# Congratulations!

The providers and staff at About Women by Women would like to congratulate you on your pregnancy! We are happy to welcome you to our practice and hope that we can help you and your family navigate through this experience.

Please read this entire care guide. It provides information and resources that you will find helpful throughout your pregnancy. There are 7 obstetricians at AWBW (listed below). Even if you are already established with a particular obstetrician within our practice, we encourage you to meet each of our providers during your pregnancy.

If you feel you have more questions or discussions you would like to have, refer to our telephone information sheet for guidance on how to best contact us.

It is our hope that this guide will be a useful resource for you. We look forward to providing you with excellent care throughout your pregnancy and beyond!

Sincerely,

About Women by Women

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Office Information/Important Contacts	3
Prenatal Schedule/Timeline	4
Pregnancy Calendar	5-8
Nausea	Ð
Mental Health	9
Domestic Violence	8
Safe OTC Medications 1	L <b>O</b>
General Health Tips/Pregnancy FAQ	11-13
Travel	14
Cord blood banking	14
Vaccines	15
Weight Gain	16
Exercise	16
"Healthy Eating Tips" from USDA	17
"Daily Food Checklist"	18
"Food Safety for Baby & Me"	19
"Advice about Eating Fish"	20-21
Infections/Exposure	22-23
Genetic Testing	24-28
Billing	28-29
Disability/Benefits/Leave Paperwork	30-31
Labor and Delivery/Important Forms	. 32
Resources	. 33-34

### Office Information/Important Contacts:

Phone Number: (781) 263-0033 Fax Number: (781) 263-9125 Website: <u>www.aboutwomenbywomen.net</u>

### Locations:

30 Washington Street, Wellesley, MA 02481
111 Norfolk Street, Walpole, MA 02081
9 Hope Avenue, Waltham, MA 02453
307 West Central Street, Natick, MA 01760
969 Main Street, Millis, MA 02054

We want you to feel comfortable reaching out to us with any questions or concerns. Pregnancy can be an exciting experience but is also a time of change and stress. If after consulting your information packet, you have any *routine clinical questions or concerns* that cannot wait until your next appointment, please call our main office (781) 263-0033 to speak with a nurse. We try to answer urgent calls first and make every effort to return calls the day that they are received.

*For NON-URGENT matters that cannot wait until your next scheduled appointment*, you may find it convenient to reach out via the Patient Gateway portal. <u>The portal may be used to contact your provider with non-urgent questions, and to request appointments and prescription refills</u>. The messages may not be responded to for 3 business days.

It is essential that you have a primary care provider for non-obstetrical issues during your pregnancy.

*For URGENT calls during office hours*: Press zero (0) to be connected to the front desk. Provide them with a brief explanation of your symptoms and they will direct your call.

<u>After hours</u>: For emergencies, call the main office number at 781-263-0033 and follow the prompts to connect with the answering service. The answering service will page the doctor on call for emergencies. If for some reason you do not receive a call back from the doctor within 20 minutes, please try again. If you still have not received a response, call Labor and Delivery at Newton Wellesley Hospital (617) 243-5186

### If at any time you feel you are having a medical emergency, call 911

Notify your provider if you experience any of the following:

- Dizziness
- Headache
- Chest pain
- Calf pain or swelling
- Abdominal pain
- Blurred vision
- Fluid leaking from the vagina
- Vaginal bleeding
- Less fetal movement
- Contractions (especially every 5 minutes)

# Prenatal Visit Schedule

7-10 weeks	Intake with NP/RN
12-13.5 weeks	Standard prenatal visit after nuchal translucency
	ultrasound (NT scan)
16 weeks	Standard prenatal visit
18-20 weeks	Standard prenatal visit after fetal survey
	(ultrasound)
24 weeks	Standard prenatal visit
28 weeks	Standard prenatal visit with blood work, gestational
	diabetes test and Tdap administration (possible
	Rhogam)
30 weeks	Standard prenatal visit
32 weeks	Standard prenatal visit
34 weeks	Standard prenatal visit
36 weeks	Prenatal visit with GBS test and blood work
37 weeks	Standard prenatal visit
38 weeks	Standard prenatal visit
39 weeks	Standard prenatal visit
40 weeks	Standard prenatal visit

# Pregnancy Calendar/What Happens at Your Prenatal Visits?

This calendar will give you an overview of what you can expect throughout the process of a typical pregnancy. Your initial EDD (estimated due date) will be based on the first day of your last menstrual period (LMP) or information from your fertility specialist. If medically indicated, an early ultrasound may also be used to establish gestational age and EDD.

# First Trimester (0 through the end of 13 weeks)

Congratulations, you have just found out that you are pregnant! The first trimester is the most crucial for your baby's development; your baby will begin to develop their physical body structure and organ systems. You may experience nausea, fatigue, breast tenderness, mood changes, and frequent urination – all common symptoms of the first trimester. Remember to take your prenatal vitamins daily! By the end of this trimester, the baby will be about the size of a peach!

Intake Appointment <b>(7-10 weeks)</b>	<ul> <li>Your first appointment with our practice will be an "intake appointment," which typically takes place between 7-10 weeks of pregnancy. You will meet with one of the nurses or the nurse practitioner to review your medical history, expectations from the practice/providers, and any questions you may have at the time.</li> <li>You will review genetic testing options (see pg. 24-27), have blood work ordered/completed, and leave a clean catch urine sample.</li> <li>If your intake appointment is virtual, you may stop by our <u>Wellesley office laboratory</u> when we are open (Monday-Friday, 8am-12pm and 1pm-4pm) to have your lab work completed.</li> <li>Blood work includes serology testing for rubella immunity, varicella immunity, syphilis, hepatitis B/C, and HIV. Other testing is based on the health history obtained at your intake appointment.</li> </ul>	
NT Ultrasound/New OB visit	At this appointment, you can expect an ultrasound as well as a complete physical examination with one of our physicians. There will be time to ask questions and go over any available results.	
(12-13.5 weeks)	<ul> <li>If you are due for a Pap smear, it will be completed at this time.</li> <li>If you did not leave a clean catch urine sample at your intake appointment, you will be asked to do so at this appointment.</li> </ul>	
Teaching and Learning	★ Read about your pregnancy—ask your OB or friends about resources on pregnancy, your developing baby, and your newborn (see pg. 32-33)	

# Second Trimester (14-28 weeks)

You have made it to the second trimester! Some women will notice that the fatigue and nausea of the first weeks of pregnancy will lessen. Your body will continue to change and grow to make room for your baby, which can cause some growing pains, known as round ligament pain. At 20 weeks, the baby is swimming in a large pool of amniotic fluid. You may start to notice movement at this time. Expect movement to be irregular in the second trimester. On average, patients will have a visit every 4-6 weeks in this trimester. At each visit, we will listen to your baby's heartbeat, measure your abdomen to make sure that your uterus is growing appropriately, check your weight and blood pressure, and answer any questions that you may have.

Anatomy Scan/Prenatal Visit (19-20 weeks)	The anatomy scan or fetal survey is a detailed ultrasound to evaluate your baby's growth and organ development.
Prenatal Visit <b>(24-26 weeks)</b>	Between 26-28 weeks, we will screen you for gestational diabetes, anemia, and syphilis. Depending on your risk factors and health history, other labs may be ordered.
Fetal Development	<ul> <li>By 24 weeks, you may feel different parts of the baby's body through your abdominal wall. Your uterine muscle is stretching, and you may feel occasional pain along the sides of your abdomen (round ligament pain).</li> <li>The top of your uterus (the fundus) reaches just above your navel.</li> <li>Fetal hiccups may start happening, these are normal.</li> </ul>
Reminders/For consideration	<ul> <li>Think about Cord blood banking (see page 14)</li> <li>Submit all pre-registration forms to Newton-Wellesley Hospital. This includes the <u>Parent Worksheet for Birth Certificates</u>, <u>Maternity Pre-Admission Form</u>, and <u>Healthcare Proxy</u>.</li> <li>Speak to employer/HR about disability/family leave benefits.</li> <li>Submit disability paperwork. (see page 29-30)</li> <li>Sign up for prenatal/childbirth educations classes (see page 32)</li> <li>Read the pregnancy handout (given to you between 24-28 weeks)</li> <li>Choose a pediatrician.</li> <li>Birth Center Tour (<u>Virtual Tours of NWH Maternity Unity</u>)</li> </ul>

### Third Trimester (28-40 weeks):

You are in the home stretch now! In these final weeks, your baby will continue to grow, finishing the development of bones and organs. At this time, you should feel the baby move every day. Every baby has a different pattern of movement, but if you notice a change in what you typically feel, you should call the office. Physically, you may notice shortness of breath, urinary frequency, and trouble sleeping. On average, patients will see their provider every 2 weeks until 36 weeks gestation. At 36 weeks, you will begin to see your OB provider weekly until delivery.

