



STAR LEGACY
FOUNDATION

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Star Legacy Foundation is a 501(c)(3) non-profit organization dedicated to research, education, awareness, family support, and advocacy regarding stillbirth and other poor pregnancy outcomes. To learn more about our programs or how we can support you, please contact us at 952.715.7731 or info@starlegacyfoundation.org



STAR LEGACY
FOUNDATION

PARENTING IN PREGNANCY:

Taking care of baby starts now!



Pregnancy is an exciting and beautiful time when parents prepare to welcome a new life into their family. But one thing many new parents don't realize is that your parenting duties begin *now!*

The little life growing inside you is nothing short of a miracle. Like most things in life, however, there are no guarantees – and sometimes things do not go as expected. The good news is that there are lots of measures you can take over the next nine months to give your baby the best possible chance at a healthy start!

Sadly, nearly 26,000 babies are stillborn in the United States every year, and thousands more pregnancies will end in miscarriage, prematurity, neonatal death, or birth injury. Star Legacy Foundation is committed to partnering with families and health professionals to improve pregnancy outcomes, and give every baby the loving care that they deserve.

Read on to learn how you can begin caring for your baby today!



WHY SHOULD I MONITOR MY UNBORN BABY?

FIRST – it's fun! Getting to know your baby is one of the most magical parts of being pregnant! ONLY YOU get to have this amazing experience to know your child before he/she is born! This is a great privilege, but also a great responsibility.

SECOND – some conditions mentioned in this brochure may increase the risk of adverse pregnancy outcomes including premature labor and delivery, birth injury, and stillbirth. Having as much information about you, your baby, and your baby's environment as possible allows you and your healthcare team to make the best decisions to improve chances of your baby's healthy arrival.

THIRD – we believe the mother knows her baby best! Mom's intuition and concerns about unusual symptoms should play a significant role in the care of any pregnancy.

If prenatal testing and fetal movements indicate a healthy mom, baby, umbilical cord, and placenta, that is wonderful! Continue with the all monitoring and follow the advice of your health care team. Be aware of how you are feeling and continue to report any changes right away. Ask your healthcare providers to keep you up-to-date about local outbreaks of infection and how to prevent many types of infections. If at any time you experience abdominal or back pain, fever, vaginal bleeding or leaking, contact your health care team immediately.

WHAT ELSE CAN I DO?

New research is being conducted every day to learn more about reducing the risk of poor pregnancy outcomes. The following topics are emerging as possible benefits. Discuss these with your obstetric care provider.

High blood pressure is known to cause problems, but some studies have shown low blood pressure may be of concern as well. If you have low or borderline low blood pressure, discuss this risk with your healthcare team.

Invasive exams such as internal (vaginal) exams and membrane stripping are being shown to increase the risk of infection spreading to the uterus and baby. Discuss the risks and benefits of any invasive procedure with your provider before it is conducted.

Extremes in maternal age (less than 20 years old or older than 35 years old) may increase the risk of poor outcomes. Also, African-American women experience higher rates of stillbirth than women of other ethnicities in the United States. African-American women, women less than 20 years of age, and women over 35 years of age should discuss this risk with their providers to determine if additional testing or surveillance is needed.

Women having their first baby or those who have had a previous stillbirth, premature birth, or birth injury have a higher risk of stillbirth. If this is your first pregnancy or you have experienced these issues with a previous pregnancy, ask your provider about this increased risk and what to watch for.

Pregnancy is an exciting time and parenting duties begin right from the start. Talk to your health providers about your health, your baby's health, and how you can work together to help your baby arrive safe and healthy!



WHAT CAN I DO BEFORE I'M PREGNANT?

1. Visit your healthcare provider.

The first step to having a healthy baby is to start with a healthy mother. Schedule an appointment with your healthcare provider to determine if you have any health concerns that should be addressed before or during pregnancy. Be sure to mention your intentions to become pregnant. Your provider may evaluate your immune status, screen for common infections, or test for other health indicators before you become pregnant.

Certain vitamins or supplements, like folic acid, may be recommended to ensure you and your baby's health. Many common medications (whether prescribed, natural, or over the counter) and diseases like diabetes, autoimmune disorders, heart disease, thyroid disorders, alterations in sleep, high blood pressure, infections, renal disease, and others can predispose you to complications during the pregnancy. The risk of miscarriage, stillbirth, premature birth, and birth injury can be reduced with good attention to the health of you and your baby. Your health care provider will help you develop a plan that is best for you at this time.

2. If you smoke or use recreational drugs, it is time to quit.

Reduction/elimination of alcohol is recommended. Smoking, alcohol use, and drug use have been proven to be harmful to you and your baby. Your health care provider may be able to recommend specific programs to assist your efforts to quit if needed.

