

Preeclampsia

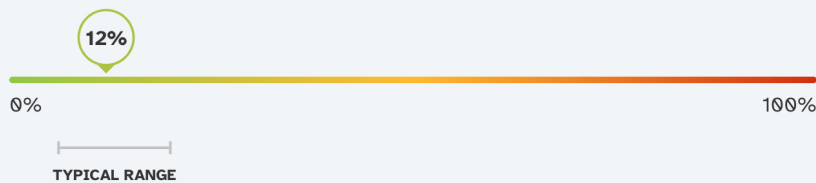
POWERED BY 23ANDME RESEARCH

Preeclampsia is a condition that develops during pregnancy that is characterized by persistent high blood pressure and in some cases, injury to organs like the liver and kidneys. Preeclampsia typically goes away within a few weeks after delivery, but during pregnancy and delivery, preeclampsia requires careful management.



Jamie, your genetic result is associated with a **typical likelihood** of developing preeclampsia.

An estimated **12%** of people with genetics and other factors like yours develop preeclampsia during pregnancy. This is based on data from female 23andMe research participants of European descent.



This estimate is based on currently available data and may be updated over time.

Ways to take action

Experts agree that while there is no sure way to prevent preeclampsia, healthy lifestyle habits before and during pregnancy can help reduce your overall likelihood of developing this condition.

- Get active. Establish a regular exercise routine before pregnancy, and talk to your doctor about how to stay active during pregnancy.
- Maintain a healthy weight before pregnancy, and if you are pregnant, talk to your doctor about healthy weight gain during pregnancy.
- Eat a low-sodium, heart-healthy diet.
- Limit caffeine and alcohol consumption.
- Practice good sleep habits to optimize your sleep.
- Avoid smoking.



If you are pregnant or might become pregnant, it's important to talk to a healthcare professional about your risk for preeclampsia and other next steps that may be right for you, such as taking certain medications or monitoring your blood pressure at home. Screening for

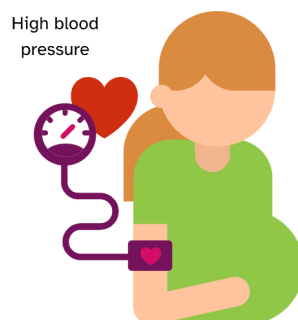
monitoring your blood pressure at home. Screening for high blood pressure is a standard practice in prenatal care that is typically done at each doctor's appointment during pregnancy.

[Learn more from the Cleveland Clinic](#)

About preeclampsia

What is preeclampsia?

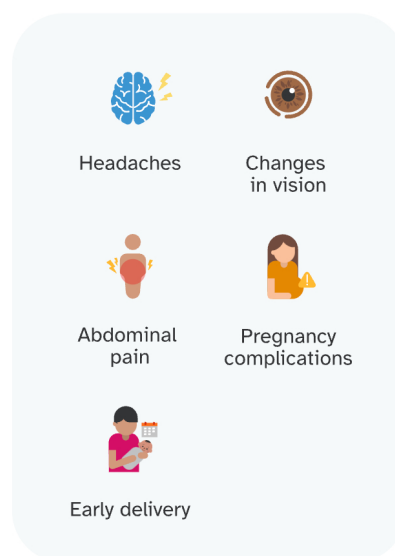
Preeclampsia is a pregnancy complication that causes persistent high blood pressure and in some cases, injury to organs like the liver and kidneys. The onset and severity of preeclampsia can vary greatly, but it typically develops later in pregnancy and resolves after delivery. Preeclampsia is usually diagnosed based on a combination of high blood pressure (>140 mmHg systolic and/or >90 mmHg diastolic), abnormal lab tests, and/or other symptoms. The condition requires careful monitoring throughout pregnancy, delivery, and the postpartum period to minimize health impacts for both the parent and child. The causes of preeclampsia are not fully understood, but scientists think that it stems from issues with the development and function of the placenta early in pregnancy.



What are the health impacts of preeclampsia?

The symptoms of mild preeclampsia may not be noticeable, or they may mimic typical experiences in pregnancy, like swelling of the hands or face. When preeclampsia does cause symptoms, they can include things like headaches, changes in vision, upper right abdominal pain, agitation or confusion, and shortness of breath. These symptoms may be a sign of more advanced preeclampsia (called eclampsia) or a condition called HELLP, which is named for its characteristics of red blood cell damage (**H**emolysis), **E**levated **L**iver enzymes, and **L**ow **P**latelet count. Eclampsia and HELLP can be dangerous for the parent and baby, so it's important to follow healthcare provider recommendations for testing and to seek immediate medical attention for any signs of preeclampsia.

In addition, preeclampsia can restrict the growth of the baby during pregnancy and increase risk for future conditions for the parent like high blood pressure, heart disease, kidney disease, and developing preeclampsia in future pregnancies. For these reasons, preeclampsia may require careful monitoring, medication, and consideration of early delivery in order to minimize complications for both parent and child.