Prenatal Visit <b>(28-30 weeks)</b>	<ul> <li>If you are RH negative, you will receive a Rhogam injection.</li> <li>We recommend that you receive a Tdap immunization at this point in pregnancy (offered in Wellesley only). It's important to ensure that yourself and any direct care providers (e.g. grandparents, family members) are up to date on this vaccination. It is recommended that the mother receives the Tdap immunization in every pregnancy to help protect your newborn against whooping cough.</li> </ul>	
Prenatal Visits <b>(30-36 weeks)</b>	You will continue to have biweekly prenatal visits. During these appointments, you will have a weight check, an abdominal measurement (fundal height), and fetal heart check. Topics like fetal kick counts, birth plans, hospital tours and prenatal classes may be discussed with your provider. As always, bring any questions that you may have!	
Prenatal Visits	<ul> <li>provider. As always, bring any questions that you may have!</li> <li>We should see you for weekly visits at this point. At your 36-week visit, there will be an in-depth visit to discuss labor and delivery. In preparation for this visit, consider what you would like your labor and delivery to be like so that you can share this with your provider. There is a worksheet on the Newton Wellesley Maternity website that may be helpful in considering your birth preferences (a link has been provided below). The delivery consent will be discussed as well as any questions regarding birth preferences or anesthesia options during birth. A pelvic exam will be offered to assess cervical change.</li> <li>★ A swab of the vagina may be done to test for the presence of Group B Streptococcus (GBS). GBS is a bacterium that occurs in approximately 30% of women. If you test positive for GBS, you may be given antibiotics during your labor.</li> <li>★ Other laboratory testing that may be ordered at this time: a complete blood count</li> </ul>	
Car Seat Inspection	<ul> <li>Schedule a car seat inspection. Many inspection stations have limited hours or require an appointment. Contact your local Police Department or visit <u>www.nhtsa.gov</u> or <u>www.seatcheck.org</u> for a listing of local inspection stations.</li> </ul>	
Things to do/think about	<ul> <li>Read the 3<sup>rd</sup> trimester handout (given to you at 36 weeks)</li> <li>Finish all childbirth, breastfeeding, and other classes sooner rather than later. Babies will arrive on their own schedules (sometimes it may be early).</li> </ul>	
Reminders- to be completed in your 3rd trimester	<ul> <li>Receive a Tdap vaccine for whooping cough (see page 15)</li> <li>Familiarize myself with when/where/what to do regarding L+D.</li> <li><u>Creating a Birth Plan/Birth Preferences Worksheet</u></li> <li>Complete worksheets (see page 31)</li> <li>Schedule a postpartum visit for 6 weeks after delivery</li> </ul>	

# Fourth Trimester (delivery through 12 weeks postpartum):

While this can be a very exciting period, it is also a time of physical and emotional changes for both the parent and baby. Postpartum experiences may include fatigue, bleeding, and mood changes. Should you feel that you need support during this transition from pregnancy to parenthood, reach out to us so that we may be a resource to help you get what you need to thrive.

8

Appointments:

- If you deliver via c-section, please call the office to schedule a 2-week postpartum incision check.
- All patients should have a 6-week postpartum visit with their provider. You will have a full physical exam at this appointment and can discuss birth control options if appropriate.

"Baby Blues" – it can be normal to feel weepy and moody for the first 2-3 weeks. Call us if:

- You do not feel better.
- You have more concerning symptoms of anxiety.
- feeling overwhelmed or fearful
- not able to sleep or eat.
- feeling depressed
- having thoughts of harming yourself or the baby

# **Domestic Violence**

If you're a victim of abuse or violence at the hands of someone you know or love, or you are recovering from an assault by a stranger, you and your baby can get immediate help and support.

The National Domestic Violence Hotline can be reached 24 hours a day, 7 days a week at 800-799-SAFE (7233) and 800-787-3224 (TTY). Spanish speakers are available. When you call, you will first hear a recording and may have to hold. Hotline staff offer crisis intervention and referrals. If requested, they connect women to shelters and can send out written information.

The National Sexual Assault Hotline can be reached 24 hours a day, 7 days a week at 800-656-4673. When you call, you will hear a menu and can choose #1 to talk to a counselor. You will then be connected to a counselor in your area who can help you. You can also visit the National Sexual Assault Hotline website.

# Nausea

Nausea and vomiting are common symptoms of pregnancy and are related to hormonal changes. These symptoms will resolve over time, often after the first trimester.

Activities to try:	Food changes:
<ul> <li>Taking a walk outside (fresh air!)</li> </ul>	- Eat small meals frequently (every 2 hours)
<ul> <li>Seeking out cooler places/rooms</li> </ul>	- Increase protein snacks (peanut butter, cheese,
<ul> <li>Avoid strong odors.</li> </ul>	and nuts)
<ul> <li>Taking slow deep breaths</li> </ul>	- Lemon (candies, fresh lemon in water/tea)
- Meditation	- Ginger (ginger ale, candies, ginger snaps)
- Massage	- Bland foods: rice, crackers, pretzels, bagels,
- Hypnosis	pasta, potatoes, dry cereal.
- Acupuncture	- Foods with built-in fluid: popsicles,
- Acupressure with Sea-Bands	watermelon, oranges, grapes

If nausea persists despite these interventions, try taking the following over-the-counter medications:

- 1. Unisom (doxylamine succinate) 12.5 mg (1/2 tablet) at bedtime.
- 2. Vitamin B6: 25-50 mg every 8 hours (three times/day)

Please call the office if your symptoms do not improve or if you have not kept down any food or fluids for 24 hours.

# Mental Health in Pregnancy

If you suffer from mental health issues while pregnant, these symptoms may get worse after your baby is born. Symptoms can show up any time during the 12 months after giving birth.

There are many treatments available to help alleviate symptoms. If you feel that you may be suffering from a mental health issue, are experiencing any mood concerns, or would like to talk to our staff about resources, please call as soon as possible.

### Symptoms of perinatal mood concerns:

- ➤ Tearfulness/sadness
- > Irritability
- Anxiety/racing thoughts/panic
- Difficulty concentrating
- ➤ Excessive guilt
- ➤ Hopelessness
- ➤ Loss of appetite
- Obsessive thoughts
- ➤ Sleeplessness
- ➤ In extreme cases, thoughts/feelings about hurting oneself or the baby.

If you're ever worried about hurting yourself or your baby, call 911 or go to the nearest emergency

Constipation	Docusate Metamucil Miralax Benefiber
Hemorrhoids	Anusol/Anusol HC Hydrocortisone cream Preparation H Tucks Pads Proctofoam
Cold/Flu/Cough	Acetaminophen (Tylenol) Tylenol PM (Acetaminophen & Diphenhydramine) Delsym (Acetaminophen & Dextromethorphan) Sudafed <b>(AFTER 13 WEEKS AND NO BP ISSUES)</b> Guaifenesin (Mucinex) Robitussin DM Benadryl (Diphenhydramine) Unisom (Doxylamine) Flonase Saline Nasal Spray (Ayr, Ocean) Throat lozenges Vicks Vapor Rub
Yeast	Miconazole (Monistat 7) Clotrimazole (Gyne-Lotrimin)
Seasonal Allergies	Zyrtec (Cetirizine) Claritin (Loratadine) Allegra (Fexofenadine) Benadryl (Diphenhydramine) Cromolyn sodium nasal spray Flonase (Fluticasone) Rhinocort (Budesonide)
Antacids/Heartburn	Pepcid (Famotidine) Tagamet (Cimetidine) TUMS (Calcium Carbonate) Mylanta Maalox Rolaids
Pain Relievers	Acetaminophen (Tylenol)* Max. 3000 mg/day

# Safe Over-the-Counter Medications

Reminder: These medications are generally considered safe in pregnancy if taken as prescribed and in moderation. This is NOT an exhaustive list. If you have any questions, please call 781-263-0033 to speak with a nurse. Please follow the medication package for directions.