3. Adopt a healthy lifestyle.

If you are overweight, now is the time to begin a weight-loss program to include a healthy diet and active lifestyle. Overweight and obese women have a higher risk of complications during pregnancy including high blood pressure, diabetes, and stillbirth. Weight loss during pregnancy generally is not recommended. Discuss a healthy weight and nutrition plan with your health care provider. If you are often stressed, talk to your provider about reducing or eliminating stress in your life before and during pregnancy.



4. Know your family history.

Ask your family and your partner's family about their pregnancies and health histories. Some genetic issues should be evaluated before or early

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WEEK	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
28							
29							
30							
31							
32							
33							
34							

Please see other side for instruction and sample chart.

WEEK	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
35							
36							
37							
38							
39							
40							
41							

Please see other side for instruction and sample chart.



For additional information on kick counting and other important ways to monitor your pregnancy, please visit our website at: www.starlegacyfoundation.org

This information is not intended to replace medical advice. Be sure to consult your doctor, midwife or health care team with any issues or concerns.

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in a pregnancy. If female relatives have had pregnancy complications such as pre eclampsia, obstetric cholestasis, stillbirth, or inherited conditions, please discuss these issues with your OB or midwife and how they may impact you and your pregnancy. If there are inherited disorders, you may wish to consider genetic counseling and testing when indicated. If family history is not known or available, be sure to tell your health care team.

HOW DO I MONITOR MY PREGNANCY?

1. Know your risk factors

We do not fully understand or know why some babies are stillborn or have other poor outcomes. About 80% of stillbirths occur in women with no existing problems with their health (as described above). However, we are learning about characteristics of mothers, babies, and pregnancies that place an individual pregnancy at risk. Following is a list of some of

these risk factors. The American Congress of Obstetrics and Gynecology (ACOG) recommends pregnancies at high-risk of stillbirth be monitored weekly or bi-weekly with regular fetal monitoring beginning at 32-34 weeks gestation. If the risk factors are especially concerning or there are multiple risk factors present, this testing should begin at 28 weeks. Antenatal testing includes ultrasound evaluation for growth

and amniotic fluid volume, monitoring fetal movement, biophysical profiles, non-stress tests (assessment of baby's heart rate), and other tests as determined to be appropriate by your healthcare provider.

If you have any of these risk factors, talk to your health care provider about the risk and possible tests and/or monitoring.



KICK CHART

Use this chart to document your baby's movements every day. Write in the box how long it takes your baby to make 10 movements. You will soon see a pattern develop that is 'normal' for your baby. Take your charts to your prenatal visits to share

with your provider. ***If you see any significant changes, feel uncomfortable with your baby's movements or behavior, or have any other concerns, CONTACT YOUR HEALTH CARE PROVIDER IMMEDIATELY.***

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
WEEK 28	12 min	15 min	18 min	13 min	12 min	10 min	10 min
WEEK 29	10 min	15 min	9 min	20 min	17 min	9 min	8 min
WEEK 30	8 min	10 min					
WEEK 31							
WEEK 32							
WEEK 33							

Please note: this small chart is only an example. Compare your results to your baby's usual pattern.



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change in your baby's behavior, you should go to your health provider's office or the hospital to have your baby assessed immediately. We do not recommend using handheld Doppler devices because there have been instances where mothers have been falsely reassured using this equipment.

Other Concerning Symptoms

In addition to the above, you should contact your health professional or visit the hospital immediately if you experience:

- Fever
- Bleeding
- New, changed, or worsening pain
- Headache
- Fainting/dizziness
- Painful urination
- Vomiting more than once a day, especially if accompanied by pain or fever
- Sudden or significant swelling of hands, feet, or face
- Constant itching
- Overwhelming concern that something is wrong



WHAT HAPPENS IF I'M CONCERNED?

You are your baby's voice. Be his/her advocate! If you ever don't feel right about your pregnancy or your health care provider's response to your concerns, don't hesitate to ask more questions or obtain a second opinion if necessary.

When you report any changes or concerns to your health care provider, you should be evaluated further. This may include a non-stress test (which assesses baby's heart rate) for 30-60 minutes or more, ultrasound, biophysical profile, daily monitoring, additional visits, or other testing and interventions as determined to be appropriate by your health care provider. Other factors will also be taken into consideration such as your age, blood pressure problems, family history, and what has happened with your previous pregnancies. It is common for women to be told to drink a cold or sugary drink to "wake" their baby. This is NOT an effective way to assess baby's wellbeing. You should ignore this advice and immediately have your baby properly assessed.