Other factors that can impact your chances of developing preeclampsia

It is estimated that preeclampsia develops in about 4% of pregnancies in the United States. Besides genetics, some factors that can increase a person's chances of developing preeclampsia include:

- Personal history of preeclampsia (preeclampsia is more likely to recur in future pregnancies)
- Certain health conditions (including high blood pressure, diabetes before pregnancy, migraine, kidney disease, or some autoimmune conditions)



Personal history



Certain health conditions



Certain types of



Age

- Certain types of pregnancies (including being pregnant with multiple babies, first pregnancies, or pregnancies using in vitro fertilization)
- Age (preeclampsia is more likely to occur in individuals over 35)
- Being of African/African American descent
- Family history of preeclampsia

pregnancies



Ethnicity



Family history

Keep in mind

This report **does not diagnose** preeclampsia. **Consult with a healthcare professional** if you are concerned about your likelihood of developing preeclampsia, have a personal or family history of preeclampsia, or before making any major lifestyle changes.



If you have already been diagnosed with preeclampsia by a healthcare professional, it is important to **continue any treatment plans** that they prescribe, including medications and lifestyle modifications.



The likelihood of developing preeclampsia also depends on **other factors**, including lifestyle, age, and family history.



This report **does not account for every possible genetic variant** that could affect your likelihood of developing preeclampsia.



This report is based on a genetic model **created using data from 23andMe research participants**. It has not been clinically validated and should not be used to make medical decisions.

How we got your result ^

Methods

This report is based on a statistical model that takes into account your genetic results at 14,462 genetic markers, along with the ethnicity and sex you reported in your account settings, to estimate the likelihood of developing preeclampsia. We used data from 23andMe research participants to calculate this estimate. Results and estimates may be updated over time as the model or scientific understanding about this condition improves.

About the result

People whose result is associated with odds of developing preeclampsia that are at least 1.5 times higher than average are considered to have an increased likelihood. Between 4% and 22% of individuals receive an "increased likelihood" result, depending on ethnicity. These results are based on many genetic markers, and random test error at one or more of these markers can lead to a small margin of error in your estimated likelihood of developing preeclampsia. For people whose estimate is near the boundary between typical and increased likelihood, this margin of error may introduce some uncertainty about whether their estimated likelihood is considered "typical" or "increased." Your genetic result is associated with a typical likelihood. Based on the available genetic markers used to calculate your result, there is a less than 1% chance your genetic likelihood estimate could fall on the other side of the boundary and be in the range that is considered increased.

Scientific validity across ethnicities

We verified that the model meets our scientific standards for individuals of European, Hispanic/Latino, East/Southeast Asian, South Asian, Sub-Saharan African/African American, and Northern African/Central & Western Asian descent.

How we may use ethnicity and sex to customize this result

- If you indicated in your account settings that you are of European, Hispanic/Latino, East/Southeast Asian, South Asian, Sub-Saharan African/African American, or Northern African/Central & Western Asian (Middle Eastern) descent, your result is tailored based on data from individuals of that ancestry.
- If you indicated in your account settings that you are predominantly of both Hispanic/Latino and another ancestry, your result will be based on data from individuals of Hispanic/Latino descent.
- If you indicated in your account settings that you are predominantly of both Sub-Saharan African/African American and European descent, your result will be based on data from individuals of Sub-Saharan African/African American descent.
- If there is not enough data from individuals of your ethnicity or combination of ethnicities at this time, your result may be based on data from individuals of European descent because the most data is available for this population.

- Your Preeclampsia result also takes into account the birth sex you indicated in your account settings.

See our [white paper](#) to learn more about the science behind this report.

Read More:

American Pregnancy Association. "Preeclampsia." Retrieved October 12, 2022, from <https://americanpregnancy.org/healthy-pregnancy/pregnancy-complications/preeclampsia/>.

Bartsch E et al. (2016). "Clinical risk factors for pre-eclampsia determined in early pregnancy: systematic review and meta-analysis of large cohort studies." BMJ. 353:i1753.

Mayo Clinic. "Preeclampsia." Retrieved October 12, 2022, from <https://www.mayoclinic.org/diseases-conditions/preeclampsia/symptoms-causes/syc-20355745>.

MedlinePlus. "Preeclampsia." Retrieved October 12, 2022, from <https://medlineplus.gov/genetics/condition/preeclampsia/>.

National Institute of Child Health and Human Development. "Preeclampsia and Eclampsia." Retrieved October 12, 2022, from <https://www.nichd.nih.gov/health/topics/preeclampsia>.

Phipps EA et al. (2019). "Pre-eclampsia: pathogenesis, novel diagnostics and therapies." Nat Rev Nephrol. 15(5):275-289.

Preeclampsia Foundation. "What is Preeclampsia." Retrieved October 12, 2022, from <https://www.preeclampsia.org/what-is-preeclampsia>.

Rana S et al. (2019). "Preeclampsia: Pathophysiology, Challenges, and Perspectives" Circ Res. 124(7):1094-1112.

US Preventive Services Task Force. et al. (2017). "Screening for Preeclampsia: US Preventive Services Task Force Recommendation Statement." JAMA. 317(16):1661-1667.



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