# General Health Tips/Pregnancy FAQ

Back Pain	Low back pain is one of the most common problems amongst pregnant people. Both weight gain and hormonal changes contribute to joint laxity, altered posture, and muscle weakness. Preferred treatments in pregnancy: → Acupuncture/Acupressure → Massage → Warm or cold compresses (short term use) → Pelvic support brace or girdle → Wear supportive shoes → Avoid sitting for long periods of time → Avoid heavy lifting → Physical therapy consults → Tylenol as needed
Constipation	<ul> <li>Increased progesterone levels, increased pressure on your pelvic organs, reduced physical activity, and iron in your prenatal vitamin all contribute.</li> <li>→ Increase dietary fiber</li> <li>→ Increase fluid intake</li> <li>→ Use bulk-forming laxatives (Metamucil or FiberCon)</li> <li>→ If needed, Colace and Miralax are safe to take</li> </ul>
Dental Work	Hormonal changes in pregnancy can increase your risk of developing gum disease. Routine dental cleaning is recommended in pregnancy. Generally speaking, x-rays are considered safe at any stage during pregnancy, when abdominal and thyroid shielding is used.
Headache	<ul> <li>Hormonal changes and dehydration are two of the most common causes of headache in pregnancy. Most patients (60-70%) with a history of migraines report improvement during pregnancy.</li> <li>→ First-line pharmacologic treatment in pregnancy is to take <i>Tylenol and increase fluid (water) intake</i>.</li> <li>→ For patients with chronic headaches, <i>Magnesium Oxide 400-800 mg daily</i> can be taken.</li> <li>→ Nonpharmacologic interventions include heat, ice, massage, rest, and avoiding triggers</li> </ul>
	*If you are experiencing a headache or migraine and it does not resolve with increasing your fluid intake, resting or taking Tylenol, you should call to speak with our office. At 20+ weeks, we must consider preeclampsia as a possible diagnosis.
Heartburn	→ Eat small, frequent meals throughout the day

	<ul> <li>Avoid both an empty and full stomach</li> <li>→ Avoid fatty foods, spicy foods, acidic foods, very sweet foods</li> <li>→ Avoid lying down after meals and avoid eating 3 hours before bed.</li> <li>→ Elevated head at night with pillows/wedge pillow (Amazon)</li> <li>→ Fluids are better tolerated if cold, clear, and carbonated or sour.</li> <li>→ TUMS as needed/prescribed.</li> <li>→ See page 10 for OTC treatments.</li> <li>→ Chew gum after meals</li> </ul>
Hemorrhoids	<ul> <li>Avoiding constipation is the primary prevention of hemorrhoids.</li> <li>→ Sitz baths</li> <li>→ Tucks medicated wipes</li> <li>→ Preparation H</li> </ul>
Infections	During pregnancy, you may find yourself experiencing more flu/cold-like symptoms and sinus infections. This is because the immune system is somewhat suppressed by pregnancy hormones. Most infections are viral and will respond to rest and fluids. If you begin to run a persistent fever ≥ 101 degrees Fahrenheit; you have a cough; runny nose; green/brown sputum– <b>please call your PCP</b> or be seen at urgent care as you may need to be screened for a communicable disease and may require an antibiotic.
Itching/Rash	<ul> <li>→ Sarna lotion</li> <li>→ Eucerin cream</li> <li>→ Hydrocortisone ointment 1%</li> <li>→ Calamine lotion</li> <li>→ Benadryl (oral or topical)</li> <li>* If at any point you have itching of palms of hands or soles of feet - call the office to speak with your provider.</li> </ul>
Leg Cramps/Restless legs	<ul> <li>Up to 50% of pregnant patients will experience leg cramps/restless legs.</li> <li>→ Increase fluids</li> <li>→ Do calf stretches (toe raises) as soon as the muscle cramp begins</li> <li>→ Walking</li> <li>→ Stretching exercises may be an effective preventative measure</li> <li>→ Compression stockings</li> <li>→ Acupuncture</li> <li>→ Iron supplementation</li> </ul>
Personal care	<ul> <li>Hair Dye/Highlights:</li> <li>→ Under normal conditions, the amount of dye that is absorbed by the healthy skin of the scalp is small. Therefore, these chemicals are unlikely to cause adverse fetal effects in pregnant people with a normal scalp. Data on safety is limited, inconsistent, and based on maternal self-report.</li> <li>→ There is no data on whether non-ammonia versus ammonia-based products is safer. A prudent approach is to avoid ammonia- and</li> </ul>

	<ul> <li>peroxide-based products, given the wide availability of non-ammonia-based products. Regardless, it's essential to use these products in a well-ventilated area since those with asthma/allergies may be more sensitive to the scents during pregnancy. Lastly, it is prudent for all pregnant people to avoid using new products since skin sensitivity is more common in pregnancy.</li> <li>Massage:         <ul> <li>Make sure that the massage therapist is licensed and well versed in the do's/don'ts of prenatal massage.</li> <li>Your skin is more sensitive in pregnancy– be mindful about scented oils/lotions that are being applied.</li> </ul> </li> <li>Topical Acne Treatments         <ul> <li>Avoid Retinoids</li> </ul> </li> </ul>
Sex	<ul> <li>Sex is safe and does not harm the baby. It is normal to have mixed feelings and thoughts about sex.</li> <li>DO NOT HAVE SEX IF YOU HAVE:</li> <li>★ Vaginal or abdominal pain</li> <li>★ Blood or fluid leaking from your vagina</li> <li>★ Been advised against it by your provider</li> </ul>
Skin changes/stretch marks	<ul> <li>It is common to have skin changes such as stretch marks or darker spots on your abdomen, face, and breasts.</li> <li>→ Eat a good diet (especially those with vitamin C foods)</li> <li>→ Although no topicals have proven to prevent stretch marks, there's no harm in applying cocoa or shea butter. Even if they don't prevent stretch marks, it can help with dry skin and itching associated with pregnancy-stretched skin.</li> </ul>
Sleep	<ul> <li>As your belly grows, sleeping on your back may not be good for you. It puts the weight of your uterus on your spine and back muscles. In the second and third trimesters, lying on your back may compress a major blood vessel that takes blood to your uterus, making you feel dizzy and possibly reducing blood flow to your fetus.</li> <li>★ Sleeping on your side during your second and third trimesters may be best.</li> <li>★ Keep one or both knees bent.</li> <li>★ It may help to place a pillow between your knees and another under your belly.</li> <li>★ Try a full-length body pillow for support.</li> </ul>

Vaginal Discharge	Increased hormones in pregnancy can cause an increase in vaginal discharge. Call the office if you notice any foul-smelling discharge, vaginal itchiness/burning, bleeding, or any gush or trickling of thin, water-like fluid.
Varicose Veins	<ul> <li>This is common with the added weight of pregnancy. At times, varicose veins can be painful. For this, we recommend seeing your PCP.</li> <li>→ Avoid standing for long periods of time</li> <li>→ Wear compression stockings to improve circulation</li> </ul>

# **Travel in Pregnancy**

Traveling <u>domestically</u> during pregnancy is fine until 36 weeks (1 month prior to your due date) as long as your pregnancy remains uncomplicated. Traveling <u>internationally</u> is typically fine until 32 weeks, though we do recommend checking ahead with your airline to see if they have any specific guidelines or restrictions.

Whether traveling by car, train, or plane, we recommend the following tips:

- frequent walks/getting up and moving around every 2-3 hours
- wear your seatbelt
- compression/support socks to help promote good circulation
- adequate hydration
- avoid restrictive clothing
- wear loose fitting shoes, in case your feet swell
- check with the specific airline/carrier for any restrictions that they may have.
- research the closest hospital to your destination that cares for pregnant patients.
- check <u>CDC.gov</u> and/or <u>travel.state.gov</u> before booking
- bring your prenatal record with you

For most air travelers, the risks to the fetus from exposure to cosmic radiation, noise and vibration are negligible. (ACOG, 2018 Committee Opinion #746) It is safe to go through the metal detector and the full body x-ray, but you can always opt for a "pat down" by a same-sex TSA official.

If you have any complications, you should check with your provider before planning a trip.

# Cord blood and tissue banking

The blood in a baby's umbilical cord (cord blood) contains special cells which may be used to treat a variety of lifethreatening diseases including leukemia, other cancers, and blood and immune disorders. Cord blood is collected immediately after the birth of a baby and may be stored privately (for a fee) or donated (at no cost) to a public donor bank (*not currently available*). There are a few companies that specialize in cord blood banking and our office can refer you to them if you are interested. If you are considering banking your child's cord blood, it is important to contact a company as early in your pregnancy as possible to allow time to complete paperwork, and to ensure that supplies necessary for harvesting the cord blood are present at your delivery. This is an optional service– please let your provider know if you have any additional questions or would like to speak with a representative.

# Vaccines During and After Pregnancy (cdc.gov)

### A pregnant person should get vaccinated against:

- Whooping cough (Tdap vaccine): During each pregnancy
- Flu: If you are pregnant during flu season
- COVID-19: If you are pregnant and not up to date on your COVID-19 vaccine.
- Respiratory syncytial virus (RSV): If you are 32 through 36 weeks pregnant during September to January.

A baby gets disease immunity (protection) from mom during pregnancy. This immunity can protect a baby from some diseases during the first few months of life, but immunity decreases over time.

- 1. Whooping cough, also known as pertussis, can be serious for anyone, but for a newborn, it can be life-threatening.
  - a. About 7 out of 10 deaths from whooping cough are among babies younger than 2 months old. These babies are too young to receive a whooping cough vaccine. The younger the baby is when they get whooping cough, the more likely they will need to be treated in a hospital.
  - b. When a pregnant person gets a whooping cough vaccine <u>during pregnancy</u>, their body will create protective antibodies and pass some of them to the baby before birth. These antibodies will provide the baby with some short-term, early protection against whooping cough. CDC recommends getting a whooping cough vaccine during the 27<sup>th</sup> through 36<sup>th</sup> week of each pregnancy, preferably during the earlier part of this time period.
- 2. *Flu:* Pregnant people are more likely to have <u>severe illness from flu</u>, possibly due to changes in immune, heart, and lung functions during pregnancy.
  - a. Make sure to receive your yearly flu vaccine —it's the best way for a pregnant woman to protect against the flu and protect the baby for several months after birth from flu-related complications.

