wisely. Your body needs added calcium (from milk products or dark leafy vegetables) and iron (from prenatal vitamins and food sources) and at least 65 grams of protein a day (the amount of protein in an 8 oz. steak). Fish oils are also important in your diet for good brain development in your infant. If you do not eat fish, talk to your doctor about prenatal supplements containing DHA, such as Expecta®Prenatal.

Do not diet to lose weight while breast-feeding. For successful milk production, your body needs an extra 500 calories/day beyond your normal requirements and at least 2000 calories/ day total. Never take any medication routinely (except prenatal vitamins) without informing your pediatrician.

You may take an occasional laxative, acetaminophen (Tylenol) or ibuprofen (Advil or Motrin). Since Benadryl and Sudafed can reduce your milk supply, use Claritin if you need an antihistamine.

## **BREAST PUMPS**

It is very important to use a professional breast pump, such as those rented and sold by lactation consultants, in the following two situations: (1) during the first month of life when you're getting breastfeeding established, and (2) if you have to interrupt breastfeeding for several days; for example, if you have to "pump and dump" while taking a course of antibiotics that isn't compatible with breastfeeding. Manual, battery and small electric pumps aren't adequate for maintaining or establishing the milk supply in these situations, although they work well for occasional pumping.

## **STORING PUMPED BREAST MILK**

Breast milk can be stored in glass (Pyrex®), rigid plastic bottles or in disposable plastic bags that insert into the bottles. Glass and rigid plastic bottles appear to have some advantages as far as preserving immune and nutritional properties of human milk. Frozen breast milk can be thawed in a pan of warm water or allowed to thaw slowly in the refrigerator. Do not use a microwave to thaw or warm the milk. Microwaves heat unevenly and can cause "hot spots" in the bottle that could burn your baby's mouth. Microwaves can also change the nutritional properties of breast milk.

You may store pumped breast milk safely as follows:

- 4 hours at room temperature
- 24 hours in a cooler with ice packs (59 degrees)
- 5-7 days in the refrigerator (39 degrees)
- 3-4 months in a refrigerator freezer (4 degrees)
- 6-12 months in a separate deep freeze

To avoid bacterial contamination of your milk:

- Do not put unconsumed milk back in the refrigerator for longer than 4 hours.
- Do not add leftover milk to a fresh bottle.
- Do not re-freeze thawed milk.
- Do not use thawed (and then refrigerated) milk after 24 hours.

## **BREASTFEEDING RESOURCES ONLINE**

Nutrition during Pregnancy & Breastfeeding:

[www.nal.usda.gov/fnic/pubs/bibs/topics/pregnancy/ pregcon.html](http://www.nal.usda.gov/fnic/pubs/bibs/topics/pregnancy/ pregcon.html)

American Academy of Pediatrics: [www.aap.org](http://www.aap.org)

International Lactation Consultant Association: [www.ilca.vorg](http://www.ilca.vorg)

La Leche League International: [www.lalecheleague.org](http://www.lalecheleague.org)

## **BOTTLE FEEDING**

Seated comfortably and holding your baby, hold the bottle so that the neck of the bottle and the nipple are always filled with formula. This helps your baby get formula instead of air. Never prop the bottle and leave your baby to feed herself; she could easily choke, and all babies need the security and pleasure of being held at feeding time.

## **PREPARING THE FORMULA**

Your doctor will probably recommend an iron-fortified infant formula, such as Enfamil® Premium™ Newborn or Enfamil® Premium™ Infant. Both are available in Ready-To-Use, Concentrate and Powder forms. Ready-To-Use is the most convenient and most expensive. One can of concentrate (13 ounces) is mixed with one can of water (13 oz.). One scoop of powder is mixed in each 2 oz. of water.

## **WARMING AND TESTING THE TEMPERATURE OF THE FORMULA**

Just before you're ready to feed your baby, you can remove a bottle of formula from the refrigerator and warm it for a few minutes in a container of hot water. Test the temperature by shaking a few drops on the inside of your wrist. Avoid using a microwave because it can heat unevenly, causing "hot spots" that could burn your baby's mouth.

## **FEED ON DEMAND**

Allow your baby to eat when he becomes hungry. Formula-fed babies usually eat every 3-4 hours. After feedings are well established and your baby has regained his birth weight, you may allow your baby to sleep as long as possible between feedings at night unless your pediatrician states otherwise.

## **HOW MUCH FORMULA?**

**NEWBORNS:** Most newborns feed for 15 to 20 minutes and take ½ to 1-½ ounces per feeding in the first 24 hours. (One ounce equals 30 ml.) As your baby grows and gains weight, he will need more formula per feeding. When your baby takes his entire bottle and cries for more, it is time to increase the amount. Do this by adding ½ - 1 ounce to his bottle until he is satisfied.

**INFANTS:** During the first few weeks, most newborns will take 2-3 ounces of formula every 3-4 hours, increasing to 4 ounces every 4 hours by one month of age. Your baby's appetite will increase gradually, by about 1 ounce per month, until she's taking 6-8 ounces per feeding 4-5 times a day (around 6 months of age). A good rule of thumb is to take the age in months and add 3 to get the average number of ounces per feeding. For example, an average one month-old will take four ounces per feeding. This rule of thumb does not work during the first few days of life, nor does it work after 4-5 months of age. The American Academy of Pediatrics recommends a maximum of 36 oz. of formula per day.

