Cardiomyopathy

Estimated 4 minute read

01 **Your result**

Lynn, this test found a difference in your DNA that is linked to a higher chance of developing a serious heart condition called cardiomyopathy.[1]

Cardiomyopathy can lead to a range of heart problems, such as an irregular heartbeat and heart failure.

02 **Key takeaways**

- This does not mean you have or will develop cardiomyopathy — just that your chances are higher than typical.
- At least one of your parents likely has this same **DNA difference** linked to a higher chance of cardiomyopathy. Each of your children and siblings has a 1 in 2 chance of having it as well.[6,10]
- To support you, your purchase of AncestryHealth® includes access to special resources. You can set up a one-on-one phone call or video conference with a PWNHealth **genetic counselor**, watch educational videos, or submit a question for a reply via a secure platform.
- **If you only do one thing, do this:** Share your physician report with a healthcare provider as soon as possible. They can advise you on next steps, including whether you should be tested for cardiomyopathy. Only a healthcare provider can determine whether you have cardiomyopathy.

Download physician report

Genes tested

This test found a DNA difference in your *MYH7* or *MYBPC3* gene. Further details about your result that would be helpful for a healthcare provider to know are included in the physician report you can download and bring to them.

03 **What this means for you**

You have a higher chance of developing heart problems, including an irregular heartbeat or even heart failure.

This is due to a difference in your DNA that is linked to a higher chance of developing cardiomyopathy.[1] Cardiomyopathy is a heart disease that damages the heart muscle. This can cause problems ranging from shortness of breath to, in some cases, heart failure.[4] Of the people who develop these problems, some develop them earlier in life and some later.[7,14,19]

Some people with DNA differences in this gene will never develop heart problems.[7,14,19] So while you may have a higher chance, this doesn't mean you currently have heart problems or will develop them in the future.

You can work with a healthcare provider to make a plan to monitor your heart health. For example, if you're a young athlete, knowing you have a higher chance of developing cardiomyopathy is critical. Some young people with cardiomyopathy may have a greater chance of cardiac arrest — a potentially fatal situation in which the heart suddenly stops beating — during intense exercise.[20]

This test cannot tell you how likely you are to have heart problems. This is why it is so important for you to talk about this result with a healthcare provider. They may refer you to a heart specialist, who can evaluate the health of your heart and make a plan for regular monitoring to check for symptoms of cardiomyopathy.[9]

> You can work with a healthcare provider to make a plan to monitor your heart health.

It is also important to share this result with your family. Some members of your family may have a higher chance of developing similar heart problems due to this same DNA difference.[6,10] They may also want to get a genetic test for cardiomyopathy.

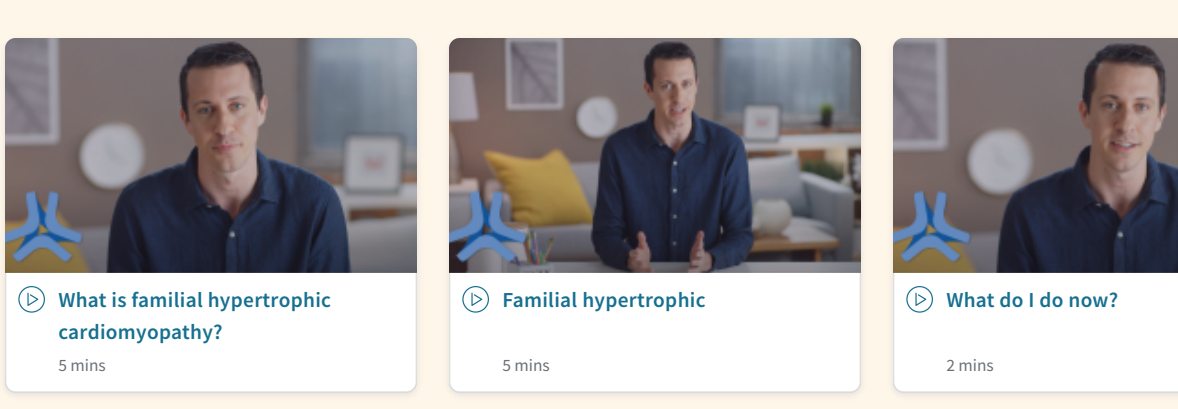
This can be a lot to take in. To support you, we've partnered with an independent clinician network of board-certified physicians and genetic counselors, PWNHealth. A PWNHealth genetic counselor can walk you through what your result means, answer any questions you might have about them, and help you make a plan. You can set up a private, one-on-one phone call or video conference with them or submit a question for a reply via a secure platform. This service is included as part of PWNHealth's clinical support of AncestryHealth®.