CDC recommends **getting a flu vaccine by the end of October** despite flu seasons varying in their timing from season to season. This timing helps protect a pregnant woman before flu activity begins to increase.

- 3. *RSV:* There are two ways to protect your baby from getting very sick with RSV. You can choose to get RSV vaccine during weeks 32 through 36 of your pregnancy during September to January, or your baby aged 8 months or younger can get RSV immunization during their first RSV season. If you have questions about getting vaccinated, talk to your healthcare provider.
- 4. *COVID-19:* The CDC recommends vaccination for everyone aged 6 months and older. Pregnant people are more likely to get severely ill with COVID-19 compared with non-pregnant people. If you are pregnant, you should stay up to date on your COVID-19 vaccine. Getting a COVID-19 vaccine during pregnancy can protect you and your baby from severe illness from COVID-19. If you have questions about getting vaccinated, talk to your healthcare provider.

# Weight Gain

Weight gain during pregnancy will vary from woman to woman. Pregnant women require about 300 additional calories above what was needed when they were not pregnant. These additional calories should be from healthy foods. Healthy weight gain varies depending upon your pre-pregnancy body mass index (BMI). From our experience, most women feel better and have fewer complications if their weight gain is reasonable. Generally speaking, "slow and steady" wins the race! Gradual weight gain is best for you and the baby. We will review your diet with you if we feel you are gaining too little or too rapidly or if you request such a review.

Pre-pregnancy BMI	Recommended Total Gain
Underweight – BMI of < 18.5	28-40 lbs.
Normal weight – BMI 18.5-24.9	25-35 lbs.
Overweight – BMI 25-29.9	15-25 lbs.
Obese – BMI > 30	11-20 lbs.

# Exercise

Examples of <i>approved</i> exercises	AVOID
Gentle aerobics (limit bouncing/low impact)	Exercises that use your lower ab muscles
Walking	Ex: leg lifts, heavy lifting, sit-ups
Swimming	Skiing (downhill or cross country)
Biking	Skating
Tennis	Waterskiing
Prenatal Yoga	Rollerblading
Gardening	Shoveling snow
	Scuba diving
	Hot Yoga/activities that cause you to overheat.
	Contact sports

- You are encouraged to keep active in pregnancy *unless* you have been told otherwise.
- Try to exercise at least 3-4 times/week for 30 minutes.
- When you exercise, start slowly, progress gradually, and cool down slowly.
- You should be able to comfortably carry on a conversation while exercising. If not, you may be overdoing it.
- Take frequent breaks.
- Avoid jerky, bouncing, and high-impact movements. Connective tissues stretch much more easily during pregnancy. So, these types of movements put you at risk of joint injury.
- Make sure you drink lots of fluids before, during, and after exercising.
- Do not workout in extreme heat or humidity.
- If you feel uncomfortable, short of breath, or tired, take a break and take it easier when you exercise again.



United States Department of Agriculture



### Find Your Healthy Eating Style

Choose a variety of foods and beverages to build your own healthy eating style. Include foods from all food groups: fruits, vegetables, grains, dairy, and protein foods.

### Making Healthy Food Choices

- Make half your plate fruits and vegetables. Choose fresh, frozen, canned, dried, and 100% juice. Include dark-green, red, and orange vegetables; beans and peas; and starchy vegetables.
- Make at least half your grains whole grains. Try oatmeal, popcorn, whole-grain bread, and brown rice.
- Move to low-fat or fat-free milk, yogurt, or cheese. Fortified soy beverages also count.
- Vary your protein routine. Choose seafood, lean meats and poultry, eggs, beans and peas, soy products, and unsalted nuts and seeds.

The amount and types of food you eat is an important part of a healthy eating style. Before you eat, think about what and how much food goes on your plate or in your cup, bowl, or glass.

- Use the Nutrition Facts label and ingredients list to limit items higher in sodium, saturated fat, and added sugars. Drink water instead of sugary drinks. Choose vegetable oils instead of butter.
- Enriched grains, beans, peas, oranges, spinach, or other dark-green leafy vegetables can help you get the folate-rich food you need.

# •♀ Visit Your Doctor Regularly

#### **Doctors Recommend:**

- Pregnant women and women who may be pregnant need to avoid alcohol and smoking. Ask for advice about caffeine, dietary supplements, and drug use.
- In addition to eating a healthy diet, take a prenatal vitamin and mineral supplement containing folic acid.
- Feed your baby only human milk (also known as breast milk) for the first 6 months.

#### How Much Weight Should I Gain?

- The right weight gain depends on your weight when you became pregnant. If your weight was in the healthy range, you should gain between 25 and 35 pounds. If you were overweight or underweight before becoming pregnant, the advice is different.
- Gain weight gradually. For most women, this means gaining a total of 1 to 4 pounds during the first 3 months.
   Gain 2 to 4 pounds each month from the 4th to 9th month.

# **Daily Food Checklist**

The Checklist shows slightly more amounts of food during the 2nd and 3rd trimesters because you have changing nutritional needs. This is a general checklist. You may need more or less amounts of food.\*

Food Group	1st Trimester	2nd and 3rd Trimesters	What counts as 1 cup or 1 ounce?
	Eat this amount f	rom each group daily.*	
Fruits	2 cups	2 cups	1 cup fruit or 100% juice ½ cup dried fruit
Vegetables	2½ cups	3 cups	1 cup raw or cooked vegetables or 100% juice 2 cups raw leafy vegetables
Grains	6 ounces	8 ounces	1 slice bread 1 ounce ready-to-eat cereal ½ cup cooked pasta, rice, or cereal
Protein Foods	5½ ounces	6½ ounces	1 ounce lean meat, poultry, or seafood ¼ cup cooked beans ½ ounce nuts or 1 Tbsp peanut butter 1 egg
Dairy	3 cups	3 cups	1 cup milk 8 ounces yogurt 1½ ounces natural cheese 2 ounces processed cheese

\*If you are not gaining weight or gaining too slowly, you may need to eat a little more from each food group.

If you are gaining weight too fast, you may need to cut back by decreasing the amount or change the types of food you are eating.

Get a Daily Food Checklist for Moms designed just for you. Go to ChooseMyPlate.gov/Checklist.



### Seafood

Seafood is part of a healthy diet. Omega-3 fats in seafood can have important health benefits for you and your developing baby. Salmon, sardines, and trout are some choices higher in omega-3 fats and lower in contaminants such as mercury.

- Eat at least 8 and up to 12 ounces of a variety of seafood each week from choices that are lower in mercury.
- Eat all types of tuna, but limit white (albacore) tuna to 6 ounces each week.
- Do not eat tilefish, shark, swordfish, and king mackerel since they are highest in mercury.

Learn about other nutrition assistance programs: http://www.benefits.gov/ × 1

# Being Physically Active

Unless your doctor advises you not to be physically active, include 2½ hours each week of physical activity such as brisk walking, dancing, gardening, or swimming. The activity can be done for at least 10 minutes at a time, and preferably spread throughout the week. Avoid activities with a high risk of falling or injury.

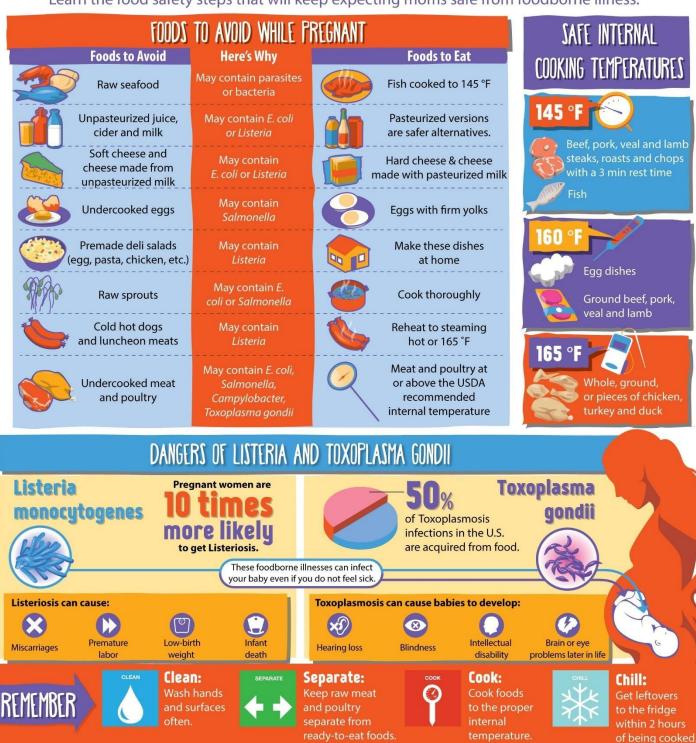
Food and Nutrition Service



Based on the Dietary Guidelines for Americans and http://www.fns.usda.gov/wic/guidance

# FOOD SAFETY for Baby and Me

Learn the food safety steps that will keep expecting moms safe from foodborne illness.



