# these FIR days

A guide to pregnancy, delivery and care for your infant from St. Bernards.





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### **USE THE FOLLOWING CALENDAR PAGES TO KEEP TRACK OF ALL THINGS BABY**

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## IN CASE OF EMERGENCY

### What to do in Case of an Emergency

If you feel you have an emergency related to your pregnancy, call 911 or visit the Obstetrics Emergency Department (OBED) on the 5th floor of St. Bernards Medical Center (enter through the main tower entrance). All nonemergent needs should start with a call to your OB clinic/doctor. In the case of an emergency, please call 911 or visit the OB-ED.

### **Before You Call**

- and remember the facts.
- If you are calling your clinic for prescription refills, please call during office hours.
- When calling, please set prescription bottles by the phone so you can read off the medicine dose and pharmacy phone number.
- Have pencil and paper handy to write down instructions. There is a notes section in this book for your convenience.

### When You Call Your OB-GYN Clinic

- Make the call yourself unless this is impossible. Relayed messages may not be accurate.
- Call during office hours so your chart is available for reference, unless it is an emergency.
- Be sure to identify yourself by first and last name and how far along you are into pregnancy.
- Describe your problem as thoroughly as possible from your notes.
- Write down instructions. When you are worried, sleepy, upset or sick, the instructions may not be as easy to remember.

## **PRENATAL CARE**

### **Office Visit Frequency**

Can be different for each pregnancy; contributing factors may include:

- Hypertension
- Gestational Diabetes
- Multiples (twins)
- Medications

0-28 weeks: Appointments may be every 4 weeks 29-36 weeks: Appointments may be every 2 weeks 36 weeks-delivery: Appointments may be every week

### **Office Visit Expectations**

During every visit you can expect the following:

- Weight, blood pressure and urine analysis for sugar and protein
- Measurement of uterine growth (also called fundal height)
- A Doppler will be used to listen to the baby's heartbeat beginning as early as week 13

• Evaluate your condition and write down a few notes and specific questions. This will help you organize your thoughts

### Diet, Nutrition, Exercise

Your body requires extra vitamins and minerals when you are pregnant. Your doctor will suggest a prenatal vitamin to supplement a healthy diet. Taking the vitamin helps to ensure you and the baby get enough folic acid and iron.

The U.S. Food & Drug Administration recommends an additional 300 calories daily to maintain a healthy pregnancy. Making food choices that are low in "empty calories" will help ensure you and the baby are getting the vitamins and minerals you need. Empty calories are the calories from added sugars and solid fats in foods like soft drinks, desserts, fried foods, cheese, whole milk and fatty meats. For best nutrition, choose foods that are low-fat, fat-free, unsweetened or have no added sugars. They have fewer or no "empty calories."

The U.S. Department of Agriculture has replaced the food pyramid with MyPlate to help you with making goals for good food choices. Recommended items to eat in each food group are as follows:

### Vegetables

Choose fresh, frozen, canned or dried vegetables. If choosing canned vegetables, look for those that say "low-sodium" or "no salt added." The vegetables below are rich in vitamin A and potassium.

- Carrots
- Cooked greens (such as kale, collards, turnip greens, and beet greens)
- Pumpkin
- Red sweet peppers

### Fruits

Choose fresh, frozen, canned or dried fruits. If choosing a canned fruit, look for those canned in 100 percent fruit juice or water and NOT syrup. The fruits below are high in potassium and many are high in vitamin A as well.

- Apricots
- Bananas
- Cantaloupe
- Honeydew melon
- Mangoes

- Oranges • Prunes
- 100% prune juice or orange juice
- Red or pink grapefruit

### Dairy

This provides the calcium and potassium you need. When choosing dairy, look for products fortified with vitamins A & D and those with DHA or Omega-3. Also be sure to choose low-fat or fat-free options. If you are lactose intolerant, choose calcium fortified foods and beverages or look for lactose-free options.

- Fat-free or low-fat yogurt
- Skim or 1% milk
- Soy milk, almond milk, or coconut milk

### Grains

Choose whole grains and items fortified with iron and folic acid.

- Fortified ready-to-eat cereals
- Fortified ready-to-eat cooked cereals
- Rice or pasta

- Whole grain bread • Whole grain crackers

**Protein** 

Choose low-fat or lean proteins. It is best to choose meats or poultry that can be baked, broiled or grilled. Mix up your protein routine and add fish in your diet once a week. Fish is high in Omega-3 fatty acids. Although too much mercury can be dangerous, you can consume 12 ounces of fish per week safely. Examples include salmon, tuna, sardines or anchovies.

- Beans and peas (such as pinto beans, soybeans, white beans, lentils, kidney beans and chickpeas)
- Lean Beef, Lamb, Chicken and Pork
- Oysters, Mussels and Crab
- Cooked Salmon, Trout, Herring, Sardines and Pollock

### Foods & Drinks to AVOID During Pregnancy

You are at an increased risk of food-borne illnesses during pregnancy.

- (apple cider).
- DO NOT EAT foods that have raw milk in them.
- DO NOT DRINK alcoholic beverages.
- DO NOT EAT raw fish or raw shellfish (including sushi containing raw fish and oysters).
- steaming hot.
- seafood salad.
- cheeses or Panela UNLESS it is made with pasteurized milk.
- DO NOT EAT raw sprouts (alfalfa sprouts).

## EXERCISE

Exercise during pregnancy helps to develop muscle strength for labor. It helps with backaches, circulation, insomnia, weight control and mood. It is important to consult your physician before you begin any exercise program. If complications in your pregnancy arise, it may be necessary to limit physical activity. The most important thing to remember is to use common sense, listen to your body and talk to your physician. Below are good exercises during pregnancy:

- Kegel exercise
- Low-impact aerobic classes
- Pelvic rock
- Stationary bike

• Squat

PLEASE NOTE: When exercising, drink lots of water, wear good shoes and a supportive bra. If at any time during exercise you develop shortness of breath, chest pain, extreme fatigue, dizziness, uterine contractions, decreased fetal movement or leakage of fluid from the vagina-STOP.

- Sweet potatoes
- Spinach
- Tomatoes & tomato sauces
- Winter squash

• Nuts and Seeds (such as sunflower seeds, almonds, hazelnuts, pine nuts, peanuts, and peanut butter)

• DO NOT DRINK unpasteurized (raw) milk, other unpasteurized milk products or unpasteurized juices

• DO NOT EAT hot dogs, lunch meats, bologna or other deli meat UNLESS they are reheated until

• DO NOT EAT refrigerated paté, meat spreads from a meat counter, or smoked seafood found in the refrigerated section of the store. Foods that don't need refrigeration, such as canned tuna and canned salmon, are okay to eat. • DO NOT EAT salads made in-store such as ham salad, chicken salad, egg salad, tung salad or

• DO NOT EAT soft cheese such as Feta, gueso blanco, gueso fresco, brie, Camembert cheeses, blue-veined

- Swimming
- Yoga
- Walking
- Water aerobic classes

## **TESTING**

### Ultrasound

A prenatal ultrasound (also called a sonogram) is a noninvasive diagnostic test that uses sound waves to create a visual image of your baby, placenta and uterus, as well as other pelvic organs. It allows your doctor to gather valuable information about the progress of your pregnancy and your baby's health. Below is a list of things an ultrasound is used for:

- Confirm and date the pregnancy usually done around 8–10 weeks. This also can determine if there are twins or multiple babies
- Determine the sex of the baby usually around 18–20 weeks
- Check the baby's heartbeat
- Measure the size of the baby
- Check the location of the placenta
- Determine the amount of amniotic fluid
- Check for physical abnormalities
- Check baby's well-being late in pregnancy usually done if you have high blood pressure or diabetes, or if vou are overdue

### **Quad Screening**

The guad screen is an optional blood test done in the second trimester, usually between 15 and 20 weeks of pregnancy. The conditions it screens for are Down syndrome and trisomy 18, which are chromosomal abnormalities, as well as neural tube defects, such as spina bifida.

### Fetal Movement (Kick Count)

An active baby is a healthy baby. Regular movement has been regarded as a way to tell how healthy your baby is. Most women feel the first "butterflies" of movement between 16 and 20 weeks. It is more noticeable mid-pregnancy and may decrease later in pregnancy as your baby fights for space. Your baby has sleep/wake cycles that can last anywhere from 20 minutes to 2 hours, and you will begin to notice when he or she is most active. Kick Count refers to the spontaneous movements you feel from your growing baby. The American Congress of Obstetricians and Gynecologists (ACOG) recommends recording the amount of time it takes your baby to kick, twist, roll, or turn. Healthy babies should have at least 10 kicks in a two-hour time period. If you do not feel at least 10 kicks in two hours, try a drink with caffeine and retake the test in 1–2 hours. If you get the same result, then call your doctor. Check out our Count the Kicks campaign at **www.countthekicks.org** and free app Count the Kicks! by Healthy Birth Day.

### **Glucose Test**

Screens for gestational diabetes between 24 and 28 weeks. Gestational diabetes is a condition some women develop during pregnancy. You will drink a concentrated sugar solution. One hour later, your blood will be drawn to see how your body breaks down sugar. If your blood glucose is higher than 140, a three-hour glucose test will be ordered.

### **Group B Strep**

Cultures will be taken between 35 and 37 weeks to determine if Group B Strep is present in the birth canal. Group B Streptococcus is a type of bacteria that can be found in the birth canal of 25 percent of all healthy adult women. It causes no disease or symptoms. If you plan on giving birth vaginally, the baby can become infected. The test is painless and usually takes two days for results. If you test positive for GBS, you will receive antibiotics during labor.

### Non-stress Test

Used to evaluate your baby's heart rate patterns especially during movement. The test will read the baby's heart rate and your contractions if you are having any.

## **CHANGES TO EXPECT**

### Abdominal/Round Ligament Pain

Having a sharp pain in the groin area? Your round ligaments are cord-like structures that go from the groin to the top of the uterus. Pain can arise as they stretch or spasm, and is typically worse after your first baby. Constipation can also cause abdominal pain. To help ease the pain, try a heating pad or maternity support band. If the pain is severe or does not go away, call your doctor immediately.

### **Backache**

As your uterus grows, the pelvic joints relax. When this happens, it can cause pain in your lower back. Exercise that strengthens your muscles can help alleviate this pain. Also practice good posture and wear comfortable shoes.

### **Breast Changes**

Your breasts more than likely will become larger, firmer and more tender. You may notice changes in your breasts before you notice any other pregnancy changes. The dark area around your nipple, the areola, may get larger and darker. Then halfway through the pregnancy, your breasts may leak colostrum; if they do, you can get special pads to protect your clothes. As your breasts prepare for milk production, the veins in your skin may become more noticeable as well.

### **Contractions**

The uterine muscle will contract the entire pregnancy. Often times, the contractions (Braxton Hicks) are irregular. When they become more painful, it can be "false" labor. You should contact your doctor if the contractions get closer together, last longer and become more painful because it can be a sign of early labor.

### **Depression/Anxiety**

Mood swings due to the increase in hormones are normal in every pregnancy. Your partner should be extra patient with you. While mild changes like feeling more tired, irritable, or worried are normal, sometimes they can become severe enough to seek help from your doctor. If you experience an abnormal amount of anxiety or have the symptoms of depression listed below, contact your physician.

- Diminished interest in wanting to be a mother
- Feeling restless or irritable
- Feeling sad, depressed and/or crying a lot
- Feeling worthless or guilty
- Having headaches, chest pains, heart palpitations, numbness or hyperventilation
- Having low to no energy
- Increase or decrease in appetite or weight
- Sleep problems either not being able to sleep or sleeping more than usual
- Thoughts of harming yourself
- Trouble focusing, remembering things, or making decisions

• Strong anxiety, tension and/or fear either about the baby or that you will not be a good mother

### **Dizzy Spells**

Circulation changes in the first trimester and lying on your back in your last trimester can often lead to dizzy spells. In order to decrease the effects, do not change positions suddenly, do not move too quickly and ease yourself when standing.

### Fatique/Insomnia

Early in pregnancy, you may be very tired and sleep a lot; but nearer to the end, you may find it difficult to sleep. Most sleep trouble comes from not being able to find a comfortable sleeping position. Exercising a few hours before bed or taking a warm bath may help you go to sleep. You might also try using pillows between your legs, under your belly, or behind your back. Pregnancy support pillows may be helpful.

### **Frequent Urination**

As your uterus expands, it puts pressure on your bladder, causing an increase in urination. The position and movement of your baby can also cause extra pressure on your bladder. It is important to stay hydrated and drink at least 64 ounces of water a day. Do not try to control your bladder by drinking fewer fluids.

### Heartburn

Heartburn and indigestion are common during pregnancy. As your body makes room for your growing baby, your other organs lose their normal space. This includes your stomach. If your symptoms are severe, contact your physician. Antacids like Tums are fine to take, but do not use baking soda or sodium bicarbonate medicines. It may also help to elevate the head of your bed.

### **Joint Pain**

An arthritis-type pain can occur in later stages of pregnancy due to swollen joints. Bed rest and a restriction on sodium during pregnancy can help. If you experience Carpal Tunnel Syndrome, a hand splint can be worn at night.

### Leg Cramps

Leg cramps can show up in the second trimester and may get worse as the pregnancy progresses. While the cause of leg cramps is unknown, it could be from your legs carrying the extra weight or from pressure placed on blood vessels from your growing uterus. If you get a cramp, stretch your muscles or try massaging them with a warm water bottle. To prevent leg cramps, try one of the following:

- Ask your doctor about a magnesium or calcium supplement.
- Avoid getting too tired. Lie down on your left side to improve circulation to and from your legs.
- Rotate your ankles and wiggle your toes when you sit, eat dinner or watch TV.
- Stay hydrated during the day by drinking water regularly.
- Take a walk every day, unless your doctor has advised you not to exercise.
- Try a warm bath before bed to relax your muscles.

### Nausea/Vomiting

The nausea and/or vomiting you experience during pregnancy is referred to as "morning sickness." Some women will experience morning sickness and some will have little to no symptoms. For more information on how to cope and triggers, please reference the morning sickness section.

### **Nose Bleeds**

Your blood volume increases everywhere, including your nasal lining. This increase can cause nose bleeds. To stop a nose bleed, apply firm pressure with your finger to the side that is bleeding. If you are unable to stop the bleeding or it is heavy, call your doctor. Congestion is also very common in pregnancy. Consult with your doctor before taking any medication.

### Pica

Pica is the medical definition of unusual food cravings during pregnancy. It is important to maintain a balanced diet no matter what you are craving. Watch out for ice, starch, dirt or clay cravings because they can indicate a nutritional deficiency.

### Sciatica

The sciatic nerve, the largest nerve in the body, starts in the lower back, runs down the buttocks, and branches down the back of the legs to the ankles and feet. Sciatica is not typically caused by pregnancy, but if you do experience it, it will most likely be in the third trimester. Most women experience pain on one side. It can be constant or sporadic, depending on the amount of pressure placed on the nerve. Some methods to relieve sciatica are listed below:

- Try acupuncture, chiropractic adjustments or therapeutic massage.
- Do pelvic tilts with kegels to strengthen your core muscles.
- Go swimming.
- Take a break and rest in a comfortable position.
- Try to gain weight slowly during pregnancy.
- Use support pillows and/or a firm mattress when you sleep.
- Use a warm compress.

### Shortness of Breath

During the last two months of pregnancy, you may experience shortness of breath. If this happens, slow down your movements and breathe deeply. If you have these issues at night, try raising the head of your bed. If you experience shortness of breath that becomes increasingly worse, you should share this information with your doctor for possible further evaluation.

### Skin Changes/Stretch Marks

Changing hormone levels can cause skin color changes, but they should go away or diminish after the baby is born. Linea Nigra, or the line that goes down the abdomen to the pubic hair, is another common change. You may experience more acne as well. Discolored zigzag lines, otherwise known as stretch marks, may show up on the breasts, buttocks, and lower abdomen. Stretch marks are caused by the breakdown of elastic tissue below the skin's surface.

Keeping weight gain under control will usually help. You can also try creams or oils that help with the elasticity of your skin. As with most pregnancy changes, these marks usually fade or become less noticeable after delivery.

### Swellina

Swelling usually happens for one of two reasons: 1) your drainage pathways become blocked or 2) due to water retention. Wearing support or compression hose and elevating your legs can help alleviate swelling in your legs.

### Vaginal Discharge

Mucus secretion from the cervix occurs due to the increase of hormones. It is normal, and unfortunately not much can be done. If you experience excessive discharge or it has a bad odor, contact your doctor. Yeast or vaginal infections are common occurrences during pregnancy. They are treated easily and are not harmful to the baby.