Introducing familial hypertrophic cardiomyopathy

There are several different types of cardiomyopathy. One of the most common is called familial hypertrophic cardiomyopathy, but all types can cause the heart to not work as well.[13]

Robin, a certified genetic counselor with the independent clinician network PWNHealth, talks about what familial hypertrophic cardiomyopathy is, what your result means for you and your family, and what to do next.

Please note that some individuals with this result may also have an increased risk for other types of cardiomyopathy.



What is familial hypertrophic cardiomyopathy? — 5 mins
Familial hypertrophic — 5 mins
What do I do now — 2 mins

04 **What is Cardiomyopathy?**

Cardiomyopathy is one of the most common inherited heart diseases.[5]

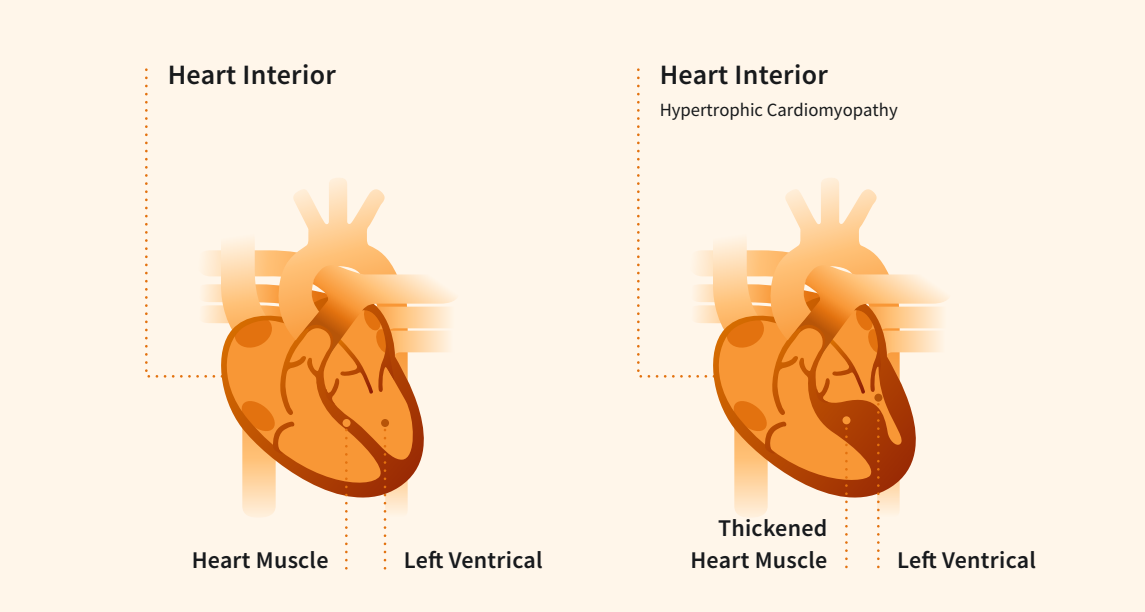
Cardiomyopathy is a disease of the heart muscle. There are several different types. One of the most common is called hypertrophic cardiomyopathy.[13] It can cause parts of the heart muscle to become too thick.[6] Another common type is called dilated cardiomyopathy.[13] It can weaken part of the heart muscle, causing a pumping chamber of the heart to become enlarged.[10] Both types can cause the heart to not work as well.[6,10]

There are various cardiomyopathy symptoms, including shortness of breath, feeling faint, an irregular heartbeat, and heart failure.[6,10] But these symptoms may look different for everyone, and some people may have no symptoms at all.[6,18] Even different members of the same family can have different symptoms.[6,18]

Cardiomyopathy can be caused by genetics or non-genetic factors, like high blood pressure or an infection.[2,3,4]

> Cardiomyopathy is a heart disease that can cause problems ranging from shortness of breath to, in some cases, heart failure.