## **AFTER THE FEEDING**

After the feeding, rinse out bottles and nipples with cool water and squeeze water through the hole of the nipple. When time permits, wash in hot, soapy water or in a dishwasher with a plastic cage that allows nipples to be washed on the top rack.

# NEWBORN CARE AND COMFORT

## BURPING

Both bottle and breastfed babies usually swallow some air during feedings. Burp your baby after each feeding; it usually isn't necessary to interrupt a feeding to burp your baby. Several positions work well for burping: try holding your baby upright against your shoulder; placing him face down across your lap, or having him sit on your lap, leaning forward and resting his chest and chin on your hand. As you gently rub or pat his back, he'll usually burp, but don't worry if he doesn't--a delayed burp is also normal.

## PACIFIERS

We now encourage the use of pacifiers to reduce the risk of Sudden Infant Death Syndrome, or "SIDS." If you are nursing, try to avoid using a pacifier for the baby's first two weeks. We do not endorse using a pacifier all day, but use at bedtime or naptime has been shown to reduce the risk of SIDS. The pacifier usually falls out while the baby sleeps, and there is no need to replace it. Pacifiers cause no dental problems in the first 5 years, so don't fear using them. They might help satisfy your baby's desire to suck and make weaning from the breast or bottle easier.

## SOLID FOODS

Baby foods such as cereal, vegetables and fruits are now started at 6 months of age. This is later than many mothers were taught in the past because of new information that food allergies and digestive problems might be more common if foods are started earlier. We will discuss starting solid foods at your baby's 6-month check-up.

## VITAMINS

We recommend the use of breast milk or an iron-fortified infant formula until 12 months of age, and breastfeeding may be continued into the second year of life if desired. Breastfed infants and those that take less than 32 oz a day of formula should take D-Vi-Sol®, 1 ml every day starting at birth. Infants need the vitamin D supplementation in order to prevent weak bones because babies do not receive as much vitamin D through sunlight nowadays.

## FLUORIDE

Fluoride supplementation starting at 6 months of age until approximately 14 years of age reduces cavity risk by approximately 60%. Austin water has the proper fluoride supplement added; however, many outlying communities do not. Ideally your tap water should have fluoride added to a concentration of one part per million (PPM). If you are unsure of your community's fluoride concentration, call your city or county utility department to find out. Also, while most water filters do not remove fluoride, some do, particularly the reverse osmosis water systems. If you are unsure of your system, you will need to check with the manufacturer. If you find that your water source has inadequate fluoride, notify your child's provider who can prescribe supplementary fluoride starting at 6 months of age. Many people prefer to use bottled water with fluoride added rather than prescription fluoride. Also, it is important to know that there are outlying communities with excessive natural fluoride in their water. Excessive fluoride stains teeth permanently, so if you live in one of these communities, contact your pediatrician for advice.

## **BATHING AND HYGIENE**

Most infants need a bath only 2-3 times a week, but you should clean the face, chin, neck and diaper area daily. Withhold regular tub baths until the umbilical cord has fallen off and healed: until then simply sponge bathe and keep the cord dry. Use mainly plain water (no soap) for the first few weeks. Soaps are drying to the newborn's already-dry skin. Mild cleansers (such as Dove®, Tone®, Cetaphil® or Olay®) may be used in small amounts. You may use soap daily to clean the diaper area. Take care to wash and dry the skin folds at the neck, arms, groin, vagina or scrotum. Your baby might develop "newborn acne" over the first few weeks. This is not treated as an infection; it is due to hormonal adjustment. Simply keep the skin clean and dry. To clean your baby's eyes, use a clean washcloth dipped in water. You may shampoo the baby's hair with baby shampoo or a mild liquid soap. Use a soft brush to scrub her scalp. Never leave your baby unattended in the bath.

## **NAIL CARE**

Keep nails clean and short. We prefer that you use an emery board in the newborn period until the nails have separated from the skin. It is easiest to trim your baby's nails while she's asleep. If you use clippers or scissors, be sure to cut the nail squarely across to avoid cutting the cuticle.

## **UMBILICAL CORD CARE**

Clean the skin around the base of the umbilical cord once a day with a cotton swab or Q-tip soaked in rubbing alcohol until it falls off. This will not hurt your baby. The umbilical cord is not actually part of your baby; it's part of the discarded placenta, and there are no nerve endings in it. Babies sometimes cry because the alcohol feels cold. Most cords fall off within 2-3 weeks.

## **VAGINAL MUCUS**

Baby girls might have white mucus drainage with occasional streaks or blobs of blood from their vaginas during the first 3-4 weeks of life. This is caused by the hormonal adjustments after birth. Do not try to wipe the mucus away completely. It is very important to wipe baby girls from front to back when cleaning stool from their vaginal area.

## **UNCIRCUMCISED BOYS**

Clean the outside of the uncircumcised penis as you would any other part of the baby's body. The foreskin of the uncircumcised penis is normally attached to the tip of the penis in layers of tissue. As the baby grows, the skin will eventually separate and allow the foreskin to slide back naturally. You should never try to force the skin back as this could cause bleeding and possible infections. In some boys, the skin retracts by one year of age; in others, full foreskin retraction might occur as late as adolescence. As long as your baby can urinate normally, you should not be too concerned about whether the foreskin retracts.