### Varicose Veins

Varicose veins can occur when your legs get weak and enlarged with blood. The growing uterus partially cuts off circulation from your legs making it harder for your veins to carry blood up from your legs to your heart. The following things can help with circulation:

- Don't stand or sit for long periods of time without moving.
- Exercise.
- Prop up your legs when you sit.
- Take short walks during the day.
- When traveling, stop often to allow time to walk and stretch.
- Wear support or compression hose.

### Weiaht Gain

As your baby grows, so will you. The average weight gain during pregnancy is 25–35 pounds, assuming you started out at an average weight. If you were underweight, you may gain between 28 and 40 pounds, and for women starting out overweight, you should gain 15–25 pounds. The minimum weight gain for any pregnant woman should be 15 pounds. Remember, most of the weight will come off after the baby is born or in the postpartum period. Sources of weight gain:

- Amniotic Fluid 2 pounds
- Blood Volume 4 pounds
- Body Fluid 4 pounds
- Breasts 2 pounds
- Fetus 6 to 8 pounds
- Maternal Stores (fat, protein, nutrients) 7 pounds
- Placenta & Membranes 1.5 pounds
- Uterus 2 pounds

## **MORNING SICKNESS**

You're not alone—Did you know that only 20 percent of women actually have morning sickness in the morning? The overwhelming majority experience morning sickness throughout the day. On average, it lasts 17 weeks, but in some cases can continue until delivery. It ranges from very mild to severe, and other than knowing it is directly related to pregnancy, the actual cause is unknown.

### How to Cope

Everyone experiences morning sickness differently. Many things can trigger morning sickness. Keep a journal of foods, smells and environmental changes so you can know what to avoid. The next two sections are a list of common triggers and irritants.

### **Smell Triggers**

Odors are one of the major triggers that cause nausea and vomiting during pregnancy. They can be odors from you, others or the environment.

- Animal Odors wet fur, urine, or feces
- ammonia, carpet deodorizer
- Food Odors greasy or fried foods, over-ripened foods, leftovers
- chlorinated water
- Room Odors bathroom or kitchen (refrigerator or garbage)
- Scented Products cologne, soap, deodorant, shampoo, conditioner, hairspray

### Irritants

Colors, movement, noise and certain activities can aggravate your morning sickness more than others. Below is a list of a few irritants. As with any morning sickness triggers, pay attention to what affects you so you can know what to avoid or adapt to.

- Appearances of food can cause nausea.
- Brightly colored items can cause headaches.
- Large group situations can cause dizziness.
- Loud noises can stimulate auditory senses causing nausea.
- Extreme temperatures can cause nausea.

### Foods that Help

Below is a list of foods that can help alleviate nausea.

- Foods high in vitamin B6 like leafy green vegetables, whole grain breads, and pasta.
- Ginger ginger ale (hot or cold), ginger cookies, and gingerbread are good options to try.
- lime juice.

• Cleaning Materials – bleach, dishwashing detergent, furniture polish, glass cleaner, laundry detergent,

• Human Body Odors – bad breath, perspiration, skin odors from food products or scents, foot odor or dirty hair • Other Odors - cigarette smoke, chewing tobacco, toothpaste, garbage, musky or moldy house smells,

• Lemons & Limes – try cutting wedges and sucking on the fruit or chew ice chips soaked in natural lemon or

### **Food Exercise**

The food prompts below are a great exercise in deciding what foods to eat. Go through each item and ask yourself if it sounds good to eat or not; feel free to add additional options to the list below.

- Bitter plum, grapefruit, black coffee, dark chocolate
- Bland plain toast, oatmeal (no milk), plain potato
- Crunchy granola, rice crispy treats, peanuts, almonds
- Earthy rice, bran muffins, baked sweet potato
- Fruity peaches, bananas, apples, strawberries
- Salty potato chips, pretzels, saltine crackers
- Smooth yogurt, pudding, ice cream
- Sour lemonade, lime or lemon ice pops, sour apples
- Sweet peppermint, fudge, cookies, cake
- Wet-watermelon, cantaloupe, honeydew

### Additional Ways to Control Nausea

Below is a list of other ways to help with nausea. Consult with your doctor especially if medications and/or bed rest have been recommended

- Ask for help from those around you. Friends and loved ones may be willing to go shopping or do the cleaning until you feel better.
- Brush your teeth. If your gag reflex bothers you, try rinsing your mouth with lemon juice. If toothpaste bothers you, try lemon water and baking soda on your gums.
- Change positions. Sit up in a chair, change the position you are in or move to a different room.
- Distract yourself and don't give in to the nausea.
- If on bed rest or limited activities, do range of motion exercises regularly.
- Let your hair down and do not put it in a braid, ponytail or bun.
- Make sure your house is well-ventilated. Open windows, use a fan or try an air purification system.
- Tell others the things you know that trigger your nausea.
- Try a compress of three drops of lavender essential oil and one drop of lemon essential oil mixed with four cups of cold or warm water. Place any remaining mixture in a dark container to be re-used.
- Wear loose-fitting clothing.

## **CARING FOR YOURSELF**

It is important to take time to care for yourself. Growing another person is hard work. Here are some tips on how to care for you.

### Alcohol

AVOID alcohol when you are pregnant. It can lead to birth defects, learning disabilities, behavioral problems and mental retardation.

### **Chemical Information**

Pesticides/Household Chemicals – It is best to avoid heavy or prolonged exposure to household chemicals. They can be absorbed through your skin. If you must use them, wear gloves and make sure the room or area is well ventilated. As for pesticides or bug sprays, allow whatever chemical was used to air out before returning.

Dental - Taking care of your teeth is very important. If you have morning sickness and your gag reflex or toothpaste makes it worse, please reference the morning sickness tab. Be sure to tell your dentist you are pregnant, so he/she can take appropriate precautions. Swollen or bleeding gums are common in pregnancy, but can be minimized through proper oral hygiene.

Hot Tubs/Saunas – Both hot tubs and saunas should be avoided. Raising the temperature of your baby's environment above 100 degrees for extended periods of time can be harmful to the baby. However, it is okay to soak tired and sore feet.

Douching – No douching.

Caffeine – Avoid large amounts of caffeine. Consuming more than two cups of coffee per day can increase your risk of miscarriage, preterm labor or having a baby with a low birth weight.

X-Rays – Dental and limited diagnostic x-rays may be done while you are pregnant. Be sure to tell any technician that you are pregnant and unless it is an emergency, wait until after the baby is born.

### **Artificial Sweeteners**

Below is a list of sweeteners and their potential effects. Consult your doctor before using any sugar substitutes. • Splenda – The "yellow packet" has been approved by the FDA and appears to be safe to use during

- pregnancy.

- supplement. It is best to consult your doctor before using it or try another option.

### Foods to Avoid

Please reference the diet, nutrition and exercise section for foods that should be avoided during pregnancy.

### Clothing

During pregnancy, it is more about comfort than style. Below are a few items to consider:

- Good supportive bra.
- Support or compression hose/tights may help with varicose veins.
- Wear shoes that are secure and comfortable.

• Equal or NutraSweet – The "blue packet" has been approved in small quantities by the FDA during pregnancy. • Sweet 'N Low – The chemicals in the "pink packet" can transfer to your baby through the placenta and is slow to leave your system. While it is approved because it is slow to leave, you might consider another option. • Stevia – A new product on the market has not been approved through the FDA because it is considered a

### **Coloring Hair**

Most research shows the chemicals found in both semi-permanent and permanent dyes are not highly toxic and are safe to use during pregnancy. Below are some things to consider when coloring your hair.

- Carefully follow the directions on the package.
- Consider waiting until the second trimester to treat your hair because the smells can affect nausea.
- Do a patch test for allergic reactions before completing the process.
- Do not leave the chemicals on your hair any longer than indicated by the directions.
- Make sure the treatment is done in a well-ventilated area.
- Never dye or bleach eyebrows or eye lashes. This could cause swelling or increase risk of infection in the eye area.
- Wear gloves when applying treatment.
- With changing hormones, your hair will change, and any treatments may take differently than they did prior to pregnancy.

### **Domestic Violence**

It is important to seek help through your doctor or local agency if you are facing any of the following items from a spouse, partner, family member, or caretaker:

- Hits, slaps, punches, kicks, pushes, shoves, spits on you, or chokes you. Threatens or scares you with a weapon.
- Forces or pressures you to have sex.
- Keeps you from getting medical attention.
- Threatens to take your children away.
- Says you deserve to be hit.
- Takes away money, house or car keys.
- Tries to isolate you from friends or family.
- Withholds affection as a punishment.
- Blames you for their violent behavior.

### Hard Drugs

AVOID using hard drugs. Substance abuse during pregnancy makes your baby a victim. Amphetamines, barbiturates, cocaine, crack, and narcotics are linked with low birth weight, premature birth, and SIDS. Your baby will also be born fighting withdrawal symptoms.

### High-risk Activities

As your pregnancy progresses, any activity that puts you at a risk of falling or increases the chance of trauma to your belly is considered high risk. Any activity over 6,000 feet may carry risk due to less oxygen for you and the baby. The following are a few activities you should stay away from:

- Amusement park rides or water slides-anything with a forceful landing or sudden start/stop can harm the baby.
- Bicycling with the shift in gravity, cycling can be dangerous. Experienced riders may be able to continue into their second trimester, but consult your doctor first.

- Contact Sports soccer, basketball, hockey and football put you at a high risk of injury, collision, or fall.
- Downhill Skiing The American Congress of Obstetrics and Gynecology advise against downhill skiing anytime during pregnancy. Stick to gentle slopes or cross-country skiing if you must.
- Gymnastics creates a risk of falling or injury to your belly.
- Horseback Riding even experienced riders should avoid it during pregnancy due to the risk of falling.
- Running now is not the time to take up running. If you already had a running regimen in place, continue in moderation and stay hydrated.
- Scuba Diving scuba diving is not recommended during any point in pregnancy due to air bubbles that form in your bloodstream as you surface.
- Snowboarding creates a risk of falling or injury to your belly.
- Surfing creates a risk of falling or injury to your belly.
- Tennis if you played before you became pregnant, then continue with moderation. It may become more difficult to maintain balance as your stomach grows.
- Waterskiing creates a risk of falling or injury to your belly.

### **Painting**

Painting during pregnancy can be risky. Here are a few tips on playing it safe when it comes to paint:

- AVOIDING paints and solvents is the safest course of action.
- Wear protective clothing and masks and keep the area ventilated.
- Paint exposures during household painting are likely to have less exposure than occupational settings.
- Talk to your healthcare provider before beginning a painting project.
- AVOID latex paints that contain solvents such as ethylene glycol ethers and biocides.
- In general, water colors, acrylic and tempera paints are recommended over oil paints.
- Limit duration and frequency of your painting.

### **Prenatal Care**

Be sure to make your scheduled doctor visits and take your prenatal vitamins.

### Rest

You will be tired, so getting adequate rest is essential. Try to get 8–10 hours of sleep at night, and don't feel guilty if you your body.

### Seat Belts

and the lap belt. The lap belt should go under your belly and across the hip and thighs.

If you are in an accident, make sure to let your doctor know.

- need a nap. The first and third trimesters are when you will be the most tired. If you need a break or a rest period, listen to
- Wearing your seatbelt makes you 60 percent less likely to be injured or killed in an accident. It is best to wear the shoulder

### Sex

Don't worry. Your baby is protected by fluid, muscle and bone. It is healthier for your relationship if you continue your sexual intimacy. Only if you have a history of miscarriages, pregnancy-related vaginal bleeding or other complications will your doctor suggest you refrain from sex. Avoid sex if you think your water has broken.

### Smoking

If you or someone in your house smokes, now is the time to quit. Smoking greatly increases your chance of miscarriage or stillbirth. Your baby also runs a higher risk of crib death or SIDS. Children under 2 who breathe second-hand smoke are at a higher risk of developing serious medical problems.

### Travel

If you follow certain guidelines, traveling is usually not a risk to you or your baby. Here are a few key things to remember when traveling.

- DO NOT travel long distances the last 4–6 weeks of your pregnancy unless it is an emergency. If it is an emergency, talk to your doctor for advice.
- If you are traveling a long distance, schedule breaks to get out and walk.
- If you have complications, consult with your doctor before making any travel plans.
- It is recommended to check with your doctor before traveling by airplane or to a foreign country.

### Work

You should be able to continue working for as long as you choose during your pregnancy. There are a few things to consider in making sure you and your baby are well cared for.

- Do not continue a job that exposes you to harmful chemicals or radiation badges. As your body changes, certain aspects of your job may become more difficult. Be sure to discuss those things with your supervisor.
- Arrange for rest periods.
- If you work around sick people, take extra precautions or ask to be moved to a different task.
- Review safety measures to reduce your risk of exposure to any toxic agents.

## **FETAL DEVELOPMENT**

Week 1 - Uterine lining thickens with blood vessels to prepare for fertilization.

**Week 2** – Egg is released and travels down the fallopian tube. 250 million sperm swim toward the released egg. A cystic structure called Corpus Luteum forms to help provide hormones needed to prepare for pregnancy.

Week 3 – The egg is protected by follicle cells that the sperm must penetrate to enter and fertilize the egg. Conception occurs when the sperm and the egg meet to form a single cell called a zygote. The zygote then develops into a bunch of other cells called a blastocyst. The blastocyst moves down the fallopian tubes toward the uterus. If it gets stuck before reaching the uterus then it is referred to as an ectopic pregnancy.

**Week 4** – The implanted blastocyst is now called an embryo and is smaller than a grain of rice. It produces hormones that may register a positive result on a home pregnancy test, but it may take another week for a positive result to appear for some women.

**Week 5** – Pregnancy symptoms may start this week and can include fatigue, nausea, increased urinary frequency and tender breasts. The embryo is the size of an apple seed, and is shaped like a small tadpole. The heart is beginning to divide into chambers with cardiac cells beginning to contract. Oxygen and nutrients once coming from a yolk sac will be delivered via the umbilical cord.

**Week 6** – The embryo is the size of a pea, and the heart is beating around 100 times per minute. Soon you will be able to hear the heartbeat with the use of a Doppler device. Lungs are beginning to form, but oxygen continues to come from the umbilical cord.

**Week 7** – Less than ½-inch long and the size of a blueberry, the embryo continues to develop. Tiny ear buds are forming, along with hands and feet.

**Week 8** – By now, the embryo is the size of a jelly bean, and the brain is developing fast while the nervous system is being organized. An important part of development happens now—a neural tube closes off to form the spinal column. If the tube does not close off, then problems such as spina bifida can occur. The nose and upper lip are beginning to appear and may be visible via an ultrasound, while the hands and legs continue to emerge and may look like paddles at this stage.

**Week 9** – The embryo is the size of a grape and weighs a fraction of an ounce. Facial features continue to develop. Tongue, lips, nose and eyes are now more distinct. Teeth have just begun to form and the head is roughly the same size as the body.

**Week 10** – About the size of an olive (1½ inches) and weighing a quarter of an ounce, the embryo is now considered a baby. Bones and cartilage, though still soft and fragile, are forming along with the liver and kidneys. Toxins and carbon dioxide, a form of fetal waste, are removed via the umbilical cord and routed through the mother's bloodstream.

Week 11 – The baby is now the size of a fig, and its arms and legs can now bend, move, and kick which cannot be felt but can be seen in an ultrasound. Male or female organs are now forming but are not yet visible on ultrasounds.

Week 12 – Do you have the pregnancy pooch? If so, it is because the uterus is about the size of a small melon and has started moving forward. The baby is now the size of a key lime, around  $\frac{1}{2}$  ounce in weight and is starting to show reflexes like grasping, sucking, and hiccups.

**Week 13** – Welcome to the second trimester. The baby is now almost three inches long. The baby's vocal cords are developing, the pancreas is producing insulin, and the intestines go from inside the umbilical cord to the abdomen.

**Week 14** – The baby is now about the size of a kiwi, or 3½ inches long. The head is in better proportion to the rest of the body and is the size of a gumball. Facial features may be visible via an ultrasound, and the heartbeat may be audible through a Doppler device.

**Week 15** – Movements are becoming more complex for the baby, which is now the size of a lemon. The eyes can perceive light, and the baby may show how it can suck its thumb.

**Week 16** – Now the size of an avocado, the baby weighs 4 ounces and is 4 inches long. Lungs are practicing breathing by taking in amniotic fluid. As the baby grows, so does your uterus and, in turn, your belly.

**Week 17** – The developing baby is now the size of an apple and about 5 ounces. The baby can hear sounds like your heartbeat and voice, the organs are well developed and the kidneys can create urine while the liver produces bile.

**Week 18** – The baby is now 6 ounces, the size of a pear, and reflexes are developing more fully. The baby is on the move inside your womb, and you may be able to feel those movements. Vitamin D and calcium, which are an important part of your diet, help the baby's soft cartilage-like bones harden.

**Week 19** – Weighing in at ½ pounds the baby is now the size of a softball. The baby now has unique fingerprints, tiny blood vessels can be seen under the skin, and he or she can smile and frown.

