

## Bone marrow donors have more side effects at hospitals that do fewer bone marrow collections

### What were researchers trying to learn?

Researchers wanted to learn whether unrelated bone marrow and peripheral blood stem cell (PBSC) donors have more side effects based on:

- Donor race or ethnicity
- Average household income
- How many times per year a hospital collects bone marrow or PBSC

Thousands of people donate bone marrow or PBSC each year. [Very few donors have severe side effects.](#) Usually donors return to work, school, and most other activities within 1 to 7 days.

Researchers studied more than 2,700 unrelated bone marrow donors and more than 6,700 unrelated PBSC donors who donated between 2004 and 2009.

### What did they find?

Researchers looked at side effects of donation – such as pain and fatigue – for up to 1 week after donation. They found:

For PBSC donors:

- Women had more side effects than men.
- Obese donors had more side effects.
- Donors over age 40 years had less pain with donation. But donors over age 30 years had more pain 1 week after donation.
- Race and ethnicity did not matter.
- Average household income did not matter.

For bone marrow donors:

- Women had more side effects than men.
- Black men had more pain 2 days after donation. But by 1 week, they did not have more pain than others.
- Donors had more side effects at hospitals that did fewer bone marrow collections.
- Average household income did not matter.

#### **Important Point:**

**Bone marrow donors had more side effects at hospitals that did fewer bone marrow collections.**

#### Why is this important?

Doctors now have more information to share with donors about side effects. Doctors might more carefully watch donors who are more likely to have side effects. Or doctors might treat certain donors to prevent side effects. Also, hospitals that do fewer bone marrow collections might give their staff more training to help lower side effects for donors.

#### What else should I keep in mind about this study?

The results of research studies are always limited in what they can and can't tell you. With this study, one drawback is that researchers only studied unrelated donors. Also, every donor is different. This can make it hard to know what the results mean for you.

#### Questions to ask your doctor

If you are a match for a patient, you may want to ask:

- What are some of the possible side effects of this type of donation?
- How long will it take me to recover?
- What steps will you take to limit side effects throughout my donation process?

#### Learn more about

- [This research study](#)
- [Donating bone marrow or PBSC](#)

#### Source:

Shaw BE, Logan BR, Kiefer DM, et al. An analysis of the effect of race, socioeconomic status and center size on unrelated NMDP donor outcomes: donor toxicities are more common at low volume bone marrow collection centers. *Biology of Blood and Marrow Transplantation*. 2015 Jun 23. [Epub ahead of print]

#### About this research summary

Ground-breaking research into blood and marrow transplant is happening every day. That research is having a significant impact on the survival and quality of life of thousands of transplant patients. But the research is written by scientists for scientists. By providing research news in an easy-to-understand way, patients, caregivers, and families have access to useful information that can help them make treatment decisions.

This information is provided on behalf of the Consumer Advocacy Committee of the CIBMTR<sup>®</sup> (Center for International Blood and Marrow Transplant Research<sup>®</sup>). The CIBMTR is a research collaboration between the National Marrow Donor Program<sup>®</sup>/Be The Match<sup>®</sup> and the Medical College of Wisconsin.