## **CIRCUMCISED BOY**

If your baby boy has been circumcised, your doctor will give you specific instructions on how to care for it, depending on the type of circumcision performed. If a small plastic ring

is attached, simply clean with water at every diaper change until the plastic ring falls off (usually 3--8 days later). If the foreskin is removed completely, you might be instructed to apply Vaseline-coated gauze until the yellowish scab is gone. The yellowish scab is part of the normal healing process; it is not pus, so don't try to wipe it off.

## **STOOLS**

Your baby might have a bowel movement after each feeding or have 1-2 stools a day. Breastfed stool will look and sound like gassy, watery diarrhea when your "milk is in" by the 4th day. If stools are excessively watery or contain blood or mucus, please let us know. At 2-3 months, some breastfed babies start having stools only once a week. If the stool is soft, this is normal. Normal breastfed stools are yellow & seedy-looking.

## **CARE OF DIAPER AREA**

If you use cloth diapers, a diaper service can be helpful. If you wash them yourself, rinse diapers twice in the washer and after the wash cycle is completed, add ½ cup of white vinegar to the last rinse.

## **WASHING CLOTH DIAPERS**

If you use cloth diapers, a diaper service can be helpful. If you wash them yourself, rinse diapers twice in the washer and after the wash cycle is completed, add ½ cup of white vinegar to the last rinse.

## **ROOM TEMPERATURE**

The room temperature should be kept comfortable. It is normal for the baby's hands and feet to feel slightly cool and be splotchy. Don't over-dress or over-wrap your baby. Your baby should not be sweating! A thin hospital blanket is usually sufficient. In the first 2 weeks of life, make sure your infant wears a hat and socks.

## **SLEEPING**

Recent studies showed a decreased incidence of "SIDS" (Sudden Infant Death Syndrome or "crib death") when babies were put to sleep on their backs instead of their stomachs; therefore, the American Academy of Pediatrics recommends that all babies sleep on their backs. Do not place your infant on her side to sleep even if she spits up because it is an unstable sleeping position and does not lower the risk of choking death in normal babies. The risk of SIDS overall is low and decreases after 6 months of age.

The mattress should be firm and flat and no pillows should be used. Protect the mattress with a waterproof cover. Be sure there are no gaps between the mattress and the side of the crib.

The current recommendation is for infants to sleep in a bassinet or crib in the parents' room during the first six months. It is not necessary to maintain absolute quiet for a baby to sleep; in fact, it is better not to let your baby become accustomed to an artificially quiet environment so that she will learn how to sleep in most situations. At 2 weeks of age, introduce a pacifier for falling asleep.

## TUMMY TIME

Although sleeping on the back is important, it is also important for your baby to have regular supervised “tummy time” while she’s awake. Do tummy time on a blanket 5 times a day until she gets mad or falls asleep. This helps your baby get used to lying on her stomach and helps her develop strong back and neck muscles. It also prevents a commonly seen flattening of the head that babies will develop if they are always kept on their backs. If you start to notice a flattening of the head on one side or the other, you need to increase the amount of time she spends on her tummy while she’s awake. It is also a good idea to place your baby in different directions in the crib or bassinette to keep the head nice and round. Babies turn their heads towards your scent and voice, so alternate the direction of the bassinette in relation to you and turn your baby’s head towards you (so there is equal time on each side).

## CRYING, COLIC & REFLUX

**Normal crying:** All babies cry each day. By two weeks of age, most normal infants will have a fussy period each day, usually in the evening. This fussiness normally peaks at 6 weeks of age and lasts up to 3 hours per day. By 3 months of age, it usually diminishes to one or two hours per day. As long as your baby calms down within a few hours and is reasonably happy during the rest of the day, there is no cause for alarm.

**Colic:** Approximately 20% of all babies develop colic, usually between the 2nd and 6th week. There is no definite explanation for why some babies get colic. It’s helpful to remember that your baby will outgrow it; the crying will not cause emotional damage, and it is not your fault or the result of anything you have done. It just happens.

**Reflux:** If the crying becomes worse and lasts throughout the day or night, it might be caused by stomach acid that backs up into the esophagus. We call this condition “reflux,” also known as gastroesophageal reflux disease or “GERD.” We suspect reflux in an infant who cries when she spits up, cries during feedings, or arches her back and pulls herself off the breast or bottle, often early in the feeding (and repeatedly) while she’s still very hungry. If you suspect reflux, please schedule an appointment.

**Persistent or inconsolable crying:** If you can’t soothe your baby, please check her temperature. If she is under 3 months of age, check it rectally and call us (day or night) if it is 100.4° F or higher. You also need to call us if the crying is inconsolable and persists for more than two hours. Anytime you are concerned about your child’s well-being, please don’t hesitate to call us, schedule an appointment or take her to the emergency room. **We strongly recommend Dell Children’s Medical Center or North Austin Medical Center Children’s ER, where pediatric specialists are readily available.**

**Soothing a crying baby:** We recommend a book written by pediatrician, Dr. Harvey Karp, called *The Happiest Baby on the Block*, in which he describes five effective techniques beginning with the letter “S” that soothe crying infants: Swaddle, Side (holding your baby’s back against your abdomen while she’s positioned on her side), Suck (pacifier or finger), Swing (any movement) and Shush (“Shhhhhh” or any white noise louder than the baby’s cry and gradually decreasing the volume). Attend to your baby’s cries; you cannot “spoil” a baby younger than 4 months of age.