**Week 20** – Boy or girl? You often can tell the gender at this stage. The baby is the size of a carrot, or around 10 inches long. Feeling butterflies in your stomach? Those sensations are probably fetal kicks.

**Week 21** – While resembling a miniature version of a person, the 12-ounce baby would fit in the palm of your hand. Fat and a thin layer of hair called lanugo are keeping the baby warm. Hiccups help the baby learn to breathe, and it swallows amniotic fluid to practice eating.

**Week 22** – Just under a pound, the baby is now about 11 inches long. The brain is developing more complex connections while hearing is more defined, and the eyes are able to better sense light.

Week 23 – Your little mango is about a full pound, with taste buds forming and the internal organs in place and functioning.

Week 24 – The baby is about 12 inches long and over one pound with hair on its head. The lungs are expanding and producing surfactant that helps keep the lungs from collapsing after birth.

Week 25 – Now the size of a squash, the baby is about  $1\frac{1}{2}$  pounds. There are now fingernails and toenails, and the hands and feet can wiggle and grasp.

**Week 26** – The second trimester is almost over, and the baby is now under 2 pounds and the size of a zucchini. The baby's immune system is rapidly developing, which includes the lymph nodes, thymus, and spleen.

**Week 27** – Welcome to the third trimester and a two-pound bundle of joy. The baby now has eyelashes on eyes that can open and close from time to time. The chance of survival is better now because of increased fat stored and more mature lungs.

**Week 28** – Weighing in now at 2½ pounds, the baby may add another 4 pounds or so before making its entrance. The movements are more noticeable at this stage and may be more blunt and forceful.

**Week 29** – Nearly 15 inches long and almost 3 pounds, the baby is now the size of a small cabbage. The sexual organs are developed and producing hormones, while the bones are beginning to harden and have been storing iron, phosphorus, and calcium.

Week 30 – Now about the size of an eggplant, the baby is less than 3 pounds. The baby has distinct sleep and wake cycles and can even have dreams. The eyes now can open and close, though vision is poor and will remain that way until a few months after delivery.

**Week 31** – Almost 16 inches long and right at 3 pounds, the baby is the size of a small melon. The brain is developing more fully now and speech and language are beginning to develop. Learning will continue throughout pregnancy and after birth in the complex neurological connectors. The baby is really working on its acrobatic skills moving around, flipping upside down, and rotating its head.

**Week 32** – Weighing in at 3<sup>3</sup>/<sub>4</sub> pounds and spanning 17 inches, the baby is growing more every day. The hair on the top of the head now has some color due to melanin production, and the lanugo is disappearing. Circulation is improving while the body is gaining more fat allowing for body temperature regulation. The baby is looking more like a newborn baby every day, his or her muscles are getting stronger and bones are continuing to harden.

**Week 33** – Now weighing around 4 pounds, the baby will add about a ½ pound every week until the birthday. The umbilical cord is providing not only nutrients but also antibodies the baby will need to fight off infections. By now you may be experiencing Braxton Hicks contractions.

**Week 34** – Your little pumpkin is just about that big at 18 inches long and over 4 pounds. When its eyes are open, the pupils can constrict when exposed to light. The fingernails and toenails are growing to reach the tips of the fingers and toes.

**Week 35** – Now around 18 inches and 5½ pounds, the baby is preparing for delivery by rotating the head toward the birth canal. It's mostly developed now, and the majority of growing effort is geared toward weight gain. The skin becomes less wrinkled with the addition of body fat. If your baby were born at this stage, studies show it should do well with little to no long-term side effects.

**Week 36** – About the size of a bowling ball, the baby now weighs about 6 pounds. The baby's kicks may become more like a sliding motion due to the decrease of space. The bones are continuing to become stronger but will remain pliable, and the skull has not fully fused. Both things allow for an easier delivery.

**Week 37** – The baby is about 6½ pounds and 19 inches long, and the internal and external genital organs are now developed. While continuing to get ready for life outside of you, the baby is practicing breathing, moving around, sucking its thumb and blinking. Wonder what your baby's eye color will be? Babies born with blue or light gray eyes will often darken over the next six months.

**Week 38**–Getting bigger every day, the baby is now around 7 pounds and almost 20 inches long. The digestive system isn't fully developed because it hasn't processed any food. Breast milk will help in this process. Breast milk also will provide antibodies and proteins important in helping the baby fight infections. When the baby is ready for its first diaper, don't be alarmed if it's dark and thick. The first bowel movement is referred to as meconium and comes from swallowing proteins in the amniotic fluid.

**Week 39** – Now considered full term, the size of a watermelon, the baby weighs 7 pounds or more, and the organs are developed and ready to function outside the womb. Ready to deliver? Here are some signs your baby is on its way—cervical dilation, uterine contractions, blood and mucus leakage and your water breaking (rupture of uterine membranes).

**Week 40** – Congrats on reaching your due date. Babies born now are somewhere between 7–9 pounds. The head is engaged when it is down past the pelvis, which typically occurs prior to labor. During delivery, the baby's oxygen level may naturally decrease while its blood pressure increases. This initiates breathing outside the womb, and the cold air on the baby causes the crying reflex which is a healthy and expected reaction.

## **POSSIBLE PROBLEMS DURING PREGNANCY**

### **Gestational Diabetes**

A type of diabetes concerning the balance of sugar in the blood that only occurs in pregnant women. It typically goes away after pregnancy, but a woman with gestational diabetes is at an increased risk of developing permanent diabetes later in life. Babies born to moms with gestational diabetes can have low blood sugar levels and jaundice following birth which can lead to neurological problems. The babies often are larger, making vaginal delivery more difficult or requiring a C-Section.

### Pre-eclampsia

About 10 percent of women develop high blood pressure or pre-eclampsia. While the cause is unknown, it is important to catch any changes in blood pressure early to limit potentially serious problems. If it goes untreated, the baby can suffer from a lack of oxygen and nutrients which leads to growth problems or death. A mother left untreated can face permanent damage to the eyes, kidneys, brain and liver.

### Preterm Labor

Early term labor is 37–38 weeks and 6 days. At this stage, babies are still immature and at risk for complications such as breathing problems and difficulty feeding. Your doctor will not consider inducing your labor before 39 weeks unless there is a medical indication. Preterm labor can be stopped if caught early enough. Below are signs for preterm labor:

- Uterine contractions more than 4 in 1 hour.
- Consistent menstrual cramps or those that come and go.
- Abdominal cramps with or without diarrhea.
- Constant low backache or a backache that comes and goes.
- Pelvic pressure where it feels like the baby is pushing down.
- Change in vaginal discharge—a sudden increase in the amount or it becomes mucus-like, watery, or slightly bloody.

## **EDUCATION**

### Count the Kicks App

Download your FREE Count the Kicks app. This app makes it simple to track your baby's normal movement pattern with the touch of your finger. Its daily text feature will even remind you when it's time to start counting. If you notice a change in your baby's regular movement pattern, call your healthcare provider right away.

### Baby State

Get ready for Baby 101. Join us for a night of higher learning for parents-to-be during Baby State. It is an expo-type event that is offered quarterly. No registration is required and it is free to the community.

You'll be able to meet the St. Bernards Birthcare Team, participate in a Nursing Team Q & A, visit vendor booths and learn all about car seat safety.

Complimentary snacks will be provided and you will be able to register for door prizes. You will also be able to preregister for your delivery.

Call the St. Bernards HealthLine at 870.207.7300 with any questions or concerns.

### **Breastfeeding Classes**

Prenatal Breastfeeding is a free, one-time evening class to help prepare you to breastfeed your precious newborn. The instructor is an International Board-Certified Lactation Consultant with many years of experience assisting breastfeeding mothers. This class is offered every other month and lasts approximately two hours. For class registration visit stbernards.info/classes or call the St. Bernards Healthline at 870.207.7300 to register.

### **Patient Portal**

Featurina:

- Access to your health records online
- An easier way to download yout information
- Private messaging with you physician

For more information about Patient Portal visit stbernards.info/portal-information.

### What is prenatal care?

Prenatal care is a term we use to remind us all that there are steps a mother can take to help herself have a healthy pregnancy. If you're expecting, prenatal care can help prevent complications for you and your baby, even before your baby is born.

### When an Expectant Mother Takes Advantage of Prenatal Care

- handling things.
- unchecked, can lead to serious complications.

If you're having trouble finding a physician, please contact St. Bernards OB-GYN at 870.930.3990 or St. Bernards Pregnancy Clinic at 870.207.0421.

## GLOSSARY

Afterbirth pains - Pain from the uterus contracting after birth that feels like mini labor pains. Amniotomy – Breaking the water-filled pouch that holds the unborn baby.

Amniotic Fluid – Water-like fluid that surrounds the baby in the mother's uterus.

Amniotic Sac - The membrane that encloses the developing fetus and contains the amniotic fluid. It prevents bacteria from getting to the baby. The bag tears when the "water breaks" and releases the amniotic fluid to the outside of the mother's body through the vagina.

Anesthesia – General or localized pain relief.

Areola – The dark area around the nipple.

Braxton Hicks Contractions – Intermittent uterine contractions with unpredictable frequency throughout pregnancy. These contractions most often are painless and occur more frequently as the pregnancy progresses.

Cesarean Birth – Often referred to as a C-section. The method used to deliver a baby through a surgical incision in the mother's abdomen and uterus.

• You have access to doctors and specially trained nurses called Advanced Practice Registered Nurses, who answer questions and make sure you understand all the things you need to have a healthy pregnancy.

• You receive physical exams based on how far along you are in your pregnancy. Your health team will help you track your weight, blood pressure and other things that help us know how your body and your baby are

• We can help you control existing health conditions like high blood pressure and diabetes that, if left

• Diet and other activities like smoking can have an impact on the health of both mother and child. Prenatal care can help you understand all the ways you can start now helping your baby get a healthy start in life.

Cervix - The neck-like lower part of the uterus that dilates and thins during labor to allow passage of the fetus.

Colostrum – The forerunner to breast milk and may be yellow to almost colorless. It is present in the breasts during pregnancy and the initial fluid that the baby will receive for approximately 3 days until breast milk is established.

Dilation - The gradual opening of the cervix to permit passage of the baby into the vagina. It is measured in centimeters from 0 to 10.

Ectopic Pregnancy – The development of a pregnancy outside the womb, usually in a fallopian tube, and is a serious cause of early bleeding and pain.

Effacement – The gradual thinning, shortening and drawing up the cervix. This is measured in percentages from 0 to 100.

Embryo - A fertilized egg that has begun the cell division stages of growth and differentiation from fertilization to the beginning of the third month of pregnancy.

Epidural – A way to place drugs for pain in the lower spine. This is done by using a needle and thin plastic tube called a catheter.

Fallopian Tubes – Tubes that extend from the uterus and open near the ovaries. They capture the eggs from the ovary.

False Labor – Involves cramps or contractions of the lower abdomen, similar to real labor. False labor does not cause the cervix to dilate.

Fetus – The name given to the unborn baby as it is developing within the mother's womb.

Folic Acid – One of the B vitamins that is a key factor for the development of the fetus. Lack of adequate folic acid during pregnancy was found to increase the risk for the baby to have a birth defect involving the spinal cord and brain.

Forceps – Instruments used while the mother is pushing to assist the baby under the pubic bone or through the lower part of the birth canal.

Gestational Diabetes – A type of diabetes that occurs in pregnant women and usually subsides after pregnancy.

Group B Streptococcus – A type of bacteria that can normally be found in the birth canal of up to one-third of all women. Some babies who are exposed to GBS bacteria during labor and birth become infected.

Hormone – A chemical that is made by one part of the body, which affects another part of the body. Hormones most often travel in the bloodstream and control how some cells and organs behave in the body. Hormones can also be manmade.

Induction – The use of medications or amniotomy to stimulate labor contractions.

Insomnia – The inability to sleep.

Jaundice - A newborn condition caused by excess yellow bilirubin pigment. Treatment may be required but is not generally necessary.

Keael Exercises – An exercise contracting the pelvic floor muscles that improves pelvic floor muscle tone and helps prevent urinary incontinence.

Kick Count – Refers to spontaneous fetal movements experienced by the pregnant mother. You should note the time it takes to feel 10 kicks, twists, turns or rolls.

Lactation Consultant – A health professional who specializes in the clinical management of breastfeeding.

Lanugo - Fine hair that covers the baby's body and is evident at birth.

Linea Nigra – A line running from the navel to the pubic hair line that darkens during pregnancy due to hormone chanaes.

Mastitis - Infection of the breast causing breast soreness, fever and flu-like symptoms.

Milk Ejection Reflex - Often referred to as let-down response, the release of milk from the milk glands stimulated by the baby during nursing.

Meconium – A greenish material that collects in the bowels of a developing baby that is normally expelled after birth. It can stain amniotic fluid if expelled before birth.

Miscarriage – The spontaneous loss of a pregnancy before 20 weeks gestation.

Non-Stress Test - Used to evaluate fetal heart rate patterns, especially during fetal movements.

Oxytocin – A hormone in a woman's body that contributes to the start of labor and later stimulates the "let-down" response.

Pica – A medical term for the unusual cravings for strange foods that you may experience during pregnancy.

Pitocin – A synthetic oxytocin used to induce or enhance labor. Also given after the delivery of the placenta to contract the uterus.

Placenta – The circular, flat organ in the pregnant uterus that serves as the exchange station for nutrients and oxygen. It is delivered after the baby and is often referred to as the "afterbirth."

Postpartum Depression – A condition that can occur in up to 10 percent of women who recently delivered babies. It most likely results from changing physiology, particular hormones and other changes such as self-image, life-style, stress and fatigue. It is a treatable condition.

Pre-eclampsia – A condition in pregnancy characterized by a rise in blood pressure, large amounts of protein in the urine, and swelling of the hands, feet and face. Pre-eclampsia is the most common complication of pregnancy.

Prenatal Testing – Tests performed on a pregnant woman or her fetus to prevent or diagnose abnormalities.

Premature Birth – Babies born before 37 completed weeks of pregnancy.

Prostaglandin – A chemical substance that causes uterine contractions.

Rh Factor – A marker found on the red blood cells. If you have the marker you are Rh-positive. If you are missing the marker, you are Rh-negative. If you are negative and carry a positive baby, your body may develop antibodies against the baby's blood, which could lead to a problem in the baby.

Round Ligament Pain – Pain in one or both groin regions from stretching or spasm of the round ligaments.

Sonogram – The use of sound waves to produce a "picture" of the developing fetus inside the uterus.

Trimester – A period of 3 months. One-third of a full term pregnancy.

Umbilical Cord – Structure that contains blood vessels that connect the baby to the placenta.

Uterus – The muscular organ that contains the products of conception – the baby, placenta, membranes, amniotic fluid, and umbilical cord. It contracts during labor to move the baby through the birth canal and is commonly referred to as the womb.

Vacuum Delivery – The use of a special instrument that is attached to the baby's head to help guide it out of the birth canal. Vagina – The lower part of the birth canal that is normally 5 to 6 inches long.

### List of Approved Over-the-counter Medicines

During your pregnancy, over the counter medicines approved by our physicians throughout your pregnancy and while nursing are:

Cough – Robitussin, Mucinex

Sinus Symptoms – Actifed, Sudafed, Benadryl, Tylenol Cold, Zyrtec, Claritin

Gas – Milk of Magnesia, Mylicon, Gas X

Nausea and Vomiting – Emetrol, Unisom (1/2 tablet 3 times daily), B6 (25mg 3 times daily)

Heartburn – Maalox, Gaviscon, Mylanta, Tums, Rolaids; May take OTC Prevacid AC or Tagament-HB

Fever or Minor Pains – Tylenol (regular or extra strength) (Acetaminophen)

Constipation – Fibercon, Metamucil, Milk of Magnesia, Miralax, Colace Stool Softener

Hemorrhoids – Preparation H, Anusol

Vaginal Yeast Infection – Monistat, Mycelex, Gynelotrimin available OTC

Diarrhea – Kaopectate, Imodium AD

## **RESOURCES**

WIC - http://www.wicprograms.org/ci/ar-jonesboro

### Pediatrician Information -

- Centers for Children 870.336.2175
- Children's Clinic 870.935.6012
- LeBonheur 800.870.5570

Immunization Schedule - http://www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html

**Pregnancy** – https://www.cdc.gov/pregnancy/

## **HOSPITAL DELIVERY**

### **Pre-registration Information**

It is helpful to pre-register prior to checking in at the hospital. The registration form is a one-page form that takes only a few minutes to fill out. You may obtain it from your doctor's office or on the St. Bernards Labor and Delivery floor at any time. Along with your pre-registration sheet, a copy of a photo identification card and insurance card are required. It is not mandatory that the pre-registration form be completed; however, providing the information in advance will speed up your admission process and allow more prompt and efficient care.