How cardiomyopathy can affect the heart



There are a few particularly dangerous symptoms people with cardiomyopathy should be aware of:

Irregular heartbeat: Some people with cardiomyopathy have an irregular heartbeat, called an arrhythmia.[6,12] This happens when the electrical system that keeps the heart beating isn't working correctly. People with an arrhythmia might faint more frequently or feel like their heart is fluttering or racing.[15]

Heart failure: Some people with cardiomyopathy develop heart failure. This can happen when the heart cannot pump blood as well as it is supposed to.[6,10] People with heart failure may feel out of breath, have swelling in the ankles or other body parts, or feel tired and weak.[16]

Sudden cardiac arrest: Sudden cardiac arrest is when the heart abruptly stops beating. In some instances, this can be fatal, in which case it's called sudden cardiac death.[17] It's unlikely, but people with one type of cardiomyopathy, hypertrophic cardiomyopathy, have a higher chance of dying from sudden cardiac arrest than people without it.[11]

05 **How inheritance works**

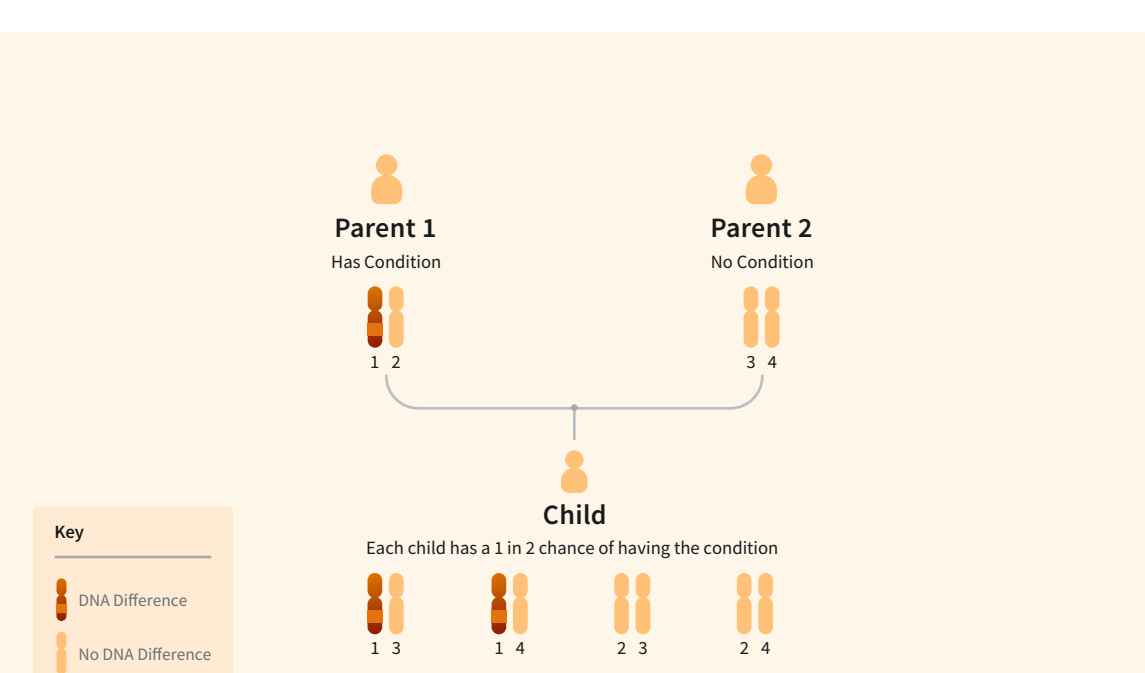
Each child of someone with a DNA difference linked to a higher chance of developing cardiomyopathy has a 1 in 2 chance of having that DNA difference as well.

In most cases, people inherit a DNA difference linked to cardiomyopathy from one of their biological parents.[6,10] This means that if you have a DNA difference linked to a higher chance of developing cardiomyopathy, at least one of your parents probably has that DNA difference too. It also means each of your biological brothers and sisters has a 1 in 2 chance of having it, as do each of your children.

It is important that you share your results with your family members so they can get tested for this DNA difference.[20]

Here is how the inheritance works for the genes tested in this report: You have two copies of most of your genes, one from each of your parents. To have a higher chance of developing cardiomyopathy, you only need to inherit a DNA difference linked to cardiomyopathy from one of your parents.[4] This type of inheritance is called autosomal dominant inheritance.

How cardiomyopathy is inherited



06 **What you can do**

This information about your genes is only the beginning.

There are actions people with a higher chance of cardiomyopathy can take. The first thing to do is to share your physician report with a healthcare provider and discuss appropriate next steps.

They may refer you to a specialist who has experience with people who have an increased chance of cardiomyopathy. That specialist may order tests to check how healthy your heart is now and make a plan for getting tests regularly going forward.[9] These tests may include an electrocardiogram, or ECG, which measures the rhythm of the heart, and an echocardiogram, which is an ultrasound of the heart.

