



WOMEN'S HEALTH & GENETICS

# Guideline-driven laboratory testing throughout the pregnancy continuum



## CONTINUUM OF PREGNANCY CARE

Overview of recommendations for preconception, pregnancy and postpartum laboratory testing based on guidelines from several medical societies and the Centers for Disease Control and Prevention (CDC)

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Tests recommended by medical societies and CDC can identify conditions that may increase the risk for both fetal and maternal complications. Identification of concerning lab results can lead to effective treatment, intervention, education and improved pregnancy outcomes.

Recommended testing includes<sup>1-6</sup>:

- Carrier screening
- Early pregnancy health screening
- Noninvasive prenatal screening
- Screening for sexually transmitted infections
- Screening for gestational diabetes
- Group B streptococcus colonization detection





## Carrier screening

According to medical society recommendations, every pregnant woman or woman considering pregnancy should be offered carrier screening for spinal muscular atrophy (SMA) and cystic fibrosis (CF).<sup>1</sup>

While some providers may only screen for CF and SMA, or select screening based on ethnicity, the case for more comprehensive screening is becoming clear. Between 2010 and 2021, there was a 276% increase in U.S. individuals identifying as multiethnic.<sup>7</sup> Medical society recommendations now include ethnic-neutral carrier screening approach for prenatal testing.

With a wide array of testing choices, Labcorp offers carrier screening for all patient backgrounds and needs. Labcorp screening and services include:

- Ethnic-neutral and multiethnic panel choices
- Comprehensive partner testing (with or without VUS)
- Prenatal diagnosis for each condition included in Inheritest® Carrier Screen
- Over 130 genetic counselors on staff to assist patients and providers

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## Early pregnancy health screening

Early screening during pregnancy can improve the health of both mothers and their newborns.<sup>8</sup>

Labcorp's Pregnancy, Initial Screening Profile supports timely, quality care during pregnancy and includes:

- Complete blood count
- Blood type, Rh factor and antibody screen
- Urinalysis
- Urine culture
- Infectious testing:
  - Rubella antibody
  - Hepatitis C
  - Hepatitis B
  - HIV
  - Syphilis
  - Chlamydia
  - Gonorrhea

## Noninvasive prenatal screening (NIPS/NIPT)

When combined with diagnostic testing and genetic counseling (as clinically indicated), cell-free DNA screening is now suitable for all pregnancies regardless of age or risk—including twins.

Labcorp's MaterniT® NIPS performs in key areas that ensure your time is spent wisely, delivering fast, reliable, and effective prenatal screening results.

- More than 2 million tests performed to date<sup>9</sup>
- Published data on more than 30,000 twins and multiple pregnancies<sup>9</sup>
- A comprehensive diagnostic portfolio, including Reveal Prenatal SNP microarray with more than 75,000 samples<sup>9</sup>
- Extensive maternal serum screening options, including MS-AFP
- Over 130 genetic counselors on staff to assist patients and providers

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## Screening for sexually transmitted infections (STIs)

Certain infections such as HIV, viral hepatitis, STDs, and tuberculosis (TB) can complicate pregnancy and negatively impact pregnant women, their babies and their pregnancy outcomes.<sup>10</sup> Screening early can mean access to important treatment to prevent perinatal transmission.<sup>10</sup>

To protect all pregnant women and infants the CDC recommends that all pregnant women get tested for HIV, hepatitis B virus (HBV), hepatitis C virus (HCV) and syphilis during each pregnancy.<sup>10</sup> In light of the current syphilis epidemic and drastic increase in the number reported congenital syphilis cases (more than 2,000 cases in 2020), screening and confirmation is vital.<sup>11</sup> Screening is necessary to access medical services for HCV and treatment to prevent transmission of HIV, HBV and syphilis to the infant.





### First prenatal visit<sup>12</sup>

**Syphilis** – All pregnant women

**HIV** – All pregnant women

**HBV** – All pregnant women

**Chlamydia** – All pregnant women under 25 years of age and pregnant women 25 years of age and older if at increased risk

**Gonorrhea** – All pregnant women under 25 years of age and pregnant women 25 years of age and older if at increased risk

**HCV** – All pregnant women

### Third trimester<sup>12</sup>

**Syphilis** – All pregnant women

**HIV** – Certain groups of pregnant women before 36 weeks

**Chlamydia** – Pregnant women at continued high risk

**Gonorrhea** – Pregnant women at continued high risk

### At delivery<sup>12</sup>

**Syphilis** – All pregnant women

**HIV** – Pregnant women not screened during pregnancy

**HBV** – Pregnant women not screened during pregnancy who are at high risk or with signs or symptoms of hepatitis  
Labcorp offers a profile called Sexually Transmitted Infections (STI), with CT/NG:

- Syphilis reflex on positive
- HBV screening and diagnosis
- HCV with reflex to quant
- Chlamydia
- Gonorrhea
- HIV



## Screening for gestational diabetes

Based on traditional criteria, gestational diabetes affects an estimated 5.8-9.2% of pregnancies in the U.S.<sup>13</sup>

Universal screening for gestational diabetes using the oral glucose challenge test (OGTT) is recommended at 24 to 28 weeks of gestation.<sup>4,5</sup>

Screening asymptomatic patients for gestational diabetes in the U.S. commonly involves a two-step approach (screening followed by diagnostic test).<sup>13</sup> A 50-gram oral glucose challenge test (OGCT) is performed in a nonfasting state between 24 and 28 weeks' gestation.<sup>13</sup>

Labcorp offers Gestational Diabetes Screen (ACOG Recommendations). We also offer The Fresh Test. It's a refreshing lemonade drink made with organic produce, equivalent to the standard 50-gram glucola that can now be used for gestational diabetes screening.

## Group B streptococcus colonization detection

Group B streptococcus (GBS) is the leading cause of newborn infection, with 50% of women colonized with GBS transmitting the bacteria to their newborns.<sup>6</sup>

Medical societies recommend that all pregnant women undergo antepartum screening for GBS between 36 weeks and 37 weeks, six days of gestation.<sup>6</sup>

Women with a positive prenatal GBS culture should receive appropriate intrapartum antibiotic prophylaxis unless a prelabor cesarean birth is performed.

Labcorp offers Group B Streptococcus Colonization Detection, NAA with reflex to susceptibilities.



Whether you want to order a cutting-edge genetic test or early pregnancy health screening, you can rely on Labcorp to enhance your patient's pregnancy experience and support your laboratory needs every step of the way.

Your partner for preconception, pregnancy and pediatric care

## References

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More information on pregnancy testing and services:  
[womenshealth.labcorp.com/providers/pregnancy](https://womenshealth.labcorp.com/providers/pregnancy)