### Map of St. Bernards Medical Center

Check out our website at https://grco.de/cartogram.

### Packing for Your Stay

Things every new mom should have:

- tape it on the door.
- Change of clothes to wear home
- Comfy and high waist panties ("granny panties")
- lotion, sanitary pads, etc.
- List of current medications and dosage
- Nursing bra
- Nursing gown or something that unbuttons so you can slip it off your shoulder easily
- Pillow
- Robe to cover with when you have visitors
- Socks and slippers

Things every partner or caretaker should have:

- Car seat in the car (will need to bring it in the hospital)
- Camera-charged and ready
- Cell phone charger
- Notebook to keep track of baby's progress and any visitors/gifts
- Snacks and/or loose change for vending machines

Video recorder charged and ready. Recording is allowed before and after delivery.



• A little sign to hang on the door that says "mommy and baby are sleeping" —you can just print something off and

• Cosmetic bag – toothbrush, mouthwash, makeup, lip balm, shampoo, face soap, comb, hairdryer, deodorant,

### Things for the New Baby

Our facility has everything you could possibly need to care for your baby during your stay. However, some people choose to bring their own:

Socks

- Caps that match his/her gowns
- Outfit to wear home and blanket
- Long-sleeved gowns with mittens
- Real Labor vs. False Labor

False Labor (otherwise known as Braxton Hicks) contractions are your body's way of getting ready for your baby's entrance into the world. False Labor typically occurs in the third trimester but may be felt in the second. It is not a sign that labor has begun or is about to begin. You may want to rest and get a massage to ease the symptoms.

Below are signs and symptoms of False Labor:

- Does not happen at regular intervals, last longer as they go or feel stronger over time.
- Does not increase when you walk. If the contractions make you uncomfortable, try walking or changing position.
- May feel like mild menstrual cramps.
- May be uncomfortable but not painful.
- Tightening in the abdomen.

Real Labor can feel different for each woman and with each pregnancy. Below are signs it's time to head to the hospital:

- Contractions cause pain and pressure in your pelvis and in your back or lower abdomen. Pain also can be felt in your sides and thighs.
- Contractions every 5 minutes or more than 10 in one hour.
- Fluid leaking from your vagina.
- Pain comes and goes at regular intervals and becomes more frequent and intense.
- Vaginal bleeding.

### When to Come to the Hospital

Deciding when to come to the hospital can be difficult. Please consult your healthcare provider to receive instructions about how or when to notify him or her of your arrival. However, the following is a list of symptoms that may necessitate a prompt evaluation:

- Any watery leakage from the vagina, a sudden gush, or a continuous slow leak. Always note the time this happened and the color of the fluid.
- Bright red vaginal bleeding similar to a period or passing clots.
- Contractions every 3–5 minutes lasting 45–60 seconds for at least an hour.
- If you are less than 37 weeks, you would need to come in for treatment earlier. It's very important to come in for evaluation and make every attempt to stop your contractions early since the baby's lungs may not be fully developed.
- Decreased fetal movement or any change in your baby's normal activity pattern. (Please refer to section on Kick Counts.)
- Remember you may experience other symptoms not listed above.

If you have questions or concerns regarding your pregnancy or when you come to the hospital, please call your healthcare provider. St. Bernards also provides 24/7 coverage with a board-certified OB-GYN.

### Anesthesia

While in labor, you may choose to receive medications to help with pain management in addition to other relaxation techniques you may have learned. Most medications for pain are delivered through an intravenous (IV) or epidural catheter if you choose to get an epidural. For your safety and the safety of your baby, you will be connected to a fetal monitor if you are receiving IV pain medication or an epidural.

An epidural is another option for more effective pain relief while you are in labor. Upon your request and order from your obstetrician, an epidural will be administered by anesthesia personnel. Prior to receiving an epidural, there are a few things that must happen. You must have a consent form signed for an epidural. You must have an IV placed and fluids administered. Fluids are given prior to an epidural to decrease the risk of having a significant drop in blood pressure. You also will need lab work documented in your chart from your current stay. As long as your lab work is within an acceptable range, you should be able to receive an epidural. If for some reason you are unable to receive an epidural, we will discuss with you in detail the reason, as well as include you in a plan of care for other pain control options.

IV medications are designed to help ease the pain and help you manage contractions more effectively by making you more relaxed. There is no numbing effect with IV medication. To help us better understand your pain level, we use a numeric pain scale. Several times throughout your stay, we will ask you to rate your pain on a scale of 0 to 10. Zero is no pain, and 10 is the worst pain you can imagine. This scale lets us know how we can help best manage your pain and also helps us re-evaluate how pain medication and/or our interventions to reduce your pain have worked. Every patient is very important to us, and we are here to make this an enjoyable time for you and your family. We will try to make sure pain is not all you remember.

### **Nitrous Oxide**

St. Bernards Birthcare Center is the first in the region to offer the option of Nitrous Oxide (otherwise known as laughing gas) to laboring women. Nitrous oxide is commonly used to ease the pain of childbirth in countries like Great Britain and Australia, but has not been widely used in the U.S. until recently when the technology used to safely deliver the gas became federally approved. Nitrous Oxide consists of a mixture of nitrous oxide (N2O) and oxygen and is the same type that is commonly used in dentist offices. It is inhaled through an oxygen mask and is controlled by the patient to safely help ease the pain without inhibiting muscle movement. Some women use the gas instead of epidural analaesia, while others use it up until they are able to receive an epidural. The Nitronox system St. Bernards has purchased has been approved by the FDA and is used in several other states with great results. The gas is fast acting and quick to leave the patient's system, allowing them control while remaining safe for the baby. Nitrous oxide use does not affect breastfeeding or disrupt natural release of oxytocin and does not affect infant alertness after birth during initial bonding between mother and newborn, making it a safe analgesic option for women during childbirth. To learn more, call the St. Bernards Healthline at 870.207.7300 or visit stbernards.info.

### Induction

Induction of labor is defined as inducing the childbirth process artificially not before 39 weeks unless medical conditions warrant induction. Therefore, each patient's situation is reviewed on a case-by-case basis, and the decision to induce is then made between the patient and physician. Your physician will speak with you about the pros and cons of induction, as well as what medication is to be used during the induction process. Again, each patient is different, and different medications may be used. Your doctor will not consider inducing your labor before 39 weeks unless there is a medical indication. Your doctor and the nursing staff will gladly answer all of your questions and address your concerns. Below is a list of procedures and/or medications commonly used in the induction process:

- Amniotomy–Artificially "breaking the water bag."
- admission, and left in place for 12 hours.
- Cytotec-Cervical ripening agent that is inserted every 4 hours until dilated 3 centimeters.

• Cervidil-A vaginal insert or pill given by mouth used as a cervical ripening agent, placed by your nurse upon

- Pitocin-A synthetic form of oxytocin, which is the natural hormone you secrete during labor. Used to induce labor or strengthen labor contractions during childbirth and to control bleeding after childbirth.
- Stripping of Membranes-By running an examining finger around the inside of your cervix, your physician can separate the amniotic sac from where it's attached, which can release prostaglandins in an attempt to stimulate labor.
- Foley Bulb-A catheter inserted vaginally with a balloon inflated with water to help your cervix dilate.

### **C-Section**

The majority of cesarean sections, scheduled and unscheduled, are performed on the labor and delivery floor in one of our operating rooms. For a scheduled cesarean section, you will be asked to refrain from eating or drinking anything 8-12 hours before surgery (or whatever time your doctor specifies). You also will be informed to arrive to the labor and delivery floor a few hours before your scheduled cesarean section to allow time for the admission process. Upon your arrival to the floor, a nurse will complete your preparation for surgery.

A member of the anesthesia team will come speak with you before your surgery and answer any questions you may have. One support person will be allowed in the operating room if the physician and anesthesia team permit and you are awake for the surgery. Your support person will wait outside the operating room until your spinal block is in place and working effectively. He or she will then be guided into the operating room and allowed to sit at your side throughout your procedure.

Unscheduled or emergency cesarean sections may take on a more urgent nature prior to your surgery. Still, our goal is to provide emotional support and to answer all your questions. If there is a need to deliver your baby very quickly, it may be necessary for you to have general anesthesia (this is when you are put to sleep). This decision is made jointly by your obstetrician and anesthesiologist, and in that event, no one will be allowed to accompany you in the OR, but will be allowed to wait outside the room.

We do everything possible to keep you and your baby together after delivery. After delivery your baby may be cared for in the operating room while the physician is finishing your procedure, in your assigned room you will return to, or in the neonatal intensive care unit (NICU) depending on the well being of your baby. Either way, you will always be informed of the plan of care at all times.

### Vaginal Birth

Vaginal birth is the most common and safest way of giving birth. Sometimes it becomes necessary for your doctor to use forceps (instruments resembling large spoons) to cup your baby's head and help guide the baby through the birth canal or vacuum delivery (a plastic cup is applied to the baby's head by suction) where your doctor gently pulls the baby from the birth canal. These are only used in case of emergencies.

The Golden Hour: A special time for you and your baby to bond. We encourage this time immediately after your baby is born.

### Length of Stay in St. Bernards Medical Center

The average length of stay after an uncomplicated vaginal delivery is 24-48 hours, while the average length of stay for a cesarean section is 48 hours. However, these times could vary based on the mother's and baby's condition. Delivery happens on the 5th floor of St. Bernards Medical Center.

After delivery, most moms and babies are moved to the 4th floor, closer to the nursery.

### St. Bernards Level 3 NICU

NICU stands for Neonatal Intensive Care Unit. In the past, local families have had to travel hours away to receive care for high-risk pregnancies involving premature births or other complications, but not anymore. We are the proud provider of the region's only Level 3 Neonatal Intensive Care Unit, a 16-bed open intensive care facility developed in conjunction with UAMS and Arkansas Children's Hospital. The Level 3 NICU is located on 5 East of the Medical Center. Neonatologists and the NICU's multidisciplinary team have advanced training in the development disorders of newborns and include professionals in the following fields:

- Dietary
- Laboratory
- Nursing
- Pastoral Care
- Pharmacy
- Radiology
- Speech Therapy

With a combination of expertise and compassion, our caregivers develop strong relationships, teaching parents how to bond with their babies while they are in the NICU, as well as how to care for them when they go home.

This addition to the continuum of care at St. Bernards means that families in northeast Arkansas and southeast Missouri whose little blessings arrive early can receive the specialized care they need without being too far from home.

### Infant Security & Safety

Infant safety and security are of the utmost importance at St. Bernards.

- or family have to know the patient's first and last name.
- members who belong on the unit versus other areas of the hospital.

- Several cameras are located in the area for added safety as well as security personnel on site.

### Mom & Baby Care

It is the philosophy of St. Bernards Birthcare Center to provide family-centered other/baby care. From the time your infant is born, families are encouraged to actively participate in caring for their newborns. After delivery and the recovery process, you and your newborn may be moved to our postpartum care unit on the fourth floor. This transition of care will provide you with a quieter environment to bond with your infant and rest. The transition also allows mothers of infants who may remain in NICU for an extended period of time to remain close to their babies.

### **Birth Certificate**

Within 24 hours of your delivery, the appropriate staff will visit you and obtain information to complete your baby's birth certificate. They will let you know exactly what documents you need to send off for your baby's birth certificate and should be able to answer any questions you may have regarding the birth certificate.

- Occupational Therapy
  - Pediatrics

Education

- Physical Therapy
- Social Work

Non-Invasive Cardiology

• Respiratory Therapy

• The labor and postpartum units have secured access through locked doors. In order to gain entrance, visitors and/

• Birthcare Center staff members have name badges with "special marking" so it is very easy to distinguish staff

• Infant and maternal I.D. bands are applied to mom prior to delivery and are verified with infant at delivery.

• Your infant will also have a security tag placed at delivery. This tag helps insure your baby's safety at all times.

### Family & Friends Information

Our cafeteria is located on the east wing of the hospital on the ground floor and offers multiple selections of tasty and healthy food choices.

There is a salad bar that stays open all day with fresh fruits and vegetables, as well as the option for soups/chili, hamburgers, hot dogs, and yogurt. Starbucks is centrally located on the ground floor next to Admissions. Free guest WiFi is available. Select St. Bernards Guest WiFi and register with your email.

We're stepping up our service to offer Room Service. To place an order anytime 7:00 am-7:00 pm please call 870.207.DINE.

Our Gift Shop is located on the ground floor next to Admissions and offers a wide array of items, some of which are listed below:

- Baby gifts/regular gifts
- Balloons/door wreaths and ribbons
- Cards
- Clothing
- Fresh flowers

Phone Number: 870.207.4189

- Jewelry • Purses
- Snacks
- **Professional Newborn Photos**
- Toiletry items and/or infant care items you may have forgotten

A professional photographer is available to speak with you about photo opportunities available during your stay. As an added bonus, you can make appointment times that work well with older siblings and/or your spouse who may want to be included in the photo shoot with your little bundle of joy. Prices are reasonable, and you can build packages based on what you choose. Payment is due at the time of the photo session. Ask your nurse for more information.

### **Discharge Information**

Discharge for you will come from your obstetrician while the baby must be discharged by the pediatrician or one of our neonatologists.

### **OB-ED**

St. Bernards has a board-certified OB-GYN located on the 5th floor and available 24/7. These obstetricians coordinate care with your regular OB-GYN, will assess and manage patients at his/her request, will deliver your baby in his/her absence and are ready to assist should difficulties related to labor and delivery arise.

Having an OB hospitalist on-site allows for the immediate management of any issue or complication that may accompany the birth of a child. OB Hospitalists are trained in advanced cardiac life support and OB emergency care. They are prepared and committed to providing outstanding care for you and your child.



## **POSTPARTUM/AFTER DELIVERY Baby Blues**

Having a baby can be very exciting, but it can also be overwhelming. Feeling weepy, moody, exhausted, unable to sleep, anxious and nervous after your baby is born is normal. About 80 percent of new moms have baby blues. It is caused from rapidly changing hormones and physical changes such as milk coming in. The great news is these symptoms will go away on their own and it's not an illness. Ask for help from others when you need it and get as much rest as possible. Even little "cat naps" can help. If the symptoms persist more than 2–3 weeks after the birth of your baby, call your doctor and seek help.

### Warning Signs of Perinatal Mood and Anxiety Disorders

One in ten women may experience perinatal mood or anxiety disorders. The symptoms can occur any time during pregnancy through the baby's first year of life. Symptoms are like the baby blues, only more severe. It is not known what causes the reaction, but it is believed to be related to physical and emotional changes of pregnancy and birth. If you experience any of the feelings or thoughts below, please contact your physician.

- Changes in appetite
- Exhaustion
- Feeling guilty, worthless or hopeless
- Feeling like you will be a bad mother
- Irritability, anger, or nervousness
- Low energy
- Lack of interest in the baby

## **POSTPARTUM DEPRESSION**

About 20 percent of women experience an episode of depression, known as postpartum depression, after having a baby. Postpartum depression (PPD) is treatable, but many people do not know the facts. They wait too long to get help or never

seek treatment.

PPD is serious. Feeling of depression or sadness may cause a new mom to feel confused and alone. By learning to recognize and understand PPD, a woman can seek support from her family and get medical help. Husbands, partners, friends and family members can help in the process. Often, they recognize there is a problem even before the woman herself.

Postpartum depression affects one in every 8 to 10 women. It usually occurs within the first year after childbirth, miscarriage or stillbirth. PPD is not a character flaw or sign of personal weakness. It does not mean that there is anything wrong with your ability to be a mother. The symptoms of PPD range from mild blues to severe depression. The depression may be mild, moderate or severe.

- Lack of interest in family and friends
- Lack of interest in sex
- Not enjoying life as much as you used to
- Trouble concentrating
- Thoughts of harming your baby or yourself
- Trouble sleeping or sleeping too much
- Uncontrollable crying

### When should I see a doctor?

Most new mothers (60 to 80 percent) experience at least a brief feeling of the "baby blues." The baby blues include feelings of sadness, anxiety, loneliness or moodiness that usually go away within a couple of weeks.

If your symptoms last more than two weeks, you may benefit from medical and/or psychological attention and should seek help.

### What can I do to feel better?

### Here are some helpful tips for coping with PPD:

- Talk openly about your feelings with your spouse, family, friends and healthcare provider.
- Ask for help with baby care from friends and family.
- Eat a healthy, nutritious diet.
- Exercise for more energy. Walking, which is a mild exercise, can help.
- Join a postpartum depression support group, such as Postpartum Support International (PSI), Postpartum Education for Parents or National Association for Mothers.

There is no need to struggle alone. Many new mothers feel out of control, but with help they get back on track and feel good again.

### How do I know what treatment is best for me?

Many women find it helpful to join a support group where they can talk openly with other mothers who are going through the same thing. Others find relief with medication and psychotherapy. Depending on your needs, and the services available in your area, your physician may recommend a combination of treatments.