For more food safety tips, go to

FoodSafety.gov

**ADDITIONAL SOURCE: CDC** 

# **ADVICE ABOUT EATING FISH**

For Those Who Might Become or Are Pregnant or Breastfeeding and Children Ages 1 – 11 Years



# Fish<sup>‡</sup> provide key nutrients that support a child's brain development.

Fish are part of a <u>healthy eating pattern</u> and provide key nutrients during pregnancy, breastfeeding, and/or early childhood to support a **child's brain development**:

- · Omega-3 (called DHA and EPA) and omega-6 fats
- Iron
- lodine (during pregnancy)
- Choline

Choline also supports development of the **baby's spinal cord**. Fish provide iron and zinc to support **children's immune systems**. Fish are a source of other nutrients like protein, vitamin B12, vitamin D, and selenium too.



### Choose a variety of fish that are lower in mercury.

While it is important to limit mercury in the diets of those who are pregnant or breastfeeding and children, many types of fish are both nutritious and lower in mercury.

#### This chart can help you choose which fish to eat, and how often to eat them, based on their mercury levels.

# What is a serving? As a guide, use the palm of your hand. Childhood: On average, a serving is about: On average, a serving is about: 1 serving is 4 ounces 1 serving is 4 ounces Eat 2 to 3 servings a week from the "Best Choices" list (OR 1 serving from the "Good Choices" list). I ounce at age 1 to 3 2 ounces at age 8 to 10 4 ounces at age 11 Eat 2 servings a week from the "Best Choices" list). Eat 2 servings a week from the "Best Choices" list.

Best Choices	S		Good Choices		
Anchovy Atlantic croaker Atlantic mackerel Black sea bass Butterfish Catfish Clam Cod	Herring Lobster, American and spiny Mullet Oyster Pacific chub mackerel Perch, freshwater and ocean	Scallop Shad Shrimp Skate Smelt Sole Squid Tilapia	Bluefish Buffalofish Carp Chilean sea bass/ Patagonian toothfish Grouper Halibut Mahi mahi/dolphinfish	Monkfish Rockfish Sablefish Sheepshead Snapper Spanish mackerel Striped bass (ocean)	Tilefish (Atlantic Ocean) Tuna, albacore/ white tuna, canned and fresh/frozen Tuna, yellowfin Weakfish/seatrout White croaker/ Pacific croaker
Crab Crawfish	Pickerel Plaice	Trout, freshwater Tuna, canned light	Choices to Avoi		EVELS
Flounder Haddock Hake	Pollock Salmon Sardine	(includes skipjack) Whitefish Whiting	King mackerel Marlin Orange roughy	Shark Swordfish	Tilefish (Gulf of Mexico) Tuna, bigeye

What about fish caught by family or friends? Check for fish and shellfish advisories to tell you how often you can safely eat those fish. If there is no advisory, eat only one serving and no other fish that week. Some fish caught by family and friends, such as larger carp, catfish, trout and perch, are more likely to have fish advisories due to mercury or other contaminants.

www.FDA.gov/fishadvice www.EPA.gov/fishadvice U.S. FOOD & DRUG SEPA Environ

‡ This advice refers to fish and shellfish collectively as "fish" / Advice revised October 2021

#### CONTINUED

# **ADVICE ABOUT EATING FISH**

For Those Who Might Become or Are Pregnant or Breastfeeding and Children Ages 1 - 11 Years



# The *Dietary Guidelines for Americans* recommends eating fish as part of a healthy eating pattern.

The Dietary Guidelines for Americans recommends:

- At least 8 ounces of seafood (less for children§) per week based on a 2,000 calorie diet.
- Those who are pregnant or breastfeeding consume between
   8 and 12 ounces per week of a variety of seafood from choices that are lower in mercury.





### Eating fish can provide other health benefits too.

Fish intake during pregnancy is recommended because moderate scientific evidence shows it can help your baby's cognitive development.

Strong evidence shows that eating fish, as part of a healthy eating pattern, **may have heart health benefits.** <u>Healthy eating patterns</u> that include fish may have other benefits too. Moderate scientific evidence shows that eating patterns relatively higher in fish but also in other foods, including vegetables, fruits, legumes, whole grains, low- or non-fat dairy, lean meats and poultry, nuts, and unsaturated vegetable oils, and lower in red and processed meats, sugar-sweetened foods and beverages, and refined grains are associated with:



Promotion of bone health decreases the risk for hip fractures\*

Decreases in the risk of becoming overweight or obese\*



Decreases in the risk for colon and rectal cancers\*

#### A healthy eating pattern

consists of choices across all food groups (vegetables, fruits, grains, dairy, and protein foods, which includes fish), eaten in recommended amounts, and within calorie needs. Healthy eating patterns include foods that provide vitamins, minerals, and other health-promoting components and have no or little added sugars, saturated fat, and sodium.

This advice supports the recommendations of the <u>Dietary Guidelines for Americans</u>, which reflects current science on nutrition to improve public health. The Dietary Guidelines for Americans focuses on dietary patterns and the effects of food and nutrient characteristics on health.

§ For some children, the amounts of fish in the Dietary Guidelines for Americans are higher than in this FDA/EPA advice. The Dietary Guidelines for Americans states that to consume those higher amounts, children should only be fed fish from the "Best Choices" list that are even lower in mercury – these fish are anchovies, Atlantic mackerel, catfish, clams, crab, crawfish, flounder, haddock, mullet, oysters, plaice, pollock, salmon, sardines, scallops, shad, shrimp, sole, squid, tilapia, trout, and whiting.

- \* There is moderate scientific evidence of a relationship between the eating pattern as a whole and the potential health benefit.
- ‡ This advice refers to fish and shellfish collectively as "fish" / Advice revised October 2021

# Infections/Exposures

Some infections are potentially harmful in pregnancy, and interventions should be taken to minimize the risk of these infections. In general, pregnant people should avoid contact with people with febrile illnesses that could be infectious and should practice good personal hygiene. **Preventing most infections is based on consistent use of good personal infection control practices throughout pregnancy.** 

• **Toxoplasmosis** – Prevention of primary infection is based on avoidance of sources of infection, which include ingestion of contaminated, undercooked, or cured meat or meat products; soil-contaminated fruits or vegetables; or contaminated unfiltered water. Individuals who are pregnant should avoid accidental contact with cat feces through touching hands to mouth after gardening, handling cats, cleaning a cat's litter box, or touching anything that encounters cat feces. Routine screening is performed in some countries, but not in the United States.

• **Cytomegalovirus** – Prevention of primary cytomegalovirus (CMV) infections is based on good personal hygiene throughout pregnancy, especially hand washing with soap and water after contact with diapers or oral and nasal secretions (particularly with a child who is in daycare), not kissing children under age 6 on the mouth or cheek; not sharing food, drinks, or oral utensils with young children; and cleaning toys, countertops, and other surfaces that come into contact with children's urine or saliva.

• Varicella – Prevention is based on pre-pregnancy immunity and avoidance of significant exposure to varicella (chicken pox) infection, which is highly contagious.

• **Parvovirus** – Young children are the main source of respiratory-acquired parvovirus B19. The best measures to prevent maternal infection are good personal infection control practices, such as hand hygiene; not touching the eyes, mouth, or nose; avoiding close contact with sick individuals; and teaching children to cover their mouth and nose with an elbow or tissue when sneezing or coughing. Many pregnant people have preexisting immunoglobulin G (IgG) to the virus, indicating immunity from a prior infection; those who are exposed to or have symptoms of parvovirus infection should have serologic testing for IgG and IgM antibodies, and if acutely infected, they should be monitored for fetal effects.

• Zika virus – Given an association between Zika virus exposure during pregnancy and congenital microcephaly (a birth defect where a baby's head is smaller than expected), pregnant people are advised to consider postponing travel to areas with ongoing mosquito transmission of Zika virus. Those who must travel are advised to take precautions against mosquito bites, including wearing long-sleeved shirts and pants, staying in places with air conditioning, sleeping under a mosquito net, and using an approved insect repellent such as DEET. In addition, pregnant people whose sexual partner has traveled to affected regions should abstain from sexual activity (vaginal, anal, and oral sex) or use condoms for the duration of the pregnancy.