Maternal Risks

- Maternal obesity
- Maternal use of alcohol, tobacco, or other recreational drugs
- Maternal infection (such as Group B Strep, syphilis, HIV, influenza, and more)
- Advanced maternal age (over 35 years)
- Nulliparity (mom's first pregnancy)
- Gestational Diabetes
- Hypertension/Pre-eclampsia/Eclampsia
- Maternal health conditions (systemic lupus, anti-phospholipid syndrome, kidney disorders, cardiovascular disease, thyroid disease, and others)
- African American or Native American/First Nations ethnicity
- History of previous poor pregnancy outcome (pre-term birth, small for gestational age baby, stillbirth, neonatal death)
- Poor prenatal care or poor access to care
- Low socioeconomic status
- Pregnancies using assistive reproductive technologies

Risks Developing in Pregnancy

- Multiple gestation pregnancy (twins, triplets, or more)
- Post-term pregnancy (beyond 40 weeks gestation)
- Fetal growth restriction (poor growth in baby)
- Change in baby's movements

2. Learn about your baby

Technology today allows us to have a better picture of an unborn baby than ever before. Testing and monitoring during pregnancy provides information about the health and development of the mother, baby, and intrauterine environment. For example, blood tests like PAPP-A and AFP are indicators of how well the placenta is functioning. (These tests may be offered as part of blood tests to determine a Mom's risk of having a baby with Down's syndrome.) Periodic urine cultures (more than the quick urine test) will monitor for signs of infection and diabetes.



Ultrasound examinations visualize the baby and his/her environment. Early in your pregnancy, your provider may do an ultrasound to confirm your pregnancy and to establish the gestational age of your baby. Around 20 weeks, another ultrasound exam reviews your baby's anatomy to look for major organ malformations or concerns. Your provider should also be able to identify the size, position, and characteristics of the umbilical cord and placenta. Knowledge of these factors will help you and your provider determine if additional surveillance may be necessary throughout your pregnancy. Many obstetrical providers are now doing additional ultrasounds during the third trimester to monitor the baby's growth, amount of amniotic fluid, and again evaluate the size, position, and characteristics of the umbilical cord and placenta.

3. Get quality sleep on your side.

Recent studies have shown that women who go to sleep on their backs during the third trimester of pregnancy have an increased risk of stillbirth. Doctors, nurses, and midwives often use lying on the left side to enhance blood flow to the baby during labor. Some women find it helpful to use extra pillows or a partner to help them stay on their side throughout the night.



Poor sleep is associated with a greater risk of longer labors and c-sections. There are also studies indicating that sleep apnea (periods when there is difficulty in breathing) can contribute to hypertension and other poor pregnancy outcomes.

If you do not sleep well, do not feel rested in the morning, snore or stop breathing briefly during sleep, or have other sleep issues, talk to your healthcare professional about potential tests or treatments.

4. Listen to your baby

A baby's movement can tell you a lot about his/her health and personality. Most women start feeling flutters around 20 weeks. By 28 weeks, movements will be easy to detect on a regular basis and most mothers notice patterns. Ongoing activity of the baby is one of the most reassuring signs that the baby is well. Being aware of your baby's movements can

help alert you and your health care team if a problem develops. *Every baby is different!* It is important to identify the usual amount of movement and patterns for your baby. Use this information as a baseline to determine if any changes occur.

Babies DO NOT slow down at the end of the pregnancy and they DO NOT usually sleep for longer than 90 minutes at a time. Your baby should also not move frantically, so you should not notice a time when your baby suddenly has "crazy" or "wild" movements. If you notice any of these changes, see your health care provider to be evaluated immediately.

If you notice ANY change in your baby's movement, behavior, or patterns or have a sense that something is different or wrong, please contact your health care provider or be evaluated at the labor/delivery unit immediately. It is important to address your instincts. Although most pregnancies are normal, altered movements of an unborn baby has been shown to be a symptom of babies who are in distress and has led to stillbirth in some cases. The purpose of this information is not to frighten you, but rather to empower you to be your baby's advocate if you have concerns. Trust your instincts!

HOW DO I MONITOR FETAL MOVEMENT?

There are many charts and smart phone apps available to help you keep track of your baby's movements. You can use one of these if you like, but it doesn't have to be a formal process. Simply choose several times each day when your baby is often very active. Lie down or sit quietly and tune into your baby's movements. Note how long it usually takes him/her to make 10 movements and the characteristics or qualities of those movements. Movements can include kicks, swooshes, pushes, jabs, or pokes – but not hiccups. If the time or characteristics are different from usual or changes suddenly, you and your baby should be evaluated immediately. Again, trust your instincts! Do not wait until the next day or your next appointment to report these changes. If your baby is in trouble, time may be critical. Share information about your baby's movements and personality with your healthcare provider at each visit.



Sometimes moms hear that babies slow down at the end of pregnancy. This is NOT true. Your baby should continue to move strongly and consistency right through to birth. If you notice any