### **Does counseling work?**

The first goal of any treatment is to relieve current symptoms. Treatment should focus on current problems and develping healthy lifestyle changes. This is not the time to solve historical and longstanding issues, such as conflict in the family.

When you find a therapist that you like and trust, you have taken an important step toward recovery. Sometimes relief and comfort come from simply talking about your feelings and being reassured that other women have experienced what you are going through and that PPD is treatable.

### Contacts

**Postpartum Support International (PSI)** www.postpartum.net

### Arkansas Coordinator: Barbara Baldwin

4301 W. Markham #789 Little Rock, AR 72205 501.686.8408 baldwinbarbaraj@uams.edu

### **St. Bernards Counseling Center**

300 Carson Street Jonesboro, AR 72401 870.930.9090

Hotline Numbers National Suicide Prevention Lifeline:

800.273.TALK

National Drug and Alcohol Treatment Hotline: 800.662.HELP

National Child Abuse Hotline: 800.4.A.CHILD



## **IMMUNIZATION SCHEDULE**

As a new parent, the flood of information about how to care for your baby can be overwhelming, especially remembering when to get immunizations. The following schedule from the CDC explains which immunizations are recommended for your child and when they should receive them.

### Recommended immunization schedule for children and adolescents aged 18 years or younger, United States, 2018

- Consult relevant ACIP statements for detailed recommendations (www.cdc.gov/vaccines/hcp/acip-recs/index.html).
- When a vaccine is not administered at the recommended age, administer at a subsequent visit.
- Use combination vaccines instead of separate injections when appropriate.
- Report clinically significant adverse events to the Vaccine Adverse Event Reporting System (VAERS) online (www.vaers.hhs.gov) or by telephone (800.822.7967).
- Report suspected cases of reportable vaccine-preventable diseases to your state or local health department.
- For information about precautions and contraindications, see www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html.

### Approved by the:

Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/acip)

**American Academy of Pediatrics** (www.aap.org)

American Academy of Family Physicians (www.aafp.org)

American College of Obstetricians and Gynecologists (www.acog.org)

This schedule includes recommendations in effect as of January 1, 2018.



The table below shows vaccine acronyms and brand names for vaccines routinely recommended for children and adolescents. The use of trade names in this immunization schedule is for identification purposes only and does not imply endorsement by the ACIP or CDC.

Vaccine type	Abbreviation	Brand(s)
Diphtheria, tetanus and acellular pertussis vaccine	DTaP	Daptacel Infanrix
Diphtheria, tetanus vaccine	DT	No Trade Name
Haemophilus influenzae type B vaccine	Hib (PRP-T) Hib (PRP-OMP)	ActHIB Hiberix PedvaxHIB
Hepatitis A vaccine	НерА	Havrix Vaqta
Hepatitis B vaccine	НерВ	Engerix-B Recombivax HB
Human papillomavirus vaccine	HPV	Gardasil 9
Influenza vaccine (inactivated)	IIV	Multiple
Measles, mumps and rubella vaccine	MMR	M-M-R II
Meningococcal serogroups A, C, W, Y vaccine	MenACWY-D MenACWY-CRM	Menactra Menveo
Meningococcal serogroup B vaccine	MenB-4C MenB-FHbp	Bexsero Trumenba
Pneumococcal 13-valent conjugate vaccine	PCV13	Prevnar 13
Pneumococcal 23-valent polysaccharide vaccine	PPSV23	Pneumovax
Poliovirus vaccine (inactivated)	IPV	IPOL
Rotavirus vaccines	RV1 RV5	Rotarix RotaTeq
Tetanus, diphtheria and acellular pertussis vaccine	Tdap	Adacel Boostrix
Tetanus and diphtheria vaccine	Td	Tenivac No Trade Name
Varicella vaccine	VAR	Varivax
Combination Vaccines		
DTaP, hepatitis B and inactivated poliovirus vaccine	DTaP-HepB-IPV	Pediarix
DTaP, inactivated poliovirus and <i>Haemophilus influenzae</i> type B vaccine	DTaP-IPV/Hib	Pentacel
DTaP and inactivated poliovirus vaccine	DTaP-IPV	Kinrix Quadracel
Measles, mumps, rubella and varicella vaccines	MMRV	ProQuad

## FIGURE 1. Recommended Immunization Schedule for Children and Adolescents Aged 18 Years or Younger, United States, 2018 (FOR THOSE WHO FALL BEHIND OR START LATE, SEE THE CATCH-UP SCHEDULE [FIGURE 2])

These recommendations must be read with the footnotes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars in Figure 1. To determine minimum intervals between doses, see the catch-up schedule (Figure 2). School entry and adolescent vaccine age groups are shaded in gray.

Vaccine	Birth	1 mo	2 mos	4 mos	6 mos	9 m
Hepatitis B <sup>1</sup> (HepB)	1ª dose	<b>≺</b> 2 <sup>nd</sup> (	dose>		<b></b>	
Rotavirus <sup>2</sup> (RV) RV1 (2-dose series); RV5 (3-dose series)			1ª dose	2 <sup>nd</sup> dose	See footnote 2	
Diphtheria, tetanus and acellular pertussis <sup>3</sup> (DTaP: <7 yrs)			1ª dose	2 <sup>nd</sup> dose	3 <sup>rd</sup> dose	
Haemophilus influenzaetype b <sup>.4</sup> (Hib)			1ª dose	2 <sup>nd</sup> dose	See footnote 4	
Pneumococcal conjugate <sup>5</sup> (PCV13)			1ª dose	2 <sup>nd</sup> dose	3 <sup>rd</sup> dose	
Inactivated poliovirus <sup>6</sup> (IPV: <18 yrs)			1ª dose	2 <sup>nd</sup> dose	<b>«</b>	
Influenza <sup>7</sup> (IIV)						
Measles, mumps, rubella <sup>8</sup> (MMR)					See foo	otnote 8
Varicella <sup>9</sup> (VAR)						
Hepatitis A <sup>10</sup> (HepA)						
Meningococcal <sup>11</sup> (MenACWY-D ≥9 mos; MenACWY-CRM ≥2 mos)						See
Tetanus, diphtheria and acellular pertussis <sup>13</sup> (Tdap:≥7 yrs)						
Human papillomavirus <sup>14</sup> (HPV)						
Meningococcal B <sup>12</sup>						
Pneumococcal polysaccharide <sup>5</sup> (PPSV23)						
Range of recommended ages for all children	Range of for catch-u	recommend p immuniza	ed ages ition		Range of for certai	recom n high-r

NOTE: The above recommendations must be read along with the footnotes of this schedule.



## FIGURE 2. Catch-up immunization schedule for persons aged 4 months-18 years who start late or who are more than one month behind, United States, 2018

The figure below provides catch-up schedules and minimum intervals between doses for children whose vaccinations have been delayed. A vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Use the section appropriate for the child's age. Always use this table in conjunction with Figure 1 and the footnotes that follow.

			Children age 4 months through 6 years		
	Minimum		Minimum Interval Between Doses		
Vaccine	Age for Dose 1	Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Dose 4	Dose 4 to Dose 5
Hepatitis B1	Birth	4 weeks	8 weeks and at least 16 weeks after first dose Minimum age for the final dose is 24 weeks.		
Rotavirus <sup>2</sup>	6 weeks Maximum age for first dose is 14 weeks, 6 days	4 weeks	4 weeks <sup>2</sup> Maximum age for final dose is 8 months, 0 days.		
Diphtheria, tetanus and acellular pertussis <sup>3</sup>	6 weeks	4 weeks	4 weeks	6 months	6 months <sup>3</sup>
Haemophilus influenzae type b <sup>4</sup>	ó weeks	4 weeks if first dose was administered before the 1 <sup>6</sup> birthday. 8 weeks (as final dose) if first dose was administered at age 12 through 14 months. No further doses needed if first dose was administered at age 15 months or older.	<ul> <li>4 weeks<sup>4</sup></li> <li>4 weeks<sup>4</sup></li> <li>4 current age is younger than 12 months and first dose was administered at younger than age 7 months and at least 1 previous dose was PRPT (ActHib, Pentacel, Hiberix) or unknown.</li> <li>8 weeks and age 12 through 59 months (as final dose)<sup>4</sup></li> <li>ii current age is younger than 12 months and first dose was administered at age 7 through 11 months; OR</li> <li>ii current age is 12 through 59 months and first dose was administered before the 1<sup>st</sup> birthday and second dose administered at younger than 15 months;</li> <li>iii fourth doses were PRP-ONP (PedvaxHIB; Comwax) and were administered before the 1<sup>st</sup> birthday.</li> <li>No further doses needed if previous dose was administered at age 5 months or older.</li> </ul>	8 weeks (as final dose) This dose only necessary for children age 12 through 59 months who received 3 doses before the 1 <sup>er</sup> birthday.	
Pneumococcal conjugate <sup>3</sup>	6 weeks	4 weeks if first dose administered before the 1 <sup>e</sup> birthday. 8 weeks (as final dose for healthy children) if first dose was administered at the 1 <sup>e</sup> birthday or diret. No further doses needed for healthy children if first dose was administered at age 24 months or older.	4 weeks if current age is younger than 12 months and previous dase given at <7 months old.	8 weeks (as final dose) This dose only necessary for children aged 12 through 59 months who received 3 doses before age 12 months or for children at high risk who received 3 doses at any age.	
Inactivated poliovirus <sup>6</sup>	6 weeks	4 weeks <sup>6</sup>	4 weeks <sup>6</sup> if current age is < 4 years 6 months (as final dose) if current age is 4 years or older	6 months <sup>6</sup> (minimum age 4 years forfinal dose).	
Measles, mumps, rubella <sup>8</sup>	12 months	4 weeks		,	
Varicella®	12 months	3 months			
Hepatitis A <sup>10</sup>	12 months	6 months			
Meningococcal <sup>11</sup> (MenACWY-D≥9 mos; MenACWY-CRM≥2 mos)	6 weeks	8 weeks <sup>11</sup>	See footnote 11	See footnote 11	
		·	Children and adolescents age 7 through 18 years		
Meningococcal <sup>11</sup> (MenACWY-D≥9 mos; MenACWY-CRM≥2 mos)	Not Applicable (N/A)	8 weeks <sup>11</sup>			
Tetanus, diphtheria; tetanus, diphtheria and acellular pertussis <sup>13</sup>	7 years <sup>13</sup>	4 weeks	<ul> <li>4 weeks if first dose of DTaP/DT was administered before the 1<sup>a</sup> birthday.</li> <li>6 months (as final dose) if first dose of DTaP/DT or Tdap/Td was administered at or after the 1<sup>a</sup> birthday.</li> </ul>	6 months if first dose of DTaP/DT was administered before the 1 <sup>st</sup> birthday.	
Human papillomavirus <sup>14</sup>	9 years		Routine dosing intervals are recommended. <sup>14</sup>		
Hepatitis A <sup>10</sup>	N/A	6 months			
Hepatitis B <sup>1</sup>	N/A	4 weeks	8 weeks and at least 16 weeks after first dose.		
Inactivated poliovirus <sup>6</sup>	N/A	4 weeks	6 months <sup>6</sup> A fourth dose is not necessary if the third dose was administered at age 4 years or older and at least 6 months after the previous dose.	A fourth dose of IPV is indicated if all previous doses were administered at <4 years or if the third dose was administered <6 months after the second dose.	
Measles, mumps, rubella <sup>8</sup>	N/A	4 weeks			
Varicella <sup>o</sup>	N/A	3 months if younger than age 13 years. 4 weeks if age 13 years or older.			
1			I Contraction of the second seco		1

NOTE: The above recommendations must be read along with the footnotes of this schedule.

## FIGURE 3. Vaccines that might be indicated for children and adolescents aged 18 years or younger based on medical indications

			HIV infection CD
VACCINE V INDICATION >	Pregnancy	Immunocompromised status (excluding HIV infection)	<15% or total CD4 cell count of <200/mm <sup>3</sup>
Hepatitis B <sup>1</sup>		1	1
Rotavirus <sup>2</sup>		SCID*	i i
Diphtheria, tetanus and acellular pertussis <sup>3</sup> (DTaP)			1
Haemophilus influenzae type b <sup>4</sup>			
Pneumococcal conjugate <sup>5</sup>			
Inactivated poliovirus <sup>6</sup>			
Influenza <sup>7</sup>			
Measles, mumps, rubella®			
Varicellaº			
Hepatitis A <sup>10</sup>			
Meningococcal ACWY <sup>11</sup>			
Tetanus, diphtheria and acellular pertussis <sup>13</sup> (Tdap)			
Human papillomavirus <sup>14</sup>			
Meningococcal B <sup>12</sup>			Ii
Pneumococcal polysaccharide <sup>5</sup>			
Vaccination according to the routine schedule recommended	Recommende an additional the vaccine w	d for persons with risk factor for which rould be indicated	Vaccina and add necessa

### \*Severe Combined Immunodeficiency

<sup>†</sup> For additional information regarding HIV laboratory parameters and use of live vaccines, see the General Best Practice Guidelines for Immunization "Altered Immunocompetence" at

www.cdc.gov/vaccines/hcp/acip-recs/general-recs/immunocompetence.html and Table 4-1 (footnote D) at: www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html.

NOTE: The above recommendations must be read along with the footnotes of this schedule.



## **FOOTNOTES**

Recommended Immunization Schedule for Children and Adolescents Aged 18 Years or Younger, UNITED STATES, 2018

For further guidance on the use of the vaccines mentioned below, see www.cdc.gov/vaccines/hcp/acip-recs/index.html. For vaccine recommendations for persons 19 years of age and older, see the Adult Immunization Schedule.

### Additional information

- For information on contraindications and precautions for the use of a vaccine, consult the General Best Practice Guidelines for Immunization and relevant ACIP statements at www.cdc.gov/vaccines/hcp/acip-recs/index.html.
- For calculating intervals between doses, 4 weeks = 28 days. Intervals of >4 months are determined by calendar months.
- Within a number range (e.g., 12–18), a dash (-) should be read as "through."
- Vaccine doses administered ≤4 days before the minimum age or interval are considered valid. Doses of any vaccine administered  $\geq 5$  days earlier than the minimum interval or minimum age should not be counted as valid and should be repeated as age-appropriate. The repeat dose should be spaced after the invalid dose by the recommended minimum interval. For further details, see Table 3-1, Recommended and minimum ages and intervals between vaccine doses, in General Best Practice Guidelines for Immunization at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/timing.html.
- Information on travel vaccine requirements and recommendations is available at wwwnc.cdc.gov/travel/.
- For vaccination of persons with immunodeficiencies, see Table 8-1, Vaccination of persons with primary and secondary immunodeficiencies, in General Best Practice Guidelines for Immunization at www.cdc.gov/vaccines/ hcp/acip-recs/general-recs/immunocompetence.html and Immunization in Special Clinical Circumstances (In Kimberlin DW, Brady MT, Jackson MA, Long SS, eds. Red Book: 2015 report of the Committee on Infectious Diseases. 30th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2015:68-107).
- The National Vaccine Injury Compensation Program (VICP) is a no-fault alternative to the traditional legal system for resolving vaccine injury claims. All routine child and adolescent vaccines are covered by VICP except for pneumococcal polysaccharide vaccine (PPSV23). For more information, see www.hrsa.gov/vaccinecompensation/index.html.

### 1. Hepatitis B (HepB) vaccine (minimum age: birth)

### Birth Dose (Monovalent HepB vaccine only):

- <2,000 grams administer 1 dose at chronological age 1 month or hospital discharge.
- Mother is HBsAg-Positive:
- weight.

### • Mother's HBsAg status is unknown:

- Give HepB vaccine within 12 hours of birth, regardless of birth weight.
- infants >2,000 grams as soon as possible, but no later than 7 days of age.

### **Routine Series:**

- given before age 6 weeks.)

- Minimum age for the final (3rd or 4th) dose: 24 weeks.
- (When 4 doses are given, substitute "Dose 4" for "Dose 3" in these calculations.)
- Catch-up vaccination:
- Unvaccinated persons should complete a 3-dose series at 0, 1-2 and 6 months.
- (adult formulation Recombivax HB only).
- For other catch-up guidance, see Figure 2.

### 2. Rotavirus vaccines. (minimum age: 6 weeks)

### **Routine vaccination:**

Rotarix: 2-dose series at 2 and 4 months.

RotaTeq: 3-dose series at 2, 4 and 6 months.

If any dose in the series is either RotaTeq or unknown, default to 3-dose series.

### **Catch-up vaccination:**

- Do not start the series on or after age 15 weeks, 0 days.
- The maximum age for the final dose is 8 months, 0 days.
- For other catch-up guidance, see Figure 2.

• Mother is HBsAg-Negative: 1 dose within 24 hours of birth for medically stable infants >2,000 grams. Infants

• Give HepB vaccine and 0.5 mL of HBIG (at separate anatomic sites) within 12 hours of birth, regardless of birth

• Test for HBsAg and anti-HBs at age 9–12 months. If HepB series is delayed, test 1–2 months after final dose.

• For infants <2,000 grams, give 0.5 mL of HBIG in addition to HepB vaccine within 12 hours of birth • Determine mother's HBsAg status as soon as possible. If mother is HBsAg-positive, give 0.5 mL of HBIG to

• A complete series is three doses at 0, 1–2, and 6–18 months. (Monovalent HepB vaccine should be used for doses

• Infants who did not receive a birth dose should begin the series as soon as feasible (see Figure 2). • Administration of 4 doses is permitted when a combination vaccine containing HepB is used after the birth dose.

• Minimum Intervals: Dose 1 to Dose 2: 4 weeks / Dose 2 to Dose 3: 8 weeks / Dose 1 to Dose 3: 16 weeks.

• Adolescents 11-15 years of age may use an alternative 2-dose schedule, with at least 4 months between doses

### 3. Diphtheria, tetanus and acellular pertussis (DTaP) vaccine (minimum age: 6 weeks [4 years for **Kinrix or Quadracel**)

### **Routine vaccination:**

- 5-dose series at 2, 4, 6 and 15–18 months and 4–6 years.
- Prospectively: A 4th dose may be given as early as age 12 months if at least 6 months have elapsed since the 3rd dose.
- Retrospectively: A 4th dose that was inadvertently given as early as 12 months may be counted if at least 4 months have elapsed since the 3rd dose.

### **Catch-up vaccination:**

- The 5th dose is not necessary if the 4th dose was administered at 4 years or older.
- For other catch-up guidance, see Figure 2.

### 4. Haemophilus influenzae type b (Hib) vaccine (minimum age: 6 weeks)

### **Routine vaccination:**

- ActHIB, Hiberix or Pentacel: 4-dose series at 2, 4, 6 and 12-15 months.
- PedvaxHIB: 3-dose series at 2, 4 and 12-15 months.

### **Catch-up vaccination:**

- 1st dose at 7-11 months: Give 2nd dose at least 4 weeks later and 3rd (final) dose at 12-15 months or 8 weeks after 2nd dose (whichever is later).
- 1st dose at 12-14 months: Give 2nd (final) dose at least 8 weeks after 1st dose.
- 1st dose before 12 months and 2nd dose before 15 months: Give 3rd (final) dose 8 weeks after 2nd dose.
- 2 doses of PedvaxHIB before 12 months: Give 3rd (final) dose at 12-59 months and at least 8 weeks after 2nd dose.
- Unvaccinated at 15-59 months: 1 dose.
- For other catch-up guidance, see Figure 2.

### **Special Situations:**

· Chemotherapy or radiation treatment

### 12-59 months

- Unvaccinated or only 1 dose before 12 months: Give 2 doses, 8 weeks apart
- 2 or more doses before 12 months: Give 1 dose, at least 8 weeks after previous dose.

Doses given within 14 days of starting therapy or during therapy should be repeated at least 3 months after therapy completion.

- Hematopoietic stem cell transplant (HSCT)
- 3-dose series with doses 4 weeks apart starting 6 to 12 months after successful transplant (regardless of Hib vaccination history).
- Anatomic or functional asplenia (including sickle cell disease)

### 12-59 months

- Unvaccinated or only 1 dose before 12 months: Give 2 doses, 8 weeks apart.
- 2 or more doses before 12 months: Give 1 dose, at least 8 weeks after previous dose.

### Unimmunized\* persons 5 years or older

• Give 1 dose

### • Elective splenectomy

Unimmunized\* persons 15 months or older

- Give 1 dose (preferably at least 14 days before procedure).
- HIV infection

### 12-59 months

- Unvaccinated or only 1 dose before 12 months: Give 2 doses 8 weeks apart.

Unimmunized\* persons 5-18 years

- Give 1 dose
- Immunoglobulin deficiency, early component complement deficiency 12-59 months
  - Unvaccinated or only 1 dose before 12 months: Give 2 doses, 8 weeks apart.
  - 2 or more doses before 12 months: Give 1 dose, at least 8 weeks after previous dose.

### 5. Pneumococcal vaccines (minimum age: 6 weeks [PCV13], 2 years [PPSV23])

### **Routine vaccination with PCV13:**

4-dose series at 2, 4, 6, and 12–15 months.

### Catch-up vaccination with PCV13:

- 1 dose for healthy children aged 24-59 months with any incomplete\* PCV13 schedule
- For other catch-up guidance, see Figure 2.

### Special situations: High-risk conditions: Administer PCV13 doses before PPSV23 if possible. Chronic heart disease (particularly cyanotic congenital heart disease and cardiac failure); chronic lung disease (including asthma treated with high-dose, oral, corticosteroids); diabetes mellitus:

### Age 2-5 years:

- Any incomplete\* schedules with:
- 3 PCV13 doses: 1 dose of PCV13 (at least 8 weeks after any prior PCV13 dose)
- No history of PPSV23: 1 dose of PPSV23 (at least 8 weeks after any prior PCV13 dose).

### Age 6-18 years:

• No history of PPSV23: 1 dose of PPSV23 (at least 8 weeks after any prior PCV13 dose).

### Cerebrospinal fluid leak; cochlear implant: Age 2-5 years:

- Any incomplete\* schedules with:
- 3 PCV13 doses: 1 dose of PCV13 (at least 8 weeks after any prior PCV13 dose)

• 2 or more doses before 12 months: Give 1 dose, at least 8 weeks after previous dose.

\*Unimmunized = Less than routine series (through 14 months) OR no doses (14 months or older)

• <3 PCV13 doses: 2 doses of PCV13, 8 weeks after the most recent dose and given 8 weeks apart.

• <3 PCV13 doses: 2 doses of PCV13, 8 weeks after the most recent dose and given 8 weeks apart.

No history of PPSV23: 1 dose of PPSV23 (at least 8 weeks after any prior PCV13 dose)

### Age 6-18 years:

- No history of either PCV13 or PPSV23: 1 dose of PCV13, 1 dose of PPSV23 at least 8 weeks later.
- Any PCV13 but no PPSV23: 1 dose of PPSV23 at least 8 weeks after the most recent dose of PCV13
- PPSV23 but no PCV13: 1 dose of PCV13 at least 8 weeks after the most recent dose of PPSV23.

Sickle cell disease and other hemoglobinopathies; anatomic or functional asplenia; congenital or acquired immunodeficiency; HIV infection; chronic renal failure; nephrotic syndrome; malignant neoplasms, leukemias, lymphomas, Hodgkin disease and other diseases associated with treatment with immunosuppressive drugs or radiation therapy; solid organ transplantation; multiple myeloma:

### Age 2-5 years:

- Any incomplete\* schedules with:
- 3 PCV13 doses: 1 dose of PCV13 (at least 8 weeks after any prior PCV13 dose)
- <3 PCV13 doses: 2 doses of PCV13, 8 weeks after the most recent dose and given 8 weeks apart.
- No history of PPSV23: 1 dose of PPSV23 (at least 8 weeks after any prior PCV13 dose) and a 2nd dose of PPSV23 5 years later.

### Age 6-18 years:

- No history of either PCV13 or PPSV23: 1 dose of PCV13, 2 doses of PPSV23 (1st dose of PPSV23 administered 8 weeks after PCV13 and 2nd dose of PPSV23 administered at least 5 years after the 1st dose of PPSV23).
- Any PCV13 but no PPSV23: 2 doses of PPSV23 (1st dose of PPSV23 to be given 8 weeks after the most recent dose of PCV13 and 2nd dose of PPSV23 administered at least 5 years after the 1st dose of PPSV23).
- PPSV23 but no PCV13: 1 dose of PCV13 at least 8 weeks after the most recent PPSV23 dose and a 2nd dose of PPSV23 to be given 5 years after the 1st dose of PPSV23 and at least 8 weeks after a dose of PCV13.

### Chronic liver disease, alcoholism:

### Age 6-18 years:

• No history of PPSV23: 1 dose of PPSV23 (at least 8 weeks after any prior PCV13 dose).

\*Incomplete schedules are any schedules where PCV13 doses have not been completed according to ACIP recommended catch-up schedules. The total number and timing of doses for complete PCV13 series are dictated by the age at first vaccination. See Tables 8 and 9 in the ACIP pneumococcal vaccine recommendations (www.cdc.gov/ mmwr/pdf/rr/rr5911.pdf) for complete schedule details.

### 6. Inactivated poliovirus vaccine (IPV) (minimum age: 6 weeks)

### **Routine vaccination:**

• 4-dose series at ages 2, 4, 6-18 months and 4-6 years. Administer the final dose on or after the 4th birthday and at least 6 months after the previous dose.

### **Catch-up vaccination:**

- outbreak.
- after the previous dose.
- previous dose.
- IPV is not routinely recommended for U.S. residents 18 years and older.

- See www.cdc.gov/mmwr/volumes/66/wr/mm6601a6.htm?s\_cid=mm6601a6\_w.
- For other catch-up guidance, see Figure 2.

### 7. Influenza vaccines (minimum age: 6 months)

### **Routine vaccination:**

- Administer an age-appropriate formulation and dose of influenza vaccine annually.
  - should receive 2 doses separated by at least 4 weeks.
  - Persons 9 years and older 1 dose
- Live attenuated influenza vaccine (LAIV) not recommended for the 2017-18 season.
- 2017;66(2):1-20: www.cdc.gov/mmwr/volumes/66/rr/pdfs/rr6602.pdf).
- (For the 2018–19 season, see the 2018–19 ACIP influenza vaccine recommendations.)

## 8. Measles, mumps and rubella (MMR) vaccine (minimum age: 12 months for routine vaccination)

### **Routine vaccination:**

- 2-dose series at 12–15 months and 4–6 years.
- The 2nd dose may be given as early as 4 weeks after the 1st dose

### Catch-up vaccination:

• Unvaccinated children and adolescents: 2 doses at least 4 weeks apart.

### International travel:

- in high-risk areas) and 2nd dose as early as 4 weeks later.
- Unvaccinated children 12 months and older: 2 doses at least 4 weeks apart before departure.

• In the first 6 months of life, use minimum ages and intervals only for travel to a polio-endemic region or during an

• If 4 or more doses were given before the 4th birthday, give 1 more dose at age 4-6 years and at least 6 months

• A 4th dose is not necessary if the 3rd dose was given on or after the 4th birthday and at least 6 months after the

Series Containing Oral Polio Vaccine (OPV), either mixed OPV-IPV or OPV-only series:

• Total number of doses needed to complete the series is the same as that recommended for the U.S. IPV schedule.

• Only trivalent OPV (tOPV) counts toward the U.S. vaccination requirements. For guidance to assess doses documented as "OPV" see www.cdc.gov/mmwr/volumes/66/wr/mm6606a7.htm?s\_cid=mm6606a7\_w.

• Children 6 months - 8 years who did not receive at least 2 doses of influenza vaccine before July 1, 2017

• For additional guidance, see the 2017-18 ACIP influenza vaccine recommendations (MMWR August 25,

• Infants 6-11 months: 1 dose before departure. Revaccinate with 2 doses at 12-15 months (12 months for children

### **Mumps outbreak:**

• Persons  $\geq 12$  months who previously received  $\leq 2$  doses of mumps-containing vaccine and are identified by public health authorities to be at increased risk during a mumps outbreak should receive a dose of mumps-virus containing vaccine.

### 9. Varicella (VAR) vaccine (minimum age: 12 months)

### **Routine vaccination:**

- 2-dose series: 12–15 months and 4–6 years.
- The 2nd dose may be given as early as 3 months after the 1st dose (a dose given after a 4-week interval may be counted).

### **Catch-up vaccination:**

- Ensure persons 7-18 years without evidence of immunity (see MMWR 2007;56[No. RR-4], at www.cdc.gov/ mmwr/pdf/rr/rr5604.pdf) have
- 2 doses of varicella vaccine:
- Ages 7-12: routine interval 3 months (minimum interval: 4 weeks).
- Ages 13 and older: minimum interval 4 weeks.

### 10. Hepatitis A (HepA) vaccine (minimum age: 12 months)

### **Routine vaccination:**

• 2 doses, separated by 6-18 months, between the 1st and 2nd birthdays. (A series begun before the 2nd birthday should be completed even if the child turns 2 before the second dose is given.)

### Catch-up vaccination:

• Anyone 2 years of age or older may receive HepA vaccine if desired. Minimum interval between doses is 6 months.

### **Special populations:**

Previously unvaccinated persons who should be vaccinated:

- Persons traveling to or working in countries with high or intermediate endemicity
- Men who have sex with men
- Users of injection and non-injection drugs
- Persons who work with hepatitis A virus in a research laboratory or with non-human primates
- Persons with clotting-factor disorders
- Persons with chronic liver disease
- Persons who anticipate close, personal contact (e.g., household or regular babysitting) with an international adoptee during the first 60 days after arrival in the United States from a country with high or intermediate endemicity (administer the 1st dose as soon as the adoption is planned-ideally at least 2 weeks before the adoptee's arrival).

### 11. Serogroup A, C, W, Y meningococcal vaccines

### **Routine:**

• 2-dose series: 11-12 years and 16 years.

### Catch-Up:

- Age 16-18 years: 1 dose.

### **Special populations and situations:**

Anatomic or functional asplenia, sickle cell disease, HIV infection, persistent complement component deficiency (including eculizumab use):

### Menveo

- 1st dose at 8 weeks: 4-dose series at 2, 4, 6 and 12 months.
- 1st dose at 24 months or older: 2 doses at least 8 weeks apart.
- Menactra
  - Persistent complement component deficiency:
  - 9-23 months: 2 doses at least 12 weeks apart
  - 24 months or older: 2 doses at least 8 weeks apart
  - Anatomic or functional asplenia, sickle cell disease, or HIV infection:
  - 24 months or older: 2 doses at least 8 weeks apart.
  - Menactra must be administered at least 4 weeks after completion of PCV13 series.

## outbreak attributable to a vaccine serogroup:

- Children <24 months of age:
  - Menveo (2-23 months):
  - 1st dose at 8 weeks: 4-dose series at 2, 4, 6 and 12 months.
  - birthday).
  - Menactra (9-23 months):
  - weeks after the 1st dose in travelers).
- Children 2 years or older: 1 dose of Menveo or Menactra.

Note: Menactra should be given either before or at the same time as DTaP. For MenACWY booster dose recommendations for groups listed under "Special populations and situations" above, and additional meningococcal vaccination information, see meningococcal MMWR publications at: www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/mening.html.

• Age 13-15 years: 1 dose now and booster at age 16-18 years. Minimum interval 8 weeks.

• 1st dose at 7-23 months: 2 doses (2nd dose at least 12 weeks after the 1st dose and after the 1st birthday).

Children who travel to or live in countries where meningococcal disease is hyperendemic or epidemic, including countries in the African meningitis belt or during the Hajj, or exposure to an

-1st dose at 7-23 months: 2 doses (2nd dose at least 12 weeks after the 1st dose and after the 1st

-2 doses (2nd dose at least 12 weeks after the 1st dose. 2nd dose may be administered as early as 8

### 12. Serogroup B meningococcal vaccines (minimum age: 10 years [Bexsero, Trumenba])

### Clinical discretion: Adolescents not at increased risk for meningococcal B infection who want MenB vaccine.

MenB vaccines may be given at clinical discretion to adolescents 16–23 years (preferred age 16–18 years) who are not at increased risk.

- Bexsero: 2 doses at least 1 month apart.
- Trumenba: 2 doses at least 6 months apart. If the 2nd dose is given earlier than 6 months, give a 3rd dose at least 4 months after the 2nd.

Special populations and situations: Anatomic or functional asplenia, sickle cell disease, persistent complement component deficiency (including eculizumab use), serogroup B meningococcal disease outbreak

- Bexsero: 2-dose series at least 1 month apart.
- Trumenba: 3-dose series at 0, 1-2 and 6 months.

Note: Bexsero and Trumenba are not interchangeable.

For additional meningococcal vaccination information, see meningococcal MMWR publications at: www.cdc.gov/ vaccines/hcp/acip-recs/vacc-specific/mening.html.

13. Tetanus, diphtheria and acellular pertussis (Tdap) vaccine (minimum age: 11 years for routine vaccinations, 7 years for catch-up vaccination)

### **Routine vaccination:**

- Adolescents 11–12 years of age: 1 dose.
- Pregnant adolescents: 1 dose during each pregnancy (preferably during the early part of gestational weeks 27-36).
- Tdap may be administered regardless of the interval since the last tetanus- and diphtheria-toxoid-containing vaccine.

