

The search for new blood donors ends at the living - but why?

By *Nicholas Staropoli* — August 2, 2015



Every day the Red Cross must collect [15,000 blood donations](#)

[for America's 2,600 hospitals](#) [1] and transfusion centers. Usually, in the summer months, when people are more likely to be on vacation, [they lose about 40 percent of their donors](#) [2]. This puts the Red Cross in crisis mode, during what they call summer shortages, when they must make up the loss of these 6,000 donors.

But it's not just summer anymore. Last September, a month the Red Cross considers one with adequate donation levels, was hit hard by shortages. [The Red Cross reported that 32 of their 36 regions](#) [3] had inadequate supplies of blood and in some places they had less than a day's supply of blood. This forced the cancellation of many elective procedures in several major cities.

Blood is a vital component for many surgical procedures including heart surgeries and organ transplants. In fact one liver transplant can use as many as 120 units of blood. For that reason it might be time for us to consider more creative ways to collect blood. One idea, which was highlighted by [Ross Pomeroy over at Real Clear Science](#) [4], was to collect blood *from the recently deceased*.

Pomeroy explains Roughly 15 million pints of blood [are donated](#) [5] each year by approximately 9.2 million individuals. Over the course of the same year, about [2.6 million Americans](#) [6] will -- sadly -- pass away. If hospitals were to harvest the blood from a third of those people, roughly 4.5 million liters would be added to the reservoir.

It may seem, as Pomeroy describes it, *macabre* to harvest the dead for blood but we already harvest organs from the recently deceased. And draining the blood from a deceased individual is part of the embalming process. There should be no safety issue because for in-patients, physicians have accurate medical records to make a determination of whether the departed is an acceptable candidate for donation. The battery of tests the Red Cross normally runs on donor blood makes it all seem like a plausible idea. We certainly can't take blood from everyone that passes on, but it may be enough to fill in the gaps during shortages.

I reached out to the Red Cross to get their opinion and they are not too keen on the idea. Dr. Anne Eder, Vice President, National Medical Affairs told me that *Collection of blood from deceased individuals is not currently possible, nor is it necessary, feasible or safe. She continued Despite periodic shortages, there is generally not a supply issue that would require a drastic change in the way healthy individuals are qualified for voluntary blood donation.*

So although the Red Cross says there are shortages, they aren't bad enough for them to seek blood from the deceased, despite 32 of 36 regions being in shortfall as noted above. She further explained why organs are a separate issue: *Blood donations are substantially different from the much more scarce supply of tissues and organs, which are collected from deceased individuals under separate regulations that take into account the very limited supply of organs and the only source in some cases, cadavers.*

In short they will not turn to blood because they we are not in a dire enough state to turn to radical solutions. While this may signify some degree of shortsightedness on the part of the Red Cross, the future of blood transfusions may make the need for donors obsolete anyway. [Many companies are pursuing](#) [7] and testing the viability of synthetic blood, and advances have also been made in [cloning the stem cells that produce red blood cells](#). [8] A [recently discovered enzyme](#) [9] may also eliminate the need for blood type matching, turning all blood types into universal donors.

We at the American Council on Science and Health encourage all people to sign up to donate blood, become organ donors, and sign up with the bone marrow registry.

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[1] <http://www.sbsun.com/health/20150717/red-cross-plans-blood-drives-to-deal-with-summer-shortage>

[2] <http://wxxinews.org/post/red-cross-campaigns-combat-blood-shortage>

[3] <http://abcnews.go.com/Health/story?id=117954>

[4] http://www.realclearscience.com/blog/2015/07/a_simple_solution_to_end_blood_shortages.html

[5] <http://www.redcrossblood.org/learn-about-blood/blood-facts-and-statistics>

[6] <http://www.cdc.gov/nchs/fastats/deaths.htm>

[7] <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2738310/>

[8] http://www.nbcnews.com/id/26290783/ns/health-cloning_and_stem_cells/t/stem-cell-advance-may-boost-blood-supply/#.VbvUb5NViko

[9] <http://www.genengnews.com/gen-news-highlights/blood-type-altering-enzyme-could-make-anyone-a-universal-donor/81251215/>