Schedule rest and relaxation for yourself: You need time away from a baby who cries a lot. Be creative. For example, you can hire a teenager as a “mother’s helper” and let her entertain your baby while you nap, have coffee with a friend or catch up on laundry. Both you and your baby benefit when you are rested and refreshed.

## **GAS**

When babies cry, parents often associate their discomfort with gas. Intestinal gas is normal in newborns and is not a sign of illness nor is it thought to actually cause discomfort. Some babies seem to feel better after taking Mylicon® drops (simethicone) which make tiny gas bubbles coalesce into larger bubbles; however, it might be Mylicon’s sweet taste that distracts babies from their crying. Nevertheless, you may use Mylicon® drops as often as desired if they seem to help since they are safe and do not contain medication.

## **CONSTIPATION**

Babies often strain, turn red and seem distressed when they have bowel movements. This is normal and does not mean they are constipated. If the crying and straining persists more than 10 minutes, we recommend inserting a rectal thermometer or half of an infant glycerin suppository (lubricated with KY® jelly or Vaseline®) to stimulate her urge to poop. If stools are persistently hard and difficult for your baby to expel, try giving her up to 4 ounces of undiluted apple, prune or pear juice per day. If these methods are ineffective, call our office for an appointment or additional guidance.

## **TEETHING**

Baby teeth may begin to erupt as early as 2-3 months of age or as late as 14 months. Most children are 6 months old before this event. We recommend a cold teething ring since this allows the child to chew and simultaneously provides a good local anesthetic. It is not recommended to use numbing gels or homeopathic teething tablets/gel for discomfort. Teething does not cause fever (a temperature of 100.4° F or higher) or significant diarrhea, although it might cause a mild temperature elevation (99-100° F) and loose stools.

## **DAY CARE**

In babies less than two months of age, contagious illnesses have a much greater potential for harm. We recommend that you wait at least 8-12 weeks before you place your infant in child care, church nurseries or similar environments.

## **FRIENDS AND RELATIVES**

Ask each person to wash or sanitize his hands before holding your newborn. Limit your baby’s visitors to healthy close friends and relatives. All others should not be allowed to come in close contact with your baby. You may put the blame for this on your pediatrician if necessary to avoid hurt feelings. Don’t take your baby shopping or around other large groups of people for at least 2 months if possible.

## **SNEEZING and HICCOUGHS**

Sneezing is the only way a baby can clear his nose of mucus, lint, or milk curds.

Hiccoughs are little spasms of the diaphragm muscle. Sneezing and hiccoughs are perfectly normal, and it isn't necessary to do anything about them.

## **SMOKING**

Smoking in the household increases the frequency of respiratory illnesses and ear infections and could increase your child's risk of Sudden Infant Death Syndrome and cancer. If you smoke, please stop for your baby's sake. Ask grandparents and caregivers to also refrain from smoking around your child.

### **ITEMS YOU WILL NEED FOR NEWBORN CARE:**

- digital rectal thermometer
- soft washcloths
- bulb syringe, or Nasal Clear® aspirator
- Dove® bar soap
- Mylicon® drops
- saline nose drops
- emery board
- Desitin®, Balmex®, etc.

### **DO NOT USE THE FOLLOWING PRODUCTS:**

- powders of any kind
- perfumed lotions
- strong soaps like Baby Magic®, Johnson & Johnson's®
- acetaminophen (Tylenol®) until your baby is at least 2 months old
- cough and cold medicines until your child is at least 6 years old
- water until 3-4 months of age
- ibuprofen (Motrin®) until 6 months of age

## **WELL CHILD CHECK-UP AND IMMUNIZATION SCHEDULE**

The keystone to pediatric care is preventative medicine. During each checkup, your child will receive a complete physical examination, growth measurements, and the necessary immunizations and/or screening tests appropriate for his or her age. The pediatrician will also discuss feeding and development with you.

Here are the 2018 American Academy of Pediatrics (AAP) Immunization Recommendations and our well child checkup schedule. Before an appointment, it is helpful to read this section for information about each of the vaccines your child is due to receive. Please remember to bring your child's immunization record to all appointments. It is important to keep this record up-to-date. You will need to provide proof of immunization for daycare and school registration.

## IMMUNIZATION ABBREVIATION KEY

DTaP -- Diphtheria, Tetanus, acellular Pertussis

Flu – Influenza

Hep A -- Hepatitis Type A

Hep B -- Hepatitis Type B

Hib -- Haemophilus influenza type B

HPV – Human Papilloma Virus (brand name “Gardasil”)

IPV -- Inactivated Polio Vaccine (not a live vaccine)

MCV – Meningococcal conjugate vaccine (brand name “Menactra”)

MMR -- Measles, Mumps, Rubella

PCV -- Pneumococcal conjugate vaccine (brand name “Prevnar”)

Rotavirus – brand name “Rotateq”

Tdap –Tetanus, diphtheria, acellular pertussis (brand names “Boostrix” and “Adacel”)

Var – Varicella (for the virus that causes chicken pox; brand name “Varivax”)