• Listeria and other foodborne infections – To reduce the risk of foodborne illness, pregnant people should practice good personal hygiene (frequent hand washing); consume only meats, fish, and poultry (including eggs) that are fully cooked; avoid unpasteurized dairy products and fruit/vegetable juices; thoroughly rinse fresh fruits and vegetables under running water (approximately 30 seconds) before eating; avoid eating raw sprouts (including alfalfa, clover, radish, and mung bean); avoid bagged salads; and wash hands, food preparation surfaces, cutting boards, dishes, and utensils that come into contact with raw meat, poultry, or fish using hot, soapy water.

• Severe acute respiratory syndrome coronavirus 2 (Covid) – Pregnant people should follow the same recommendations as nonpregnant persons for avoiding exposure to Covid and being up to date on SARS-CoV-2 vaccination.

# **Environmental Risks**

It is impossible to completely control the environment and our surroundings. Although you do not need to worry about everything you breathe in or eat, it is recommended to avoid exposure to certain chemicals/substances that may put your pregnancy or unborn baby's health at risk.

During pregnancy, avoid exposure to:

- Lead found in some water and paints, mainly in homes built before 1978.
- Mercury the harmful form is found mainly in large, predatory fish.
- Arsenic high levels can be found in some well water.
- Pesticides both household products and agricultural pesticides
- Solvents such as degreasers and paint strippers and thinners
- Nicotine/smoking cigarettes crosses the placenta and can influence the infant's weight and brain development. Avoid smoking and exposure to secondhand smoke in pregnancy as both can cause complications.
- Marijuana crosses the placenta and may impact the baby's development.
- Alcohol- use during pregnancy is associated with an increased risk of miscarriage, preterm birth, stillbirth, and sudden infant death syndrome (SIDS). Alcohol use during pregnancy can also cause a range of lifelong behavioral, intellectual, and physical disabilities known as fetal alcohol spectrum disorders (FASDs). *The Surgeon General and Secretary of Health and Human Services advised that the only completely safe choice is to not consume alcohol during pregnancy.*
- Saccharin (Sweet N' Low) Saccharin is a weak carcinogen that crosses the placenta. It is not recommended during pregnancy.
- Radiation used in certain medical and industrial jobs.
- Illegal/street drugs

Keep in mind: We don't know how much exposure can lead to problems, such as miscarriage or birth defects. That is why it's best to avoid or limit your exposure as much as possible. Here are some simple, day-to-day precautions you can take:

- Clean in only well-ventilated spaces. Open the windows or turn on a fan.
- Check product labels for warnings for pregnant women and follow instructions for safe use.
- Do not clean the inside of an oven while pregnant.
- Leave the house if paint is being used, and don't return until the fumes are gone.

If you are exposed to chemicals in the workplace, talk to your doctor and your employer about what you can do to lower your exposure. Certain industries, such as dry cleaning, manufacturing, printing, and agriculture, involve the use of toxins that could be harmful. If you are concerned about the safety of your drinking water, call your health department or water supplier to ask about the quality of your tap water or how to have your water tested. You could also call the Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791. Don't assume that bottled water is better or safer. Usually, bottled water offers no health benefits over tap water.

# **Genetic Testing**

### Non-Invasive Prenatal Screening with cell-free DNA:

The purpose of the cell-free DNA test (NIPS) is to screen pregnancies to determine which ones are at high risk for the fetus to have extra or missing copies of the specific chromosomes 21, 18, 13, X, and Y, as well as a common microdeletion (missing piece of chromosome) known as 22q11.2 (DiGeorge syndrome). The cell-free DNA test is a blood test available for women who are at least 9 weeks pregnant. This test only provides information about the risk of these abnormalities in your <u>current pregnancy</u>.

### Table1: What is screened as part of the standard Panorama panel:

Trisomy 21	Trisomy 21 (T21) is caused by an extra copy of chromosome 21 and is also
	called <i>Down syndrome</i> . This is the most common cause of genetic intellectual
	disability; individuals with T21 have an average IQ of 50. Some children with
	T21 have defects of the heart or other organs that may require surgery or
	medical treatment. T21 affects approximately 1 in 700 births and the risk of
	conceiving a child with T21 increases with a woman's age.
Trisomy 18	Trisomy 18 (T18) is caused by an extra copy of chromosome 18 and is also
	known as Edwards syndrome. T18 causes severe intellectual disability, and
	most babies with T18 have multiple severe birth defects of the brain, heart,
	and other organs. Poor growth during pregnancy is common and many babies
	are miscarried or stillborn. Of those babies born alive, most die before one year
	of age. Babies who survive have profound intellectual disabilities and growth
	and development problems. T18 occurs in approximately 1 in 6,000 live births.
	The risk of conceiving a child with T18 increases with a woman's age.
Trisomy 13	Trisomy 13 (T13) is caused by an extra copy of chromosome 13 and is also
	called Patau syndrome. This causes severe intellectual disability. Most babies
	with T13 have multiple severe birth defects of the brain and other organs.
	Many babies are miscarried or stillborn. Of those babies born alive, most die
	before one year of age. T13 affects somewhere between 1 in 10,000 and 1 in
	21,700 live births. The risk of conceiving a child with T13 increases with a
	woman's age.
Monosomy X	Monosomy X is caused by a missing copy of the X chromosome and is also
	known as <i>Turner syndrome</i> . Monosomy X only affects girls. Girls with
	Monosomy X are shorter than average. Some have heart or kidney defects,
	difficulty with hearing, and minor learning disabilities. Girls with Monosomy X
	may need growth hormone treatments in early childhood and usually need sex
	hormone treatments at the time of puberty. As adults, they often have
	infertility. The incidence of Monosomy X in live female births is approximately
	1 in 2,000.
22q11.2 Deletion Syndrome	22q11.2 deletion syndrome is also known as <i>DiGeorge syndrome</i> . It is caused
	by a small missing piece of chromosome 22. It is found in approximately 1 in
	2,000 newborns. Most children with this condition have a mild to moderate
	intellectual disability and delayed speech and language. Many have heart
	defects, immune system problems, and other health problems. Some people
	with this condition have an autism spectrum disorder and some have
	psychiatric illnesses such as schizophrenia.
	psychiatre infesses such as senicophrenia.

\*The **expanded** Panorama includes everything in the standard panel and screens for an additional 5 microdeletions. More information regarding this is on their website: <u>https://www.natera.com/womens-health/panorama-nipt-prenatal-screening/</u>

NIPS results are typically sent back to our office in 7-10 business days and can include:

- A "High Risk" result: a result indicative that the test has detected a very high chance for the fetus to
  have one of the chromosomal abnormalities described in the above table. The specific risk will be listed
  in the report. A "High Risk" result <u>does not confirm</u> that your baby has one of the chromosomal
  conditions tested. The recommended follow up to this result would be a diagnostic test such as
  chorionic villi sampling (CVS) or amniocentesis. A referral to a genetic counselor may also be indicated.
- A "Low Risk" result means that the test detected a very low chance for the fetus to have one of the chromosomal abnormalities described above.
- "No results" or "Indeterminate" which can be due to a finding outside the scope of testing; a finding suggestive of a third profile (vanishing twin or triplet pregnancy); low fetal fraction (often related to maternal weight, maternal age, and gestational age); or insufficient fetal DNA. A second sample may be required to repeat the test (at no charge to you). In rare cases, a second sample will not meet testing requirements and be unable to yield any results.

Because cell-free DNA tests for material from the Y chromosome, it can identify the sex of the fetus. <u>We will ask</u> you whether you would like to know the sex of your baby at time of testing.

\*Screening tests cannot detect all birth defects, nor do they provide definite answers about whether a baby has a certain condition. Each test can provide reassurance within the limits of what the test can screen for. Thus, a normal result provides reassurance but is not a guarantee. Likewise, if the test results suggest an increased risk of having the defect, this does not provide you with a final diagnosis. Only a diagnostic test such as an amniocentesis or chorionic villi sampling can *diagnose* a chromosomal abnormality.

### Test Limitations:

Although this screening test will detect most chromosomal abnormalities described in Table 1, it cannot detect 100% of these abnormalities. A "Low Risk" result reduces the chances that your fetus has an extra or missing/abnormal copy of one of the tested chromosomes, but it cannot guarantee normal chromosomes or a healthy baby. The results of this test do not eliminate the possibility of other abnormalities of the tested chromosomes, and it does not detect abnormalities of untested chromosomes, other genetic disorders, birth defects, or other complications in your fetus or pregnancy.

While the results of cell-free DNA are highly accurate, infrequent errors may be due to unusual DNA sequences in the DNA analyzed or other causes.

