

Delayed umbilical cord clamping benefits babies. Cord blood donation could help others

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Credit: AI-generated image ([disclaimer](#))

While blood from a newborn's umbilical cord was once considered a waste product, it's now known that it contains stem cells. These cells can be used for cord blood transplants, including for specific genetic and hematologic conditions, and some cancers—potentially saving lives.

"Cord blood is the blood that remains in the [umbilical cord](#) after birth. It contains [red blood cells](#) that can carry oxygen, nutrients and stem cells. Stem cells replenish cells in blood, skin and organs," says Dennis Costakos M.D., a neonatologist at Mayo Clinic Health System in La Crosse. "When your baby is born, delaying cord clamping for 30–60 seconds benefits your baby. Delaying cord clamping for this time frame allows for higher distribution of blood to your infant rather than leaving this precious blood in the placenta. Delaying [cord clamping](#) for 30–60 seconds for babies born prematurely decreases the serious complications of prematurity that can be life-threatening. Full-term babies are less likely to be iron-deficient at 3–6 months of age, which is important for health and development."

The other important note is how cord blood can affect the lives of others.

"Cord blood is one of the three sources of blood-forming cells used in transplants. Bone marrow and peripheral blood stem cells are the other two sources of cells," Dr. Costakos describes. "Cord blood contains stem cells that can be used to treat certain diseases. Current uses for cord blood transplant include certain genetic and hematologic conditions, and some cancers."

If a sibling or family member has one of these conditions, the health care team can provide input on whether a donation to a private or public cord blood bank could be considered. Public cord blood banks are a viable option for helping others in need.

"Public cord blood banks operate like blood banks. Cord blood is collected for later use by anyone who needs it. The [stem cells](#) in the donated cord blood can be used by any person who matches," says Dr. Costakos. "Public banks do not charge for collecting cord blood."

If a family decides to donate cord blood, your health care team will plan to collect the cord blood at the time of delivery. After the child is born, the umbilical cord is clamped.

"The process of collecting the cord [blood](#) is painless for the baby because no [nerve fibers](#) are in the umbilical cord," Dr. Costakos explains. "Blood is drained from the umbilical cord with a needle, and a special collection bag is attached. After the bag is sealed, the placenta is delivered. The process takes about 10 minutes."

Provided by Mayo Clinic

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