## IMMUNIZATION AND WELL VISIT SCHEDULE

At Birth (in the hospital)	Hep B #1, initial newborn metabolic screen, hearing test, vitamin K, erythromycin eye ointment
2-3 days after hospital discharge	1 st office visit with weight check
2 weeks	repeat newborn metabolic screen, optional supplemental newborn metabolic (Baylor) screen
1 month	Optional visit to check for head symmetry
2 months	Pentacel (DTaP/IPV/Hib) Hep B, Prevnar, Rotateq Pentacel
4 months	(DTaP/IPV/Hib), Prevnar, Rotateq
6 months*	Pentacel (DTaP/IPV/Hib) Prevnar, Rotateq, Hep B
9 months*	developmental assessment, anemia risk assessment MMR,
12 months*	Varivax, HepA
15 months*	Pentacel (DTaP/IPV/Hib), Prevnar, anemia check (hemoglobin)
18 months*	Hep A, autism screening, developmental assessment well
24 months*	child check, autism screening
30 months*	well child check, developmental screening
3 years*	well child check, vision screening
4 years*	Quadracel ((DTaP/IPV), Proquad (MMRV), hearing & vision
5 yrs - 10 years*	well check every year, at 9 year cholesterol screening
11-12 years*	Menactra, Tdap, HPV
12-18 years*	well check every year
16 years*	Menactra
18 years	Men B, cholesterol screening

\* Annual Influenza vaccine during flu season for infants six months old and older, children and adolescents

## PREVENTIVE SCREENING TESTS

- Anemia: at 9-15 months
- Cholesterol: children from high-risk families as discussed with provider
- Lead: risk assessment at 6, 9, 12, 18 & 24 months and 3-6 years of age
- Urinalysis: annually for sexually-active adolescents
- Hearing: starting at 4 years of age (often done at school or preschool)
- Vision: starting at 1 year, photo screener or acuity chart
- Autism screening: at 18 & 24 months

## SIGNS OF ILLNESS

**In infants less than 3 months of age, call to report the following symptoms as soon as possible:**

- A rectal temperature of 100.4° F or higher
- Vomiting, especially bile-tinted (yellow or green) or projectile
- Listlessness, a weak cry, or limp muscle tone
- Poor feeding or refusal of several feedings in a row
- Poor color (pale, dusky or bluish color, bluish lips or nail beds)
- Grunting with every breath, labored breathing or wheezing
- A rash that doesn't blanch when you press on it
- No urine for more than 12 hours
- Inconsolable crying for more than 2 hours

## FEVER

Normal body temperature varies between 97° and 100.3° Fahrenheit. Fever is defined as a rectal temperature of 100.4° F or higher. If you think your child has a fever, take his/her temperature orally, rectally or under the arm. Use the rectal method if your baby is under 3 months of age. Digital thermometers will signal when the temperature reading is complete. Ear and temporal artery thermometers can give a reading in 1-2 seconds. Do not use ear thermometers in infants less than 3 months of age; they are not accurate for infants in this age group.

Fever can be beneficial and help your child fight infections. If your child is younger than three months with a fever, call the office or after-hour number and do not give any fever-reducing medication to avoid masking other symptoms. If your child is older than 3 months of age and uncomfortable with a fever over 101° F, you may give acetaminophen (Tylenol®) every 4-6 hours. For children with fever over 6 months of age, you may give ibuprofen (Motrin®) every 6-8 hours.

**Call the office or after-hours number if you are concerned about your child's fever or if:**

- Your child looks very sick one hour after a dose of acetaminophen or ibuprofen
- The fever goes above 105° F degrees
- The fever persists without any apparent cause for more than 24 hours in a child under 2 years of age
- The rectal temperature is 100.4° F or higher in an infant less than 3 months of age
- The fever is greater than 102.5° F degrees if 3-6 months of age
- The fever lasts more than 3 days
- Your child becomes worse

MEDICATIONS FOR FEVER

DO NOT USE ASPIRIN to control your child’s fever. Aspirin is no longer recommended for children under 16 years of age due to the link between the use of aspirin during viral illnesses and Reye’s syndrome.

ACETAMINOPHEN (TYLENOL®) DOSING

IMPORTANT: DO NOT USE ACETAMINOPHEN IN INFANTS UNDER 2 MONTHS OF AGE!

Tylenol® works well to reduce fever. It can be found as Children’s suspension (160mg/5ml). Children’s Chewable Tablets (80 mg), Junior Strength Chewable Tablets (160mg), and Junior Strength Caplets (160mg). Acetaminophen can be given every 4-6 hours as needed. Use the dosage closest to your child’s weight. Be sure to use the correct dosage for the form of medicine.

Recommended Dosing: 15mg/kg every 4 – 6 hours

Weight		Dose  (15 mg/ kg)	Children’s Oral Suspension  160 mg/5 ml 160 mg/teaspoon  1 teaspoon = 5 ml	Children’s Soft Chews Chewable Tablets  80mg each	Junior Strength Chewable Tablets  160 mg each
lb	kg	mg	Teaspoon	Tablet	Tablet
6 - 11	2.7 – 5.3	40			
12 – 17	5.4 – 8.1	80	½ (= 2.5 ml)		
18 – 23	8.2 – 10.8	120	¾ ( = 3.75 ml)		
24 – 35	10.9 – 16.3	160	1 (= 5 ml)	2	
36 – 47	16.4 – 21.7	240	1 ½ (= 7.5 ml)	3	
48 – 59	21.8 – 27.2	320	2 (= 10 ml)	4	2
60 – 71	27.3 – 32.6	400	2 ½ (= 12.5 ml)	5	2.5
72 – 95	32.7 – 43.2	480	3 (= 15 ml)	6	3
> 95	> 43.2	640			4

# IBUPROFEN (MOTRIN®) DOSING

**IMPORTANT: DO NOT USE IBUPROFEN IN INFANTS UNDER 6 MONTHS OF AGE!**

**IBUPROFEN (MOTRIN®):**

Ibuprofen is available for fever control and pain. Ibuprofen is more effective than acetaminophen for fevers over 102.5° F. Ibuprofen is dosed every 6-8 hours instead of every 4-6 hours like acetaminophen; however, it will be more irritating to your child's stomach than acetaminophen if he is nauseated or not eating well. Ibuprofen can be found as oral drops (50mg/1.25ml), suspension (100mg/5ml), or chewable tablets (100mg).

