

# An Analysis of Organ Donation Policy in the United States

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## ABSTRACT

There is currently an organ shortage crisis in the United States. This paper analyzes the magnitude of the problem, the organ procurement programs in other developed countries as compared to the US, and discusses the changes that can be made to address this problem. With the opt-in or explicit-consent method currently practiced in the US, less than one third of the population consents to organ donation. In order to narrow the gap between the demand and supply of organs, steps need to be taken to improve the organ procurement infrastructure. The public needs to be educated about the dire need, the benefits and risks in organ donation, and living vs. deceased donation.

**KEYWORDS:** Organ donation, opt-in, opt-out, organ transplantation, organ donation policy

One hundred and twenty-two thousand, six hundred and twenty-five (122,625) – this is the number of patients on the waiting list in need of a life-saving organ transplant in the United States. On average, 22 patients die each day while waiting for a transplant that cannot take place because there is a shortage of donated organs.<sup>1</sup> Major policy and regulatory changes need to be made in order to narrow the gap between the demand and supply of organs. Within the past 30 years, the number of organs donated has not kept pace with the number of organs needed. The demand for organs has increased exponentially due to various factors. The increase in life expectancy, obesity, diabetes, and alcohol-related liver failure are a few of those factors.

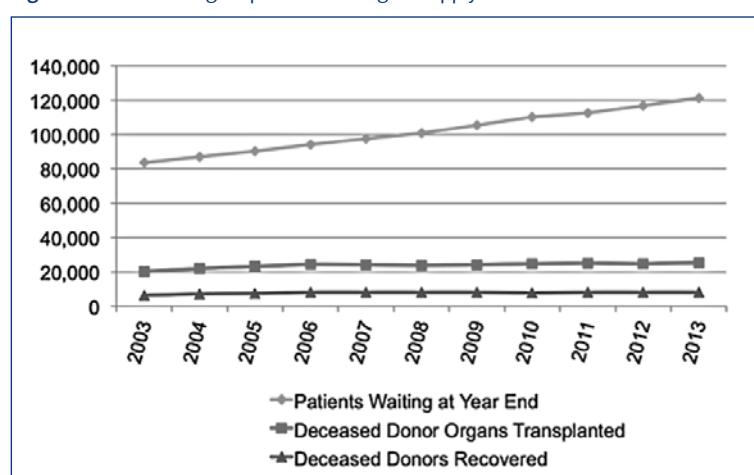
What if organ donors were compensated? In all countries but Iran, the selling and buying of organs is illegal, as they rely on altruistic donations – donations that do not depend on monetary gain. Some suggest that if it were legalized, donation of organs could be promoted through monetary gain and that the black market organ transplants could be made safer and done professionally. While this idea seems to make sense in theory, it would have problems and would be impractical to execute. One of the problems of this system is that the poor would be unable to obtain organs, and they would be pressured to sell their organs for money. Also, it is nearly impossible

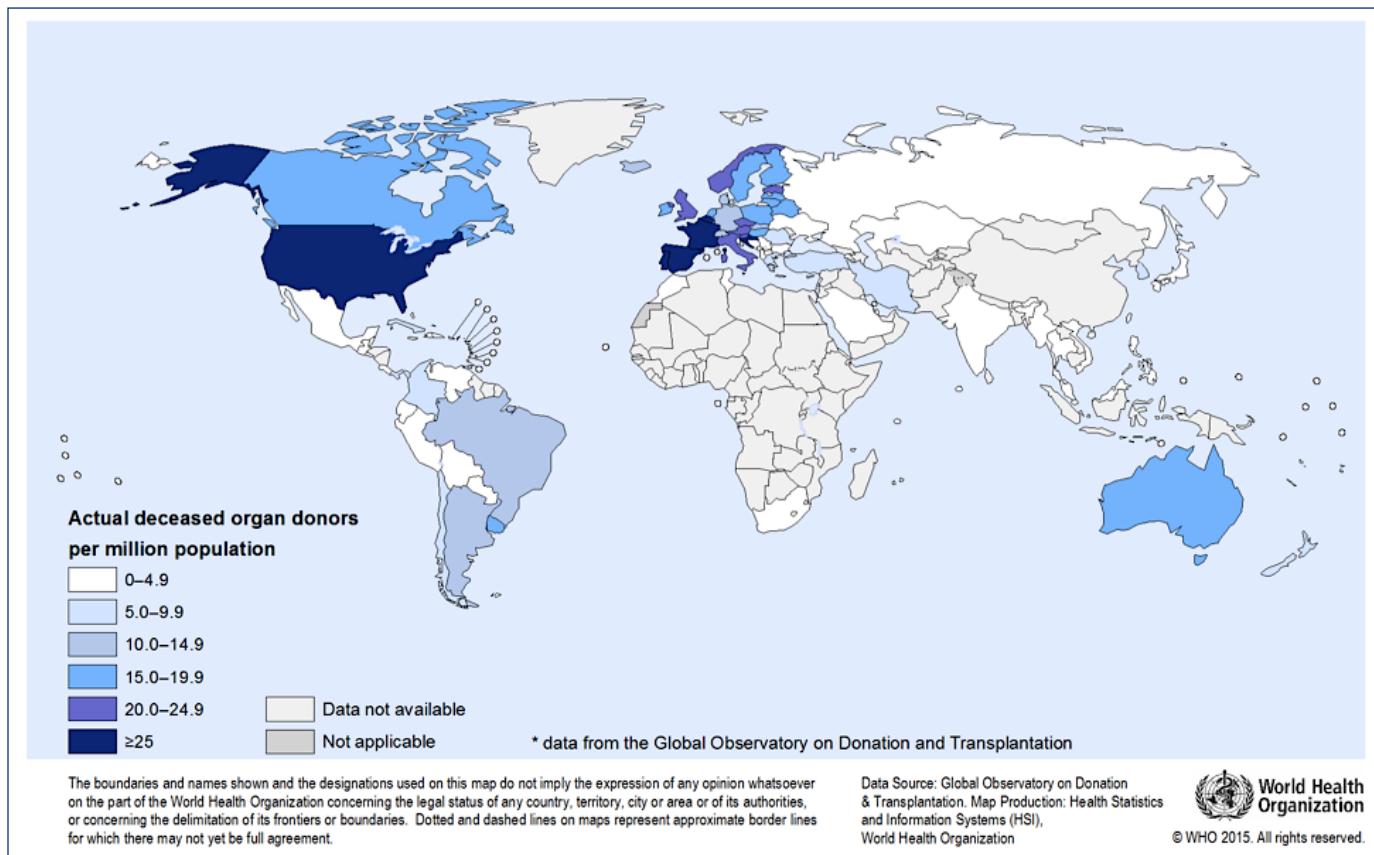
to verify the effect of legalizing organ donation on black market sales as there is very little evidence to support its existence or nonexistence.<sup>2</sup>

While the current system of organ donation in the United States is not effective enough to keep up with the demand for organs, blaming this on the use of altruistic donations would be incorrect. Specifically, Spain, Austria, Hungary, Poland, Portugal, and Sweden all have consent rates of above 85% while all rely on altruistic organ donations.<sup>3</sup> These countries are evidence that altruistic donations are not the problem. They are fairing well in transplantation rates as they rely on an opt-out system for donation and have success in other programs and practices. Spain is leading in organ transplantation not only due to the opt-out system, but also due to a comprehensive national organ procurement system.

The United States currently has the “opt-in” system. The opt-in system assumes that everyone does not wish to be an organ donor, and that anyