

DO YOU HAVE HIGH CHOLESTEROL? **HAS SOMEONE IN YOUR FAMILY HAD A HEART ATTACK** **AT AN EARLY AGE?**

FIND OUT MORE ABOUT **FAMILIAL HYPERCHOLESTEROLEMIA**

WHAT IS FAMILIAL HYPERCHOLESTEROLEMIA (FH)?

F = familial = passed on through families (inherited)

H = hypercholesterolemia = high levels of 'bad' cholesterol in the blood

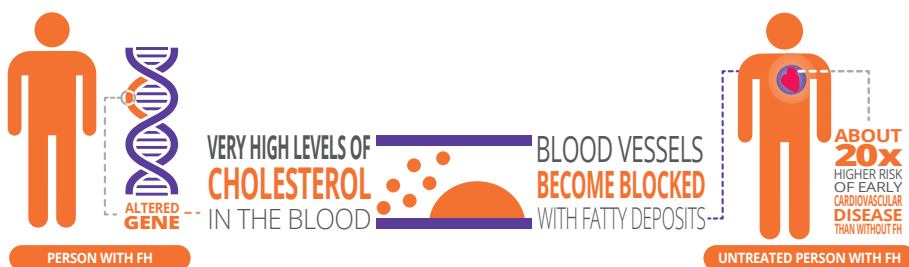
Cholesterol = a fatty substance



WHAT IS FAMILIAL HYPERCHOLESTEROLEMIA (FH)?

FH is an inherited condition, which results in **very high cholesterol** levels in the blood. FH is caused by an altered gene that stops the liver from removing cholesterol from the blood properly. Very high levels of cholesterol can block up blood vessels and increase the risk of **cardiovascular disease**, such as heart attacks and stroke, at an early age (for example, before age 55 years in men and before age 65 years in women).

WHAT IS FH?^{1,2}



Many people without FH worldwide have high cholesterol in middle age, but people with FH have very high cholesterol from birth.

- FH is one of the most common serious genetic conditions^{1,2}
- Between **1 in every 200 people** and **1 in every 500 people** has FH¹
- Between **14 and 34 million individuals** worldwide have FH¹

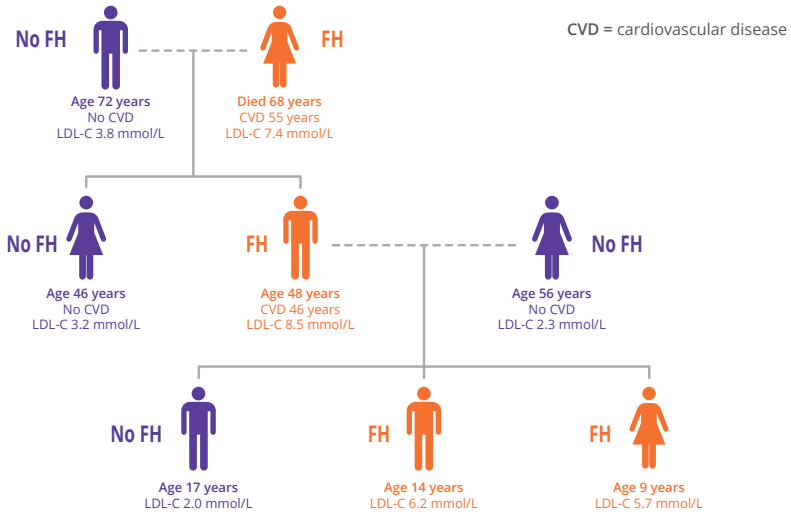
HOW IS FH INHERITED?

FH may be passed from parent to child. Not all family members are affected, but it is important to find out which ones have FH so they can receive early treatment.

Close relatives of someone with FH (for example, parents, brothers, sisters, children) have a **50:50 chance** of also having FH.

Family members with FH have high levels of low-density lipoprotein cholesterol (LDL-C), sometimes called 'bad' cholesterol, and may have early cardiovascular disease. Unaffected members have normal levels of LDL-C and no evidence of heart disease at a young age.

This picture shows a typical family affected by FH.



HOW DO YOU KNOW IF YOU HAVE FH?

FH is generally diagnosed based on high levels of bad cholesterol, a family history of cardiovascular disease and certain clinical signs. However, these clinical signs appear in only a few people with FH and cholesterol levels may not be checked until middle age.

People are often not aware that they have FH until they or a family member has a **heart attack or stroke**. Many cases of FH are not diagnosed.³

<1% OF
FH IS
DIAGNOSED¹

**AT LEAST 99% OF FH IS NOT DIAGNOSED
IN CANADA¹**

Speak to your doctor if you suspect you may have FH due to very high cholesterol levels and/or if there is a pattern of cardiovascular disease at an early age in your family.

If you have FH, medications and changes to your lifestyle and diet may help achieve a **longer and healthier life**.

There are important benefits to finding FH early:

- Bad cholesterol levels can be lowered using medication and a healthy lifestyle and diet
- Early treatment may reduce the chances of developing cardiovascular disease
- Close family members can be screened and treated for FH if needed

References

1. Nordestgaard B et al. Eur Heart J. 2013;34:3478-90a
2. Goldberg AC et al. J Clin Lipidol. 2011;5(3 Suppl):S1-8
3. <http://thefhfoundation.org/>

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Sanofi and Regeneron are committed to providing resources to better understand cholesterol management and to research the unmet needs of patients with poorly controlled LDL-C