**Recommended Dosing: 10 mg/kg every 6 – 8 hours**

<b>Ibuprofen/Motrin® Infant Concentrated Drops 50 mg/1.25 ml (dropperful)</b>	<b>Ibuprofen/Motrin® Children’s Oral Suspension 100 mg/ 5 ml (teaspoon)</b>
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**Note:** The concentration of the drops is different from the oral suspension. Always use the measuring device supplied with the product.

Weight		Dose (10 mg/kg)	<u>Ibuprofen/Motrin® Infant Concentrated Drops</u>  50 mg/1.25 ml 50 mg/dropperful  <i>note: 1 dropperful = 1.25 ml</i>		<u>Ibuprofen/ Motrin® Children’s Oral Suspension</u>  100 mg/5 ml 100 mg/teaspoon  <i>note: 1 teaspoon = 5 ml</i>	
lb	kg	mg	ml	Dropperful	ml	tsp
12 – 17	5.4– 8.1	50	1.25	1	2.5	½
18 – 23	8.2-10.8	75	2	1 ½	3.75	¾
24 – 35	10.9–16.3	100	2.5	2	5	1
36 – 47	16.4 - 21.7	150			7.5	1 ½
48 – 59	21.8 – 27.2	200			10	2
60 – 71	27.3 – 32.6	250			12.5	2 ½
72 – 95	32.7 – 43.2	325			16.25	3 ¼

## VOMITING AND DIARRHEA

Vomiting differs from spitting up in that it's a forceful emptying of most of the stomach contents. It is usually caused by a stomach virus that starts with vomiting (lasting 12-24 hours) and is followed by diarrhea (that can last for 5-7 days). Diarrhea is a sudden increase in the frequency and looseness of stools. If your child only has one or two loose stools in one day, or if your child is an infant with normally loose stools, no treatment is necessary since this is not "diarrhea."

It is important to prevent and watch for signs of dehydration whenever your child has vomiting or diarrhea. It's a good idea to keep some oral rehydration solution ("ORS" such as Pedialyte® or Enfalyte®) on hand for such occasions. The following guidelines can help you provide appropriate care at home and determine when to call the doctor. Don't hesitate to call if you have a question.

**Formula-fed infants:** offer ORS (oral rehydration solution such as Pedialyte® or Enfalyte®)

- For vomiting 1 or 2 times, offer half-strength formula for 2 feedings, then regular formula.
- For vomiting more than 2 times, switch to ORS (if none available, use formula) for 8 hours. Spoon or syringe-feed 1-2 teaspoons (5-10 ml.) every 5 minutes. After 4 hours without vomiting, double the amount. After 8 hours without vomiting, return to regular formula. If older than 6 months, resume solid foods as well.
- For frequent, watery diarrhea, switch to ORS for 4-6 hours, offering unlimited amounts. Formula is fine for average diarrhea. Avoid sports drinks (inadequate sodium content) and all fruit juices and soft drinks (they make diarrhea worse). Switch back to formula by 6 hours at the latest and offer it more frequently than usual and in unlimited amounts. Also, offer 2-4 ounces of ORS after every large, watery stool. If older than 6 months, continue solid foods. Your child needs the calories that formula and solid foods provide.
- When your baby has diarrhea, he might not be able to tolerate cow's milk formula. Your doctor might recommend a reduced-lactose formula (such as Gentlease®).

**Breast-fed infants:** reduce the amount per feeding (shorter, more frequent feedings)

- For vomiting 2 times, nurse on 1 side every 1-2 hours
- For vomiting more than 2 times, nurse for 4-5 minutes every 30-60 minutes.
- If vomiting continues, switch to Pedialyte® or Enfalyte® for 4 hours. Spoon or syringe feed 1-2 teaspoons (5-10 ml.) every 5 minutes. After 4 hours on ORS, resume breast-feeding for 5 minutes on the breast every 30 minutes.
- After 4 hours without vomiting, return to a regular schedule. If older than 6 months, resume solid foods after 8 hours without vomiting.
- For frequent, watery diarrhea, continue breastfeeding at more frequent intervals and continue solid foods if older than 6 months. Also, offer 2-4 ounces of ORS after each large watery stool.

**Older children (over 1 year old):** give frequent, small amounts of clear liquids for 8 hours

- For vomiting (only), offer water or ice chips: 1 tablespoon (15 ml.) every 5 minutes. Plain water is absorbed directly across the stomach wall, so it's preferred if your child has vomiting without diarrhea. For vomiting with diarrhea, your child needs ORS instead. If your child refuses ORS, try flat half-strength lemon-lime soda, popsicles or ORS popsicles.
- After 4 hours without vomiting, double the amount.
- After 8 hours without vomiting, add solid foods. The American Academy of Pediatrics no longer recommends the bland, high-carbohydrate BRAT diet (Bananas, Rice, Applesauce & Toast) that you might be familiar with. Your child needs the calories that his normal diet provides (avoiding spicy foods).
- For frequent watery diarrhea, offer unlimited fluids, such as Enfalyte® or Pedialyte®. Avoid all fruit juices and soft drinks (they make diarrhea worse). Continue solid foods. If refusing solids, offer milk or formula.
- Do not give your child over-the-counter diarrhea medicines such as Imodium AD®, Pepto-Bismol® or Kaopectate® unless recommended by your doctor.

**Your child needs to see a doctor if:**

- Signs of dehydration, such as no urine for more than 12 hours, a very dry mouth, no tears, or a delayed "capillary refill" time. To check the capillary refill time, press the skin on your child's arm or leg with your finger to "blanch" it for about two seconds, then count how many seconds it takes for the skin to return to its normal color. A normal capillary refill time is less than 2 seconds.
- Under 12 weeks of age and vomits 2 or more times (especially if "projectile" or bile-colored)
- Under 12 weeks of age with rectal temperature of 100.4° F or above
- Age 3 months to 2 years and vomiting persists more than 24 hours without diarrhea
- Vomits everything for more than 8 hours
- Blood in the vomit (red or "coffee grounds")
- Under 12 weeks of age with bile in the vomit (yellow, green or orange color)
- Fever over 103° F with vomiting or diarrhea
- Continuous crying or abdominal pain for more than 2 hours
- Attacks of severe crying that suddenly switch to 2-10 minute periods of quiet (usually under 3 years of age)
- Blood, mucus or pus in the stool
- Under 1 year of age with more than 8 diarrhea stools in the last 8 hours
- Diarrhea persists more than 7 days
- Your child becomes very weak or is difficult to awaken
- You have any concern or want your child to be seen

## THE COMMON COLD

A “cold” is the word we use to describe congestion in the nose and sinus areas caused by a virus. There are many viruses that cause “colds,” and they are all contagious. Most colds occur in the winter because people are in closer contact indoors and can spread the virus more easily. Colds have nothing to do with how cold it is outside. Many parents notice their children getting viral upper respiratory infections (a more specific term for “cold”) as soon as they are around other children, such as in day care or preschool. The average preschool child will get 6 to 10 viral illnesses each year.

**Symptoms of a cold:** A cold might cause a fever that lasts 24-48 hours and a runny nose that lasts for a week or two. At first, the nasal drainage will be clear. After a few days, it will change from clear to yellowish-green and sometimes back to clear. This is because the constant drainage irritates the lining of the nose and causes microscopic bleeding. The tiny blood cells break down and turn yellow and green, just as a bruise turns color. Do not let this normal color change worry you. A cough is the last symptom to develop with a cold and the last to disappear.

Many parents worry about their child’s cough because it sounds like it is “coming from chest”; however, the cough is good because it prevents mucus in the throat from going into the lungs. Because your child’s chest wall is thin, the large airways (windpipe and bronchi) project the sound of the cough like a megaphone, so that it sounds and feels loud and like it is coming from the lungs. A cold also causes postnasal drainage down the back of the throat. This often causes a sore throat and can also be the cause of a cough. Your child might experience muscle aches and fatigue, and some children become cranky or clingy. Your child might not sleep well at night because the congestion will wake him up. Other children might sleep more than usual. Your child might not feel like eating because he feels too bad or it hurts to swallow. Do not be concerned if your child does not eat very much when she has a cold. Her appetite will come back later.

**Treatment of a cold:** A cold is caused by a virus. Antibiotics do not cure viral infections. We don’t have medications that can cure a cold virus. We can only treat the symptoms. Even if you do nothing, the cold will go away on its own; therefore, if your child is comfortable, we recommend no treatment. If your child is uncomfortable, you may try the following symptomatic remedies:

- Saline nose drops and bulb suction: Suction the child’s nose with a bulb syringe just before eating and sleeping. Saline drops will loosen the mucus and make suctioning easier. You can use them as often as necessary since they are non-medicated (the same formula as tears).
- Cool mist humidifier: Use at night to moisten the air and reduce coughing. Use only distilled water in the humidifier; and, dump it out every morning. Allow humidifier to air dry during the day so that it doesn’t grow bacteria, mold and other undesirable organisms.
- Little Noses decongestant nose drops may be used at bedtime to help dry up the nose if congestion causes frequent awakening. We do not recommend using them in the daytime or for more than 3 days because using these drops repeatedly can actually make the nose more stopped up (called “rebound congestion”)

- Elevate the head of the bed. To help decrease coughing at night, raise the crib mattress up a few notches on one end or put large stable blocks under the front legs of the bed. Elevating the head keeps the postnasal drainage from pooling in the back of the throat.
- Acetaminophen (Tylenol) for fever over 101° F or general discomfort if over 2 months of age.