_	Trisomy 21	Trisomy 18	Trisomy 13	Sex Chromosome Aneuploidy (XXX, XY, XYY, 45, X)	Microarray or Rare Chromosomal Abnormality	All Chromosomal Abnormalities
Age 20	8 per 10,000	2 per 10,000	1 per 10,000	34 per 10,000	37 per 10,000	82 per 10,000
	1 in 1,250	1 in 5,000	1 in 10,000	1 in 294	1 in 270	1 in 122
Age 25	10 per 10,000	2 per 10,000	1 per 10,000	34 per 10,000	37 per 10,000	84 per 10,000
	1 in 1,000	1 in 5,000	1 in 10,000	1 in 294	1 in 270	1 in 119
Age 30	14 per 10,000	4 per 10,000	2 per 10,000	34 per 10,000	37 per 10,000	91 per 10,000
	1 in 714	1 in 2,500	1 in 5,000	1 in 294	1 in 270	1 in 110
Age 35	34 per 10,000	9 per 10,000	4 per 10,000	35 per 10,000	37 per 10,000	119 per 10,000
	1 in 294	1 in 1,111	1 in 2,500	1 in 285	1 in 270	1 in 84
Age 40	116 per 10,000	30 per 10,000	14 per 10,000	51 per 10,000	37 per 10,000	248 per 10,000
	1 in 86	1 in 333	1 in 714	1 in 196	1 in 270	1 in 40

### Table 1. Chromosomal Abnormalities in Second-Trimester Pregnancies Based on Maternal Age at Term

Data from:

Srebniak MI, Joosten M, Knapen MF, Arends LR, Polak M, van Veen S, et al. Frequency of submicroscopic chromosomal aberrations in pregnancies without increased risk for structural chromosomal aberrations: systematic review and meta-analysis. Ultrasound Obstet Gynecol 2018;51:445–52.

Hook EB. Rates of chromosome abnormalities at different maternal ages. Obstet Gynecol 1981;58:282-5.

Gravholt CH, Juul S, Naeraa RW, Hansen J. Prenatal and postnatal prevalence of Turner's syndrome: a registry study. BMJ 1996;312:16–21.

Snijders RJ, Sebire NJ, Nicolaides KH. Maternal age and gestational age-specific risk for chromosomal defects. Fetal Diagn Ther 1995;10:356–67.

Snijders RJ, Sundberg K, Holzgreve W, Henry G, Nicolaides KH. Maternal age- and gestation-specific risk for trisomy 21. Ultrasound Obstet Gynecol 1999;13:167–70.

Forabosco A, Percesepe A, Santucci S. Incidence of non-age-dependent chromosomal abnormalities: a population-based study on 88965 amniocenteses. Eur J Hum Genet 2009;17:897–903.

Crider KS, Olney RS, Cragan JD. Trisomies 13 and 18: population prevalences, characteristics, and prenatal diagnosis, metropolitan Atlanta, 1994–2003. Am J Med Genet A 2008;146A:820–6.

Irving C, Richmond S, Wren C, Longster C, Embleton ND. Changes in fetal prevalence and outcome for trisomies 13 and 18: a population-based study over 23 years. J Matern Fetal Neonatal Med 2011;24:137–41.

### Prenatal Diagnostic Procedures:

All patients interested in prenatal diagnostic procedures will first meet with a genetic counselor who can explain your options and help you to make decisions about whether to proceed with testing. Both chorionic villi sampling (CVS) and amniocentesis are performed at Maternal Fetal Medicine (MFM).

**CVS**: Chorionic villus sampling (CVS) is a procedure that may be performed during pregnancy to diagnose certain genetic or chromosomal disorders in the fetus (developing baby). CVS involves having a biopsy of the developing placenta. The chorionic villi are the tiny units that make up the placenta and have the same genetic make-up as the fetus. A CVS is generally performed in the first trimester (10-13 weeks).

Amniocentesis: Amniocentesis is a test done in pregnancy that involves removing a small amount of amniotic fluid for testing. Amniotic fluid is the fluid that surrounds the fetus (developing baby) inside the uterus; it contains cells and chemicals that can give information about the health of the fetus. The most common reason for amniocentesis is to determine for sure whether a fetus has Down syndrome or other genetic syndromes. This test is usually done around 16 weeks of pregnancy. Amniocentesis is an elective procedure, and most people do not need to have it performed.

### **Carrier Screening for Genetic Disease**

### What causes a genetic disease?

Many genetic diseases are "autosomal recessive." Autosomal recessive diseases occur when a person has <u>two</u> mutations (changes) in their genes. The two mutations are inherited from their parents – one from their mother and one from their father. The person's parents are called "carriers," which means they have one mutated and one normal gene. In autosomal recessive disease, one mutation is usually not enough to cause any health problems. In fact, since carriers are often healthy, most do not know they are carriers until they have a child born with the disease.

When both parents are carriers of a mutation for the same disease, there is a 25% chance (1 in 4) of passing both mutations to the child, who can then be affected by the disease. Carrier screening screens for autosomal recessive and X-linked conditions.

### How can I determine my carrier status?

DNA testing is available to identify genetic disease carriers. It is important to remember that while these tests are accurate at identifying many carriers, they cannot detect all carriers.

### What can I do about my results?

If carrier testing identifies that both parents are carriers, there is a 25% chance of having a child with the disease. Some couples may choose to have testing during pregnancy to determine whether the disease was inherited. Others may choose not to do testing but could prepare for the possible birth of a child with a genetic disease.

### What are the limitations to genetic screening?

The primary limitation is that not all carriers will be identified. This occurs because most screening tests are looking for the most common mutations, so an individual with a rare mutation may not be detected. Further genetic testing may be helpful, depending on individual circumstances, family history, and test results. You may consult with a genetic counselor about your results.

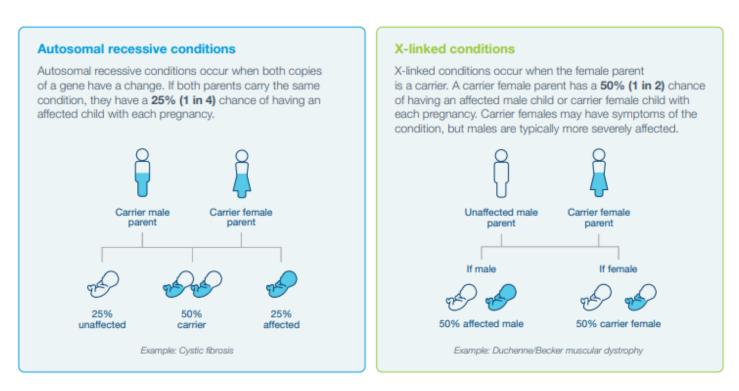
### What is the chance that I am a carrier?

Your chance often depends on your ancestry. If you have a family history of genetic disease, your chance may be higher. When testing for high-risk diseases, a person will have a 5-20% chance of being a carrier of at least one high-risk disease.

We know that certain disease conditions are more prevalent in individuals of Eastern European descent. Most individuals of Jewish ancestry in North America are descended from Ashkenazi Jewish communities and thus, are at increased risk for having offspring with one of these conditions. Also, people of French Canadian and African American ancestry are at increased risk for some conditions.

Recent large-scale studies have shown that many people are carriers of diseases that are not typically associated with their stated ethnicity. For this reason, it is now recommended that people be screened for a wider panel of conditions. The disease panel used at AWBW for most patients includes 27 conditions. The expanded panel includes 421 conditions.

https://www.natera.com/womens-health/horizon-advanced-carrier-screening/



### How much do these tests (NIPT & carrier screening) cost?

#### **PRIOR TO TESTING:**

- To determine your financial responsibility *prior to testing*, we recommend you text Natera the word "COVERAGE" to 636363.
- Natera will *estimate* your coverage and out-of-pocket cost. They can also assist you with any billing questions you may have. They may tell you a Prior Auth will be required from your doctor's office, as they do not know that About Women By Women is enrolled in Natera's Prior Auth services, which ensures Prior Authorizations are automatically done by Natera if required by your insurance once your sample/s arrive at their lab. About Women by Women is *not* involved in the Prior Authorization process.
- Please do not contact your insurance as this has caused confusion and inaccurate information in our experience. We are unable to provide any CPT codes for the tests you are considering.
- The cost of these tests could be significant when going through insurance if you have a <u>high deductible</u> which has not been met. However, throughout your pregnancy you are likely to meet your deductible at some point (especially when you deliver) so you may want to have these tests applied to the deductible to have the deductible met depending on when you are due to deliver and when your deductible resets.
- > Please keep in mind this is not a "medically necessary" test, but an optional screening test.

### **AFTER TESTING:**

In addition to the initial coverage estimate, Natera has a "Price Transparency Program" (PTP). Once your specimen arrives at their lab, they will run your insurance *again* to estimate an out-of-pocket cost. If at this point, they determine you owe *more* than the self-pay rates (outlined below), they will reach out to you via text/email (be sure to check your Spam and Junk folders).

At this point, they will offer you the option to proceed with billing your insurance or instead choosing the self-pay option. If you get this communication, it is very important and clearly states that you must respond by a specific date. Otherwise, Natera will proceed with billing your insurance. Please make sure your contact information is correct.