### **Catch-up vaccination:**

- Adolescents 13-18 who have not received Tdap: 1 dose, followed by a Td booster every 10 years.
- Persons aged 7-18 years not fully immunized with DTaP: 1 dose of Tdap as part of the catch-up series (preferably the first dose). If additional doses are needed, use Td.
- Children 7–10 years who receive Tdap inadvertently or as part of the catch-up series may receive the routine Tdap dose at 11–12 years.
- DTaP inadvertently given after the 7th birthday:
  - Child 7-10: DTaP may count as part of catch-up series. Routine Tdap dose at 11-12 may be given.
  - Adolescent 11-18: Count dose of DTaP as the adolescent Tdap booster.
- For other catch-up guidance, see Figure 2.

### 14. Human papillomavirus (HPV) vaccine (minimum age: 9 years)

### **Routine and catch-up vaccination:**

- adequately vaccinated. Number of doses dependent on age at initial vaccination:

### **Special situations:**

- History of sexual abuse or assault: Begin series at age 9 years.
- after pregnancy. Pregnancy testing not needed before vaccination.
- \*See MMWR, December 16, 2016;65(49):1405-1408, at www.cdc.gov/mmwr/volumes/65/wr/pdfs/mm6549a5.pdf.

• Routine vaccination for all adolescents at 11–12 years (can start at age 9) and through age 18 if not previously

• Age 9-14 years at initiation: 2-dose series at 0 and 6-12 months. Minimum interval: 5 months (repeat a dose given too soon at least 12 weeks after the invalid dose and at least 5 months after the 1st dose).

• Age 15 years or older at initiation: 3-dose series at 0, 1–2 months and 6 months. Minimum intervals: 4 weeks between 1st and 2nd dose; 12 weeks between 2nd and 3rd dose; 5 months between 1st and 3rd dose (repeat dose(s) given too soon at or after the minimum interval since the most recent dose).

Persons who have completed a valid series with any HPV vaccine do not need any additional doses.

• Immunocompromised\* (including HIV) aged 9-26 years: 3-dose series at 0, 1-2 months and 6 months.

• Pregnancy: Vaccination not recommended, but there is no evidence the vaccine is harmful. No intervention is needed for women who inadvertently received a dose of HPV vaccine while pregnant. Delay remaining doses until

## **TDAP (TETANUS, DIPHTHERIA & PERTUSSIS) VACCINE**

### Why get vaccinated?

Tetanus, diphtheria and pertussis are very serious diseases. The Tdap vaccine can protect us from these diseases. And, the Tdap vaccine given to pregnant women can protect newborn babies against pertussis.

TETANUS (Lockjaw) is rare in the United States today. It causes painful muscle tightening and stiffness, usually all over the body.

• It can lead to tightening of muscles in the head and neck so you can't open your mouth, swallow or sometimes even breathe. Tetanus kills about one out of 10 people who are infected even after receiving the best medical care.

DIPHTHERIA is also rare in the United States today. It can cause a thick coating to form in the back of the throat.

• It can lead to breathing problems, heart failure, paralysis and death.

PERTUSSIS (Whooping Cough) causes severe coughing spells, which can cause difficulty breathing, vomiting and disturbed sleep.

• It can also lead to weight loss, incontinence and rib fractures. Up to two in 100 adolescents and five in 100 adults with pertussis are hospitalized or have complications, which could include pneumonia or death.

These diseases are caused by bacteria. Diphtheria and pertussis are spread from person to person through secretions from coughing or sneezing. Tetanus enters the body through cuts, scratches or wounds.

Before vaccines, as many as 200,000 cases of diphtheria, 200,000 cases of pertussis and hundreds of cases of tetanus were reported in the United States each year. Since vaccination began, reports of cases for tetanus and diphtheria have dropped by about 99 percent and for pertussis by about 80 percent.

### **Tdap Vaccine**

The Tdap vaccine can protect adolescents and adults from tetanus, diphtheria and pertussis. One dose of Tdap is routinely given at age 11 or 12. People who did not get Tdap at that age should get it as soon as possible.

Tdap is especially important for healthcare professionals and anyone having close contact with a baby younger than 12 months.

Pregnant women should get a dose of Tdap during every pregnancy, to protect the newborn from pertussis. Infants are most at risk for severe, life-threatening complications from pertussis.

Another vaccine, called Td, protects against tetanus and diphtheria, but not pertussis. A Td booster should be given every 10 years. Tdap may be given as one of these boosters if you have never gotten Tdap before. Tdap may also be given after a severe cut or burn to prevent tetanus infection.

Your doctor or the person giving you the vaccine can give you more information.

Tdap may safely be given at the same time as other vaccines.

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

pertussis containing vaccine or has a severe allergy allergies.

Some People Should Not Get This Vaccine

- get Td.
- Talk to your doctor if you:
- have seizures or another nervous system problem
- had severe pain or swelling after any vaccine containing diphtheria, tetanus or pertussis
- ever had a condition called Guillain-Barré Syndrome (GBS)
- aren't feeling well on the day the shot is scheduled

### **Risks of a Vaccine Reaction**

With any medicine, including vaccines, there is a chance of side effects. These are usually mild and go away on their own. Serious reactions are also possible but are rare.

Most people who get the Tdap vaccine do not have any problems with it.

### **Mild problems** following Tdap

(Did not interfere with activities)

- Pain where the shot was given (about three in four adolescents or two in three adults)
- Redness or swelling where the shot was given (about one in five people)
- Mild fever of at least 100.4°F (up to about one in 25 adolescents or one in 100 adults)
- Headache (about three or four people in 10)
- Tiredness (about one person in three or four)
- Nausea, vomiting, diarrhea, stomach ache (up to one in four adolescents or one in 10 adults)
- Chills, sore joints (about one person in 10)
- Body aches (about one person in three or four)
- Rash, swollen glands (uncommon)

Moderate problems following Tdap (Interfered with activities, but did not require medical attention) • Pain where the shot was given (up to one in five or six) • Redness or swelling where the shot was given (up to about one in 16 adolescents or one in 12 adults) • Fever over 102°F (about one in 100 adolescents or one in 250 adults) • Headache (about one in seven adolescents or one in 10 adults) • Nausea, vomiting, diarrhea, stomach ache (up to one or three people in 100) • Swelling of the entire arm where the shot was given (up to about one in 500) Severe problems following Tdap (Unable to perform usual activities; required medical attention) • Swelling, severe pain, bleeding and redness in the arm where the shot was given (rare)

• A person who has ever had a life-threatening allergic reaction after a previous dose of any diphtheria, tetanus or

to any part of this vaccine should not get the Tdap vaccine. Tell the person giving the vaccine about any severe

• Anyone who has had a coma or long repeated seizures within seven days after a childhood dose of DTP or DTaP or a previous dose of Tdap should not get Tdap unless a cause other than the vaccine was found. They can still

### Problems that could happen after any vaccine:

- People sometimes faint after a medical procedure, including vaccination. Sitting or lying down for about 15 minutes can help prevent fainting and injuries caused by a fall. Tell your doctor if you feel dizzy, have vision changes or ringing in the ears.
- Some people get severe pain in the shoulder and have difficulty moving the arm where a shot was given. This happens very rarely.
- Any medication can cause a severe allergic reaction. Such reactions from a vaccine are very rare, estimated at fewer than one in a million doses and would happen within a few minutes to a few hours after the vaccination.
- As with any medicine, there is a very remote chance of a vaccine causing a serious injury or death.
- The safety of vaccines is always being monitored. For more information, visit: www.cdc.gov/vaccinesafety/

### What if there is a serious problem?

### What should I look for?

- Look for anything that concerns you, such as signs of a severe allergic reaction, very high fever or unusual behavior.
- Signs of a severe allergic reaction can include hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness and weakness. These would usually start a few minutes to a few hours after the vaccination.

### What should I do?

- If you think it is a severe allergic reaction or other emergency that can't wait, call 911 or get to the nearest hospital. Otherwise, call your clinic.
- Afterward, the reaction should be reported to the Vaccine Adverse Event Reporting System (VAERS). Your doctor should file this report, or you can do it yourself through the VAERS web site at www.vaers.hhs.gov or by calling 1.800.822.7967.

VAERS does not give medical advice.

### The National Vaccine Injury Compensation Program

The National Vaccine Injury Compensation Program (VICP) is a federal program that was created to compensate people who may have been injured by certain vaccines.

Persons who believe they may have been injured by a vaccine can learn about the program and about filing a claim by calling 1.800.338.2382 or visiting the VICP website at www.hrsa.gov/vaccinecompensation. There is a time limit to file a claim for compensation.

### How can I learn more?

- Ask your healthcare provider. He or she can give you the vaccine package insert or suggest other sources of information.
- Call your local or state health department.
- Contact the Centers for Disease Control and Prevention (CDC):
- Call 1.800.232.4636 (1.800.CDC.INFO) or
- Visit CDC's website at www.cdc.gov/vaccines

## **HEPATITIS B VACCINE**

### Why get vaccinated?

Hepatitis B is a serious disease that affects the liver. It is caused by the hepatitis B virus. Hepatitis B can cause mild illness lasting a few weeks, or it can lead to a serious, lifelong illness.

Hepatitis B virus infection can be either acute or chronic.

Acute hepatitis B virus infection is a short-term illness that occurs within the first six months after someone is exposed to the hepatitis B virus. This can lead to:

- fever, fatigue, loss of appetite, nausea and/or vomiting
- jaundice (yellow skin or eyes, dark urine, clay-colored bowel movements)
- pain in muscles, joints and stomach

Chronic hepatitis B virus infection is a long-term illness that occurs when the hepatitis B virus remains in a person's body. Most people who go on to develop chronic hepatitis B do not have symptoms, but it is still very serious and can lead to:

- liver damage (cirrhosis)
- liver cancer
- death

Chronically-infected people can spread the hepatitis B virus to others, even if they do not feel or look sick themselves. Up to 1.4 million people in the United States may have chronic hepatitis B infection. About 90 percent of infants who get hepatitis B become chronically infected and about one out of four of them dies.

Hepatitis B is spread when blood, semen or other body fluid infected with the Hepatitis B virus enters the body of a person who is not infected. People can become infected with the virus through:

- Birth (a baby whose mother is infected can be infected at or after birth)
- Sharing items such as razors or toothbrushes with an infected person
- Contact with the blood or open sores of an infected person
- Sex with an infected partner
- Sharing needles, syringes or other drug-injection equipment
- Exposure to blood from needlesticks or other sharp instruments

Each year about 2,000 people in the United States die from hepatitis B-related liver disease.

The hepatitis B vaccine can prevent hepatitis B and its consequences, including liver cancer and cirrhosis.

Many Vaccine Information Statements are available in Spanish and other languages. See www.immunize.org/vis. Hojas de información sobre vacunas están disponibles en español y en muchos otros idiomas. Visite www.immunize.org/vis.

### **Hepatitis B Vaccine**

The hepatitis B vaccine is made from parts of the hepatitis B virus. It cannot cause hepatitis B infection. The vaccine is usually given as three or four shots over a six-month period

Infants should get their first dose of the hepatitis B vaccine at birth and will usually complete the series at six months of age.

All children and adolescents younger than 19 years of age who have not yet gotten the vaccine should also be vaccinated.

The hepatitis B vaccine is recommended for unvaccinated adults who are at risk for hepatitis B virus infection, including:

- People whose sex partners have hepatitis B
- Sexually active persons who are not in a long-term monogamous relationship
- Persons seeking evaluation or treatment for a sexually transmitted disease
- Men who have sexual contact with other men
- People who share needles, syringes or other drug-injection equipment
- People who have household contact with someone infected with the hepatitis B virus
- Healthcare and public safety workers at risk for exposure to blood or body fluids
- Residents and staff of facilities for developmentally disabled persons
- Persons in correctional facilities
- Victims of sexual assault or abuse
- Travelers to regions with increased rates of hepatitis B
- People with chronic liver disease, kidney disease, HIV infection or diabetes
- Anyone who wants to be protected from hepatitis B

There are no known risks to getting the hepatitis B vaccine at the same time as other vaccines.

### Some People Should Not Get This Vaccine

Tell the person who is giving the vaccine:

- If the person getting the vaccine has any severe, life-threatening allergies. If you ever had a life-threatening allergic reaction after a dose of the hepatitis B vaccine, or have a severe allergy to any part of this vaccine, you may be advised not to get vaccinated. Ask your health care provider if you want information about vaccine components.
- If the person getting the vaccine is not feeling well. If you have a mild illness, such as a cold, you can probably get the vaccine today. If you are moderately or severely ill, you should probably wait until you recover. Your doctor can advise you.

### **Risks of a Vaccine Reaction**

With any medicine, including vaccines, there is a chance of side effects. These are usually mild and go away on their own, but serious reactions are also possible.

Most people who get the hepatitis B vaccine do not have any problems with it.

Minor problems following the hepatitis B vaccine include:

- soreness where the shot was given
- temperature of 99.9°F or higher

If these problems occur, they usually begin soon after the shot and last one or two days.

Your doctor can tell you more about these reactions.

### Other problems that could happen after this vaccine:

- ringing in the ears.
- follow injections. This happens very rarely.
- Any medication can cause a severe allergic reaction.
- few minutes to a few hours after the vaccination.

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

The safety of vaccines is always being monitored. For more information, visit: www.cdc.gov/vaccinesafety/

### What if there is a serious problem?

### What should I look for?

### What should I do?

Otherwise, call your clinic.

Afterward, the reaction should be reported to the Vaccine Adverse Event Reporting System (VAERS). Your doctor should file this report, or you can do it yourself through the VAERS web site at www.vaers.hhs.gov or by calling 1.800.822.7967.

VAERS does not give medical advice.

### The National Vaccine Injury Compensation Program

The National Vaccine Injury Compensation Program (VICP) is a federal program that was created to compensate people who may have been injured by certain vaccines.

Persons who believe they may have been injured by a vaccine can learn about the program and about filing a claim by calling 1.800.338.2382 or visiting the VICP website at www.hrsa.gov/vaccinecompensation. There is a time limit to file a claim for compensation.

### How can I learn more?

- sources of information.
- Call your local or state health department.
- Contact the Centers for Disease Control and Prevention (CDC):
- Call 1.800.232.4636 (1.800.CDC.INFO) or
- Visit CDC's website at www.cdc.gov/vaccines

• People sometimes faint after a medical procedure, including vaccination. Sitting or lying down for about 15 minutes can help prevent fainting and injuries caused by a fall. Tell your provider if you feel dizzy, have vision changes or

• Some people get shoulder pain that can be more severe and longer-lasting than the more routine soreness that can

• Such reactions from a vaccine are very rare, estimated at about one in a million doses and would happen within a

• Look for anything that concerns you, such as signs of a severe allergic reaction, very high fever or unusual behavior. Signs of a severe allergic reaction can include hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness and weakness. These would start a few minutes to a few hours after the vaccination.

• If you think it is a severe allergic reaction or other emergency that can't wait, call 911 or get to the nearest hospital.

• Ask your healthcare provider. He or she can give you the vaccine package insert or suggest other

## MMR (MEASLES, MUMPS & RUBELLA) VACCINE

### Why get vaccinated?

Measles, mumps and rubella are viral diseases that can have serious consequences. Before vaccines, these diseases were very common in the United States, especially among children. They are still common in many parts of the world.

### Measles

- Measles virus causes symptoms that can include fever, cough, runny nose and red, watery eyes, commonly followed by a rash that covers the whole body.
- Measles can lead to ear infections, diarrhea and infection of the lungs (pneumonia). Rarely, measles can cause brain damage or death.

### Mumps

- Mumps virus causes fever, headache, muscle aches, tiredness, loss of appetite and swollen and tender salivary glands under the ears on one or both sides.
- Mumps can lead to deafness, swelling of the brain and/or spinal cord covering (encephalitis or meningitis), painful swelling of the testicles or ovaries and, very rarely, death,

### Rubella (also known as German Measles)

- Rubella virus causes fever, sore throat, rash, headache and eye irritation.
- Rubella can cause arthritis in up to half of teenage and adult women.
- If a woman gets rubella while she is pregnant, she could have a miscarriage or her baby could be born with serious birth defects.

These diseases can easily spread from person to person. Measles doesn't require personal contact. You can get measles by entering a room that a person with measles left up to two hours before.

Vaccines and high rates of vaccination have made these diseases much less common in the United States.

### **MMR Vaccine**

Children should get two doses of the MMR vaccine, usually:

- First dose: 12 through 15 months of age
- Second dose: four through six years of age

Infants who will be traveling outside the United States when they are between six and 11 months of age should get a dose of the MMR vaccine before travel. This can provide temporary protection from measles infection, but will not give permanent immunity. The child should still get two doses at the recommended ages for long-lasting protection.

Adults might also need the MMR vaccine. Many adults 18 years of age and older might be susceptible to measles, mumps and rubella without knowing it.

A third dose of MMR might be recommended in certain mumps outbreak situations.

There are no known risks to getting the MMR vaccine at the same time as other vaccines.