### **You need to call the office for an appointment if:**

- The fever is not going down or gone in 48 hours
- The fever goes away and comes back again a few days later
- Your child's symptoms get worse instead of gradually getting better
- Your child develops more symptoms or seems very ill
- Your child is less than 2 years old with a temperature of 102.5° F or higher (make an appointment)

## **EARACHE**

An earache can be associated with an irritation of the external ear canal (swimmer's ear) or a middle ear infection (otitis media). Frequently children will develop a middle ear infection in association with a viral upper respiratory infection. This is caused by an accumulation of pus in the middle ear behind the eardrum. Ear infections usually occur 10-14 days after your child has a cold. This can cause severe pain in the ear and generalized discomfort. We feel that whenever a child has an earache, he should be seen by a physician and treated appropriately. It is difficult to accurately diagnose an ear infection over the phone. Our office policy is to NOT call out antibiotic prescriptions over the phone.

If your child develops ear pain at night, try managing his pain with acetaminophen or ibuprofen until morning. The doctor on call can also call out a prescription for numbing ear drops to help ease the pain. **IMPORTANT--Do not use numbing ear drops if your child has PE tubes in the ears or if he has yellow or bloody drainage from the ear.** If you use ear drops, be sure to call the office the next day for further treatment even if the pain is better. Signs and symptoms of a middle ear infection could include fever, a decrease in appetite, fussiness, and/or frequent waking periods at night.

## **SORE THROAT**

Most sore throats are caused by viruses and are not treated with antibiotics. Some sore throats, however, are caused by a bacterium called streptococcus. This typically causes swollen tonsils, fever, and swollen glands under the jaw. It is impossible to tell the difference between a viral or bacterial cause of a sore throat; therefore, it is necessary to diagnose strep throat in the office with a rapid strep test or throat culture.

Strep throat is treated with antibiotics and needs to be initiated within 10 days of the onset of symptoms. It is extremely important to complete a **FULL COURSE** of antibiotics in order to clear up the strep infection and to prevent complications such as rheumatic heart disease. On occasion strep throat causes a red, sand-papery rash.

## CAR SEATS

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Accidents in general and car accidents in particular are a major cause of death and injury in childhood. Therefore, always keep your baby properly restrained in an approved infant car seat. You can obtain information on approved car seats from the following sources:

- Safe Rider's Program: 1-800-252-8255
- Safe Kids Coalition: <http://www.injuryfree.org/> or 512-324-0000.
- The American Academy of Pediatrics: <http://www.aap.org/family/carseatguide.htm>.

Install the car seat according to the manufacturer's instructions. Not all car seats are installed the same way! Be sure to have your car seat installation inspected. The Austin Safe Kids Coalition "Car Seat Calendar" is located on the Dell Children's Medical Center website (below). Find a convenient date and location and call to schedule your inspection. [http://www.dellchildrens.net/services\\_and\\_programs/safety\\_and\\_injury\\_prevention/](http://www.dellchildrens.net/services_and_programs/safety_and_injury_prevention/)

**All children age 12 and under should sit properly restrained in the back seat of the car. Air bags can cause serious injury to children in the front seat. NEVER place a child in the front seat with an active airbag.**

Infants need to be in rear-facing safety seats until they are two years of age or until they reach the maximum height and weight for the seat. At this age, the safety seat should be positionally reclined so that the infant's head cannot flop forward. If the vehicle seat slopes and causes this to happen, the safety seat should be reclined back. A firm roll of cloth can be wedged below the foot end of the car seat to achieve the proper angle - a 45-degree tilt. The shoulder straps must be in the lowest slot until the infant's shoulders are above the slot. If a blanket will be needed to keep your child warm, place the unbundled baby in the car seat, fasten the harness, and then tuck the blanket over the baby. Never strap in a bundled baby. Read the child safety seat instructions carefully. **Always adjust the harness to fit snugly (until only two of your fingers will fit between it and your baby); always fasten the chest clip; and always position the clip across your child's chest (at the "nipple line"), not over the abdomen or near the neck.**

Children who are 20 pounds and at least one year old should use a semi-upright forward-facing convertible car seat until the seat no longer fits well. The 5-point harness car seats are safest and available for children who weigh up to 65 lbs. and more. The child's ears should be below the top of the back of the seat, and the shoulders should be below the seat strap slots.

When children outgrow forward-facing convertible seats, they need to be restrained in belt- positioning booster seats until they are big enough to fit properly in an adult seat belt. This includes children from 40 to 80 pounds and about 4' 9" tall. A child who cannot sit with his back straight against the vehicle back seat cushion with knees bent over the seat edge without slouching is not big enough for an adult seatbelt. On a small child, the adult lap belt rides up over the stomach, and the shoulder belt cuts across the neck. In a crash, this can cause serious injury or even death. Child booster seats lift children so that the lap and shoulder belts can be positioned correctly and safely. NEVER allow your child to slip the shoulder belt behind her back; the lap and shoulder belt combination is designed to distribute the impact of a crash with the least potential harm to your child. Failure to use them together can also result in serious injury or death.

## HOME FIRST AID KIT

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**We recommend the following items for your home first aid kit. Store in a safe place where children do not have access.**

Thermometer (digital, rectal)

Acetaminophen (Tylenol®)

Ibuprofen (Motrin®)

Neosporin® or Bacitracin® antibacterial ointment

Benadryl® elixir

A&D Ointment®, Desitin® or Dr. Smith's® diaper ointment

Band-Aids

Tape (½-1" wide)

Gauze squares 4" x 4"

Hydrogen peroxide

Scissors

Tweezers

Ace bandage (2" or 4" wide)

Rubbing alcohol

Auralgan® ear drops (by prescription if your child has a history of ear infections)

Normal saline nose drops and bulb syringe

Pedialyte® or Enfalyte®

Notes:

