

[Why Should I Donate?](#)

[Can I donate?](#)

[What Can I Donate?](#)

[How Can I Get Involved?](#)

[What Should I Know?](#)

[Forms](#)

[Hospitals](#)

How Does Matching Work?

When an individual joins the OneMatch Stem Cell and Marrow Network, a sample of the registrant's DNA is extracted. This material is used to identify a number of the registrant's Human Leukocyte Antigens (HLA) which are then stored in our database for patient searches.

Human leukocyte antigens are genetic markers found on the proteins of white blood cells. These markers are inherited from our parents and a number of antigens have been identified as important when matching donor and patient. Obviously, the closer the match between the patient and donor, the better the outcome will be for the patient.

Sometimes, when a perfectly matched donor cannot be found within a suitable timeframe, the transplant physician will choose to select a "mismatched" donor. What this means is that a less perfectly matched donor may be selected to provide a donation for a patient.

The patient's transplant physician will first look for a compatible donor in the patient's family and will arrange for testing of appropriate relatives. In general, the most likely family members to match will be the siblings. However, chances of finding a compatible donor in the family are less than 30% and the remainder of patients will rely on a volunteer from the OneMatch Stem Cell and Marrow Network to help.


“...chances of finding a compatible donor in the family are less than 30%...”



Once the transplant physician has determined that no suitable related donor is available, a request will be made to the OneMatch Stem Cell and Marrow Network to coordinate the search for a donor. A patient search involves the Canadian network as well as all international donor registries. Today, Canadian patients have access to over 11 million donors. Even with this many donors and the best efforts of everyone involved a donor cannot always be found.

Every patient's search is different - some patients have many donors available because they have inherited common antigens and their markers are inherited in a common combination of alleles. In fact these markers occur with different frequencies in different ethnic groups. For example, markers common in Caucasians might be rarely found in the Asian community and vice versa. So, while not always the case, patients are more likely to find a donor in their own ethnic community - that is why it is so important to have as many Canadians from diverse ethnic communities as possible join.

With a sufficiently large and diversified network we can give more hope to patients in Canada and around the world.

 [Printer-friendly](#)

Learn More

- [Learn More](#)
- [About Stem Cells](#)
- [Diseases Treated](#)
- ▶ [How Does Matching Work?](#)
- [Stem Cell Transplant](#)
- [Myths About Stem Cell Donation](#)
- [About OneMatch](#)
- [Frequently Asked Questions](#)
- [Contact Us](#)
- [How To Swab](#)