### Many Vaccine Information Statements are available in Spanish and other languages. See www.immunize.org/vis. Hojas de información sobre vacunas están disponibles en español y en muchos otros idiomas. Visite www.immunize.org/vis.

There is a combination vaccine called MMRV that contains both chickenpox and MMR vaccines. MMRV is an option for some children 12 months through 12 years of age. There is a separate Vaccine Information Statement for MMRV. Your healthcare provider can give you more information.

### Some People Should Not Get This Vaccine

Tell your vaccine provider if the person getting the vaccine:

- Ask your healthcare provider if you want information about vaccine components.
- vaccine.
- radiation, immunotherapy, steroids or chemotherapy)
- Has a parent, brother or sister with a history of immune system problems.
- Has ever had a condition that makes them bruise or bleed easily.
- vaccination for three months or more.
- Has tuberculosis.
- moderately or severely ill should probably wait. Your doctor can advise you.

### **Risks of a Vaccine Reaction**

With any medicine, including vaccines, there is a chance of reactions. These are usually mild and go away on their own, but serious reactions are also possible.

Getting the MMR vaccine is much safer than getting measles, mumps or rubella disease. Most people who get the MMR vaccine do not have any problems with it.

After MMR vaccination, a person might experience:

### Minor events:

- Sore arm from the injection
- Fever
- Redness or rash at the injection site
- Swelling of glands in the cheeks or neck

If these events happen, they usually begin within two weeks after the shot. They occur less often after the second dose Moderate events:

- Seizure (jerking or staring) often associated with fever
- Temporary pain and stiffness in the joints, mostly in teenage or adult women
- Temporary low platelet count, which can cause unusual bleeding or bruising
- Rash all over body

• Has any severe, life-threatening allergies. A person who has ever had a life-threatening allergic reaction after a dose of the MMR vaccine, or has a severe allergy to any part of this vaccine, may be advised not to be vaccinated.

• Is pregnant or thinks she might be pregnant. Pregnant women should wait to get the MMR vaccine until after they are no longer pregnant. Women should avoid getting pregnant for at least one month after getting the MMR

• Has a weakened immune system due to disease (such as cancer or HIV/AIDS) or medical treatments (such as

• Has recently had a blood transfusion or received other blood products. You might be advised to postpone MMR

• Has gotten any other vaccines in the past four weeks. Live vaccines given too close together might not work as well. • Is not feeling well. A mild illness, such as a cold, is usually not a reason to postpone a vaccination. Someone who is

### Severe events occur very rarely:

- Deafness
- Long-term seizures, coma or lowered consciousness
- Brain damage

### Other things that could happen after this vaccine:

- People sometimes faint after medical procedures, including vaccination. Sitting or lying down for about 15 minutes can help prevent fainting and injuries caused by a fall. Tell your provider if you feel dizzy, have vision changes or ringing in the ears.
- Some people get shoulder pain that can be more severe and longer-lasting than routine soreness that can follow injections. This happens very rarely.
- Any medication can cause a severe allergic reaction. Such reactions to a vaccine are estimated at about one in a million doses and would happen within a few minutes to a few hours after the vaccination.

As with any medicine, there is a very remote chance of a vaccine causing a serious injury or death. The safety of vaccines is always being monitored. For more information, visit: www.cdc.gov/vaccinesafety/

### What if there is a serious problem?

### What should I look for?

• Look for anything that concerns you, such as signs of a severe allergic reaction, very high fever or unusual behavior

Signs of a severe allergic reaction can include hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness and weakness. These would usually start a few minutes to a few hours after the vaccination.

### What should I do?

• If you think it is a severe allergic reaction or other emergency that can't wait, call 911 and get to the nearest hospital. Otherwise, call your health care provider.

Afterward, the reaction should be reported to the Vaccine Adverse Event Reporting System (VAERS). Your doctor should file this report, or you can do it yourself through the VAERS web site at www.vaers.hhs.gov or by calling 1.800.822.7967.

VAERS does not give medical advice.

### The National Vaccine Injury Compensation Program

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Persons who believe they may have been injured by a vaccine can learn about the program and about filing a claim by calling 1.800.338.2382 or visiting the VICP website at www.hrsa.gov/vaccinecompensation. There is a time limit to file a claim for compensation.

### How can I learn more?

- Ask your healthcare provider. He or she can give you the vaccine package insert or suggest other sources of information.
- Call your local or state health department.
- Contact the Centers for Disease Control and Prevention (CDC):
  - Call 1.800.232.4636 (1.800.CDC.INFO) or
  - Visit CDC's website at www.cdc.gov/vaccines



## **OUTPATIENT BREASTFEEDING CLINIC**

## **APPOINTMENT DATE/TIME**

4334 East Highland Drive Ste. B Jonesboro, AR 72401

## FOR QUESTIONS, CONCERNS OR TO RESCHEDULE **OR CANCEL APPOINTMENTS PLEASE CALL:**

## Remember to bring your baby hungry and keep a 24 hour log of anything that goes in the baby's mouth and comes out of the baby's bottom.

Please arrive 10 minutes early for registration.

## LOCATION

St. Bernards Pregnancy Clinic 870.207.0421

## LACTATION CONSULTANTS

St. Bernards is proud to announce we have board-certified lactation consultants within the Women's and Children's service line. The lactation department is growing to accommodate the increasing number of mothers who desire to breastfeed their babies.

These ladies are available to assist mothers at the bedside after delivery, in the NICU when their new baby needs special attention, and in the new outpatient clinic after mom and baby are discharged from the hospital. The outpatient clinic sees patients by appointment only.

## BREASTFEEDING

Breastfeeding is special and beneficial for many reasons. It creates a closeness and bond between you and your baby. Breast milk is free and healthy for the baby. Breastfeeding also provides health benefits for the mother. Below are a few benefits for you and your baby. For additional information on breastfeeding, please see the references page.

### **Breastfeeding Benefits for Baby**

Liquid Gold - Early breast milk (colostrum) is thick and yellow in color. This milk is very rich in the nutrients and antibodies your baby needs.

Changes as your baby changes – After 3–5 days you begin to produce mature breast milk. This milk has the right amount of fat, sugar, water and protein, which

is essential to your growing baby.

Easy to digest – Breast milk is typically easier for babies (especially preemies) to digest than formula.

Protects your baby – Breast milk protects your baby from illness through cells, hormones, and antibodies. The protection found in breast milk cannot be duplicated in formula. Formula-fed babies have an increased risk of the following:

- Asthma
- Childhood leukemia
- Ear infections
- Diarrhea
- Necrotizing enterocolitis-a disease affecting the gastrointestinal tract in pre-term babies
- Obesity
- Respiratory infections
- SIDS (Sudden Infant Death Syndrome)
- Skin rash
- Type 1 and type 2 diabetes

### Breastfeeding benefits for you:

- Helps the uterus return to its normal size faster.
- Helps with weight loss.
- Reduces the risk of postpartum depression.
- nipples to sterilize, no formula to mix, and no bottles to warm during night time feedings.

### Importance of Exclusive Breast Feeding in Hospital

Your new baby's stomach is smaller than you think. Should you supplement breastfeeding with formula? Here are some helpful guides on the size of your baby's stomach:

- At 1 day = the size of a cherry =  $\frac{1}{2}$  tsp. per feeding
- At 3 days = the size of a walnut = .75-1 oz per feeding
- At 1 week = the size of a plum = 1.5-2 oz per feeding
- At 1 month = the size of an egg = 2.5-5 oz per feeding



As you can see, in most cases, mothers can breastfeed exclusively with no need for formula. Given the health and emotional benefits of breastfeeding, for both mother and child, the choice is simple. For more information or assistance, call the Breastfeeding Help Line at 870.207.4436, the St. Bernards HealthLine at 870.207.7300 or visit us at stbernards.info

### **Breast Milk Bank**

At St. Bernards, a breast bank is available for moms who would like their infant to have breast milk but are unable to produce. This service is available for NICU babies only. St. Bernards NICU is a part of a Nation Wide Milk Bank to make breast milk an option. If interested, please reach out to your pediatrician.

• Breastfeeding helps keep infants healthy, which leads to fewer sick days and time off for mom.

• Reduces the risk of osteoporosis and cancers such as uterine, endometrial, ovarian, and breast.

• Saves money and makes things easier-formula and supplies can cost more than \$1,500 per year. Breastfeeding may take a little more effort at the beginning, but once you have a routine, it gets easier. There are no bottles and

### **Possible Breastfeeding Problems**

It can be challenging at times, especially at the beginning. Just remember you are not alone and St. Bernards has lactation consultants ready to help. Below are common problems and some ways to help.

Sore Nipples – Your nipples will be tender at first. Find positions that are comfortable for you and give your baby an opportunity for a good latch. Pain can arise from an abrasion or from the baby only sucking on the end of the nipple. Here are some ways to prevent your nipples from becoming sore:

- After feeding, express breast milk and rub it on your nipples. Your milk has healing properties and emollients that are soothing.
- Ask for help before you try creams, hydrogel pads, or nipple shields.
- Change nursing pads often.
- Change positions with each feeding.
- Do not delay feedings because of pain.
- Ask for help from a lactation consultant.
- Do not wear anything tight that puts pressure on your nipples.
- If they are very sore, ask your doctor about using nonaspirin pain relievers.
- Let your nipples air dry after feedings.
- Make sure your baby has a good latch. If the latch isn't correct, gently break the suction and try again.
- Wash with clean water only.

Low Milk Supply – Checking on your baby's growth and weight is the best way to know if they are getting enough milk. As you and your baby adjust to breastfeeding, there may be times that your breasts don't feel as full, and that's okay. Also during your baby's growth spurts, your baby may want to nurse longer or more often, which can actually help build up your milk supply. A few tips to keep the milk flowing:

- Let your doctor know if you think the baby is not getting enough milk.
- Let your baby decide when and how long to feed.
- Limit or stop pacifier use.
- Make sure the baby is latched on and positioned well
- Offer both breasts at feeding. Let your baby have one breast until he or she stops sucking or swallowing, then offer the other breast.
- Try to avoid giving formula or cereal because it may lead to a decreased interest in breast milk.

Oversupply of Milk – Having breasts that are overfull can be stressful and uncomfortable for both you and the baby. If you have these symptoms:

- Ask a lactation consultant if you cannot control the oversupply yourself.
- Breastfeed on one side for each feeding.
- Burp your baby frequently if he or she becomes gassy.
- Feed your baby before he or she becomes overly hungry.
- If the other breast feels full before it's time for it to be used, then hand-express it or use a cold compress or washcloth
- If you have a lot of milk ejection, then try the baby in a different position like side-lying or football hold.

### Engorgement

This happens when your breasts become too full. They will feel very hard and painful. You may also experience swelling, tenderness, warmth, redness, throbbing, and your nipple may flatten. It can sometimes lead to a low-grade fever, breast infection or plugged ducts. Here are tips for remedying engorgement. (If it has not resolved in two days, contact your lactation consultant or physician)

- Ask a lactation consultant for help with the baby's latch.
- Avoid pacifiers and bottles.
- Breastfeed often after birth.
- Breastfeed often on the side that is engorged.
- Don't let your baby go more than four hours between feeding in the first few weeks.
- Hand-express or pump a little milk to soften the breast.
- Make sure to get enough rest, fluids and proper nutrition.
- Massage the breast.
- Use a cold compress or rag between feedings.
- Upon returning to work, try to pump when your baby would normally feed.
- Wear a bra that is supportive and fits well without being too tight.

### **Mastitis**

This is a soreness or lump in the breast accompanied by a fever and flu-like symptoms, often referred to as a breast infection. Tips for treating a breast infection:

- Apply heat to the sore area with a hot compress or rag.
- overfull.

your doctor right away.

- A breast infection in which both breasts look infected.
- Red streaks appear near the sore area.
- There is puss or blood in the milk.
- Your symptoms come on suddenly and severely.

• This is often a sign you are doing too much, so get some extra rest and try to relax with your feet propped up. • Breastfeed every two hours on the affected side, which will keep the milk moving and keep it from becoming

• Massage the area starting behind the sore spot with two fingers in a circular motion working toward the nipple. If it has not resolved on its own within 24-48 hours, consult your physician. If you have any of the following symptoms, see

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Day 1 Day 2 Day 3 Day 4 Day 5 Day 6	Wet Diapers: Black Tarry Poops: Vet Diapers: Black Tarry Poops: Black Tarry Poops: Feedings: Wet Diapers: Green Poops: Feedings: Wet Diapers: Green or Yellow Poops: Feedings: Vet Diapers: Yellow Poops: Feedings: Vet Diapers: Yellow Poops:	W P 12 W P 12 W P 12 W P 12 W P 12 W P 12 W P 12	1 2 W P 1 2 W P 1 2 W P 1 2 W P 1 2 W P	3 4 3 4 W P 3 4 W P 3 4 W P 3 4 W P 3 4 W P 3 4 W P 3 4 W P 3 4 W P 3 4 W P	<ul> <li>5</li> <li>5</li> <li>5</li> <li>7</li> <li>8</li> <li>7</li> <li>8</li> <li>7</li> <li>8</li> <li>9</li> <li>9</li> <li>9</li> <li>9</li> <li>10</li> <l< td=""><td>6 7 6 7 6 7 6 7 W 6 7 W</td><td>8 9 8 9 8 9 8 9 8 9 8 9 8 9</td><td>10 10 10 10 10</td><td>11 11 11 11 11 11</td><td>Noon Noon Noon Noon Noon</td><td>1 : 1 : 1 : 1 : 1 :</td><td>2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3</td><td></td><td>5       6         5       6         5       6         5       6         5       6         5       6         5       6</td><td>7 7 7 7 7 7 7 7</td><td>8 9 8 9 8 9 8 9 8 9 8 9 8 9</td><td>10 10 10 10 10 10</td><td>11 11 11 11 11</td></l<></ul>	6 7 6 7 6 7 6 7 W 6 7 W	8 9 8 9 8 9 8 9 8 9 8 9 8 9	10 10 10 10 10	11 11 11 11 11 11	Noon Noon Noon Noon Noon	1 : 1 : 1 : 1 : 1 :	2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3		5       6         5       6         5       6         5       6         5       6         5       6         5       6	7 7 7 7 7 7 7 7	8 9 8 9 8 9 8 9 8 9 8 9 8 9	10 10 10 10 10 10	11 11 11 11 11
Day 1 Day 2 Day 3 Day 4 Day 5 Day 6 Day 7	Wet Diapers: Black Tarry Poops: Vet Diapers: Black Tarry Poops: Black Tarry Poops: Feedings: Wet Diapers: Green Poops: Feedings: Wet Diapers: Green or Yellow Poops: Feedings: Vet Diapers: Yellow Poops: Feedings: Wet Diapers: Yellow Poops:	W P 12 W P 12 W P 12 W P 12 W P 12 W P 12 W P	1 2 W P 1 2 W P 1 2 W P 1 2 W P 1 2 W P 1 2 W P	3 4 3 4 W P 3 4 W P 3 4 W P 3 4 W P 3 4 W P	<ul> <li>5</li> <li>5</li> <li>5</li> <li>8</li> <li>7</li> <li>8</li> <li>9</li> <li>9&lt;</li></ul>	6 7 6 7 6 7 6 7 W 6 7 W	8 9 8 9 8 9 8 9 8 9 W 8 9 W	10 10 10 10 10 10	11 11 11 11 11	Noon Noon Noon Noon	1 : 1 : 1 : 1 : 1 :	2 3 2 3 2 3 2 3 2 3 2 3 2 3	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	5       6         5       6         5       6         5       6         5       6         5       6         5       6         5       6         5       6	7 7 7 7 7 7 7 7	8 9 8 9 8 9 8 9 8 9 8 9	10 10 10 10 10 10	1 1 1 1 1

Call your doctor, nurse, midwife or breastfeeing helper if your baby is not making enough wet or poopy diapers, there is dark colored poop after Day 5.

## FOR A LISTING OF ALL PROVIDERS, PLEASE VISIT



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Monday - Friday, 8:00 am - 4:30 pm

St. Bernards OB-GYN 800 South Church St, Suite 302 Jonesboro, AR 72401 Phone: 870.935.3990 St. Bernards Pregnancy Clinic 4334 East Highland Drive, Ste. B Jonesboro, AR 72401 Phone: 870.207.0421

St. Bernards Medical Center 225 East Jackson Ave. Jonesboro, AR 72401 Phone: 870.207.4388

For more information about Patient Portal visit stbernards.info/portal-information

For information on insurance and billing with St. Bernards OB-GYN, call 870.935.9330, selection 5, then 1.

For information on insurance and billing with St. Bernards Pregnancy Clinic or St. Bernards Medical Center, call 870.207.7300.

For all other health questions, call the St. Bernards Healthline at **870.207.7300** or visit **stbernards.info.**