

Haemophilias

Haemophilia is a condition in which the affected person's blood doesn't clot properly. People with haemophilia can bruise or bleed internally after a minor injury and, if cut, bleed easily and find it hard to stop the bleeding.

Haemophilia can be mild or it can be severe, or anywhere in between.

There are two main types of haemophilia – A and B. Each type is caused by a specific gene alteration that leads to a shortage, or absence, of one of the proteins needed to make blood clot.

In haemophilia A, there is a shortage or absence of the protein called factor 8. Haemophilia A is also known as classical haemophilia.

In haemophilia B, there is a shortage or absence of the protein called factor 9. Haemophilia B is also known as Christmas disease.

Haemophilia is a genetic condition. It has an X-linked pattern of inheritance (see fact sheet on '*How do genetic conditions occur?*').

Men who have the altered gene on their X chromosome have the condition. Any sons they have will not be affected and any daughters they have will be carriers.

Women who have the altered gene are carriers for haemophilia. Any sons they have will have a 1 in 2 chance of inheriting the altered gene and having the condition; and a 1 in 2 chance of not inheriting the altered gene and not having it. Any daughters they have will have a 1 in 2 chance of being a carrier and a 1 in 2 chance of not being a carrier. A few women who are carriers actually have a mild form of the condition.

People with haemophilia in the family should contact a genetics service for advice. Blood tests and genetic testing may be recommended.

Contacts and further information

- Your local genetic service, which you can contact through your nearest community health centre, public hospital or health department.
- Haemophilia Foundation Australia at <http://www.haemophilia.org.au>
- Australasian Genetic Alliance at <http://www.australasiangeneticalliance.org.au>
- The Centre for Genetics Education at <http://www.genetics.edu.au>
- Better Health Channel at <http://www.betterhealth.vic.gov.au>
- HealthInsite at <http://www.healthinsite.com>
- MedicineNet at <http://www.medicinenet.com>
- MyDr at <http://www.mydr.com.au>
- For other related fact sheets, you can contact the Gene Technology Information Service on **free call Australia-wide 1800 631 276** or email gtis-australia@unimelb.edu.au or visit Biotechnology Australia's website at <http://www.biotechnology.gov.au>