> Talk with a healthcare provider about next steps.

You should not make any health, treatment, lifestyle, or dietary changes without consulting with a healthcare provider.

It's important to learn more about cardiomyopathy so that you can be proactive about your health. AncestryHealth has partnered with PWNHealth, the independent clinician network that provided clinical oversight for your test, to support you and help you understand your result.

We encourage you to take advantage of educational videos created by PWNHealth. You can also join a webinar hosted real-time by PWNHealth genetic counselors who are ready to answer your questions about cardiomyopathy.

07 **Limitations**

This test cannot tell if you currently have or will develop cardiomyopathy, just whether you have a higher chance of developing it.

This test informs you about differences in your DNA and your chance of developing cardiomyopathy at some point in your life because of those DNA differences. There are technical limitations to this test.

Read more about limitations

Incorrect results can happen, although they are rare. They might be due to a technical problem at the laboratory, you or a family member accidentally mixing up your samples, or other issues.

This test used **next-generation sequencing technology**. It is designed to look for DNA differences in the *MYH7* and *MYBPC3* genes that scientific research has found are linked to a higher chance of developing cardiomyopathy. But the number of DNA differences your test looked for may vary. There are also certain types of DNA differences this test does not look for. It's possible you could have additional DNA differences linked to cardiomyopathy that this test did not find. In some cases, having additional DNA differences can further increase the chances of developing heart problems.

There are other genes this test did not look at that may contain a DNA difference that is linked to an inherited risk of heart problems.

Although your DNA doesn't change, your result may be updated as more is learned about which DNA differences and genes are linked to an increased risk of cardiomyopathy.

This test was performed by our laboratory partner. For further technical details on the limitations of this test, download your physician report.

AncestryHealth® includes laboratory tests developed and performed by an independent CLIA-certified laboratory partner, and with oversight from PWNHealth, the independent clinician network of board-certified physicians and genetic counselors that provided clinical oversight for your test. The test results are not diagnostic and do not determine your overall chance of developing a disease or health condition. The tests are not cleared or approved by the U.S. Food and Drug Administration. Any healthcare recommendations in the report are made by PWNHealth. **You should consult a healthcare provider before taking any action, including before making any treatment, dietary, or lifestyle changes.**

08 **If you only do one thing, do this:**

Share your physician report with a healthcare provider as soon as possible.

Make an appointment with a healthcare provider to discuss next steps as soon as possible. Catching heart problems like cardiomyopathy requires special screening tests. Download your physician report to take with you to your appointment. The physician report contains guidance for healthcare providers on what the next steps should be.

Download physician report

What else can you do?

Get support from a PWNHealth genetic counselor

We encourage you to set up a private, one-on-one phone call or video conference with a genetic counselor. You can also submit a question for a reply via a secure platform. Access to these resources is included with your AncestryHealth® purchase and provided by PWNHealth, the independent clinician network of board-certified physicians and genetic counselors.

You can also submit a question to a PWNHealth genetic counselor below.

Set up a one-on-one session | Ask a genetic counselor a question

powered by pwnhealth

Share your results with your family

Because the DNA differences that raise the chance of developing cardiomyopathy run in families, your family members have a much higher chance of having it too.[6,10] That is why it is important for you to share your result with them. That way they can work with a healthcare provider to decide whether they want to have genetic testing to learn more about their health.

Download your report

07 **Resources**

Learn more | FAQ | References | About test

Learn more about your result

- My result showed a difference in my DNA that is linked to a higher chance of developing cardiomyopathy. Does that mean I have heart problems?
- My result showed a DNA difference that is linked to a higher chance of developing heart problems. How likely am I to develop them?
- If I have no family history of heart problems, does this result still mean I have a higher than typical chance of developing them?
- Should I tell a healthcare provider about my result?
- Can I start taking actions to lower my risk right away?
- Should I tell my family about my result?
- I have a personal history of heart problems. Does this result mean I'm more likely to have heart problems again?
- I am physically fit, eat healthy, and don't have a family history of heart problems as far as I know. Could I still have an increased chance of developing cardiomyopathy?
- How likely are my relatives to have the DNA difference this test found?
- How accurate is this test?
- Will the information I input into the AncestryHealth family health history tool change the result in my health report?
- What should I do next?

Didn't find what your were looking for?

Check out the health support articles for more information.

Download this Report