### **BILLING WITH INSURANCE:**

You may receive an Explanation of Benefits (EOB) from your insurance company which states your claim is denied. If your claim is denied, <u>Natera will appeal it</u>. Do **not** be concerned with the price it states you owe (it could be more than \$2,000). You will not be billed this amount. If the appeal is denied, Natera will bill you for the discounted self-pay rate. Please note, this is only if it is denied, not if it is applied to your deductible/coinsurance.

Self-pay rates:	<ul> <li>Panorama with or without 22q11.2: \$249</li> <li>Panorama with Microdeletions: \$349</li> </ul>
	<ul> <li>Horizon 14/27: \$249</li> <li>Horizon 106+: \$349</li> </ul>
If drawn on the same date	<ul> <li>Panorama with Horizon 14/27: \$349</li> <li>Panorama with Horizon 106+: \$449</li> </ul>

### Still have questions regarding your Natera billing?

1. Call Natera at 844-611-2787

2. Call or email our account support representative.

Emmary Kelland Cell: 603-438-6241 enelson@natera.com

# **INSURANCE CHANGES DURING CARE**

- About Women By Women has commenced your pregnancy care under the insurance you have in effect as of your visit with us TODAY (at your intake appointment). If at any point during your care your insurance changes, you MUST notify us immediately.
- Consumers are allowed to change insurance either during open enrollment (for you or your spouse) or during a "Life Event" i.e. job change, marital status change, birth, or death.
- Please be aware that any insurance change during your pregnancy may affect your financial responsibility. If patients have more than one active insurance on the date of delivery, it will be determined by the insurance companies involved as to which policy is billed as primary, and which is secondary. Neither patients nor AWBW choose which plan to bill.
- When there are two active insurance plans, the patient must contact each insurance company for "coordination of benefits." Failure to properly coordinate benefits will result in a greater out-of-pocket responsibility to you. Additionally, please ensure that your legal name (photo ID) must always match exactly what is on your insurance card to ensure smooth claims processing.

# Disability Benefits During Maternity Leave

Many women and their partners have paperwork that needs to be completed for pregnancy-related or parental leave. To ensure this process is smooth and efficient, please follow the policy below:

- Contact your Human Resources department to check your employers' benefits and process. They will provide you with all required documents needed for your leave.
- Any paperwork that is needed prior to delivery must be submitted to our office prior to 36 weeks.
- You may drop off your paperwork at the front desk staff, upload it through an attachment on Patient Gateway or have it faxed directly to 781-263-9125.
- Your due date will be the start of your leave. You will be given 12 weeks of medical leave regardless of the type of delivery. Your employer may allow more than 12 weeks of leave, if so the language of your paperwork will reflect the following: Patient is medically advised not to work for 12 weeks following delivery and may take up to X number of weeks per employer policy.
- If you feel you need to stop working earlier due to complications, please discuss your medical concerns with a provider prior to stopping work.
- Any medical extension beyond the 12-week postpartum leave will require an office visit and discussion with your provider. Detailed documentation by your provider must be in your medical records to support this.
- No form is needed for the 12-week bonding time as allowed by the state (MA PFMLA). The "Statement of Birth" is provided to you at discharge from the hospital and can be used as proof. Notify the state 1 week before you plan to start your "bonding time."
- Completed paperwork can be left for the patient to pick up at the front desk, mailed, faxed, or sent as an attachment via Patient Gateway.
- If your completed paperwork needs the actual date of delivery, you do not need to resubmit paperwork to the office. The "Statement of Birth" provided to you at discharge will be able to confirm proof of birth.

Disability paperwork requires a physician's signature. All requests will be completed within 14 business days.

# Labor and Delivery:

If you need to go to the hospital...Please call ahead to speak with the nursing office or on-call provider. This allows us to inform the hospital that you will be arriving and significantly shorten the time it will take for you to register upon arrival.

Newton Wellesley Hospital is located at 2014 Washington Street, Newton, MA 02462. Labor and Delivery is located on the fifth (5<sup>th</sup>) floor of the main hospital building.

*If you arrive between 7:00 am and 6:00 pm*: Enter through the WEST entrance off Washington Street/Route 16. The West Elevator bank is located just off the main lobby of the hospital. Take the West elevators to the fifth floor.

*If you arrive between 6:00 pm and 7:00 am*: Please use the Emergency Department entrance where you can register with the Admitting Coordinator. You will then be directed to antenatal/L+D for an evaluation.

# Pre-admission forms:

- <u>Maternity Pre-Admission Form</u> NWH Maternity form to gather patient identification, insurance information, and race / ethnicity information.
- <u>Labor and Delivery Patient Admission Data Form</u> Pre-admission form for Labor and Delivery.
- <u>Massachusetts Health Care Proxy</u> The Health Care Proxy is a simple legal document that allows you to name someone you know and trust to make healthcare decisions for you if, for any reason and at any time, you become unable to make or communicate those decisions.

Send these completed forms to: Admitting Department Newton Wellesley Hospital 2014 Washington Street

Newton, MA 02462

During your hospital stay a Birth Registry staff member will visit you and collect the required information. To reduce the amount of time the Birth Registry staff member will spend with you, complete the <u>"Mandatory Birth</u> <u>Reporting Form Certificate"</u> form at least 10 days prior to your anticipated hospital stay.

Once you have completed the worksheet mail it back to: Birth Registry Office 5 West

Newton-Wellesley Hospital 2014 Washington Street Newton, MA 02462

If you have questions about the information that is collected or problems obtaining a copy of the birth certificate from Newton City Hall, please contact the Massachusetts Registry of Vital Records and Statistics (RVRS) at <u>617-740-</u><u>2623</u>. Thank you for your cooperation!

# **Resources**

**NWH Maternity Guide:** <u>https://www.nwh.org/patient-guides-and-forms/maternity-guide</u> Newton Wellesley Hospital no longer provides printed materials, but all information can be found here!

Childbirth education classes: https://www.nwh.org/maternity/childbirth-education

**Resources for Parents and Caregivers: Pregnancy to Children Age 1**– <u>https://www.mass.gov/resources-for-parents-and-caregivers-pregnancy-to-children-age-1</u>

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

CDC (Centers for Disease Control and Prevention): www.cdc.gov

Office of Women's Health: <a href="http://www.womenshealth.gov">www.womenshealth.gov</a>

March of Dimes: <u>www.marchofdimes.org</u>

Mind Body Pregnancy: <a href="https://www.mindbodypregnancy.com/">https://www.mindbodypregnancy.com/</a>

**Mother To Baby/Pregnancy Exposure Hotline** – evidence-based information on the safety of medications & other exposures in pregnancy and while breastfeeding: <a href="http://www.mothertobaby.org">www.mothertobaby.org</a>

KellyMom -- evidence-based information on breastfeeding and parenting: www.kellymom.com

New Mom Health – the 4th trimester project: www.newmomhealth.com

Doula Match- find a doula: www.doulamatch.net

WIC (Women, Infants, & Children Nutrition Program) – <u>https://www.mass.gov/orgs/women-infants-children-nutrition-program</u>

Postpartum Support International – resource for mental health/PPD/anxiety: <u>https://www.postpartum.net/</u>

**MCPAP for Moms** – a free referral resource for front-line providers serving pregnant and postpartum women. A mother can ask her health care provider to call MCPAP for a referral: <u>https://www.mcpapformoms.org/</u>

	For pregnancy: What to Expect Healthy Living
Apps	For postpartum: Healthy Living Lovevery Huckleberry Baby Sparks Decibel Meter

	Solid Starts
Books	For pregnancy: Your Pregnancy and Childbirth by ACOG Nurture by Erica Chidi Cohen Expecting Better by Emily Oster Bumpin' by Leslie Schrock The Expectant Father by Armin Brott
	<i>For postpartum:</i> Cribsheets by Emily Oster The Fourth Trimester by Kimberly Johnson

# **Breastfeeding Resources**

### **Breastfeeding Classes**

Classes are offered at many places in the Boston area including Newton Wellesley Hospital <u>www.nwh.org/maternity/childbirth-education</u>

### Nursing Mothers Council

This organization has trained breastfeeding counselors in the Boston area who are available to answer questions and offer support for free.

www.bace-nmc.org/breastfeeding-help/

La Leche League Finding breastfeeding support groups that meet in the New England area. www.lllmarivt.org/findagroup

*Kelly Mom* Evidence-based information on breastfeeding and parenting

*Lactation Consultants* Find certified lactation consultants in your zip code. www.zipmilk.org

### **Breast Pumps**

Many insurance companies cover breast pumps at no cost to patients. Contact your insurance company to determine your coverage, and if covered, what specific medical supplier you must use. If you don't know where to start, we'd recommend checking out <a href="https://acelleron.com/breast-pumps/">https://acelleron.com/breast-pumps/</a> to see what your insurance covers, complete an order and then the prescription gets sent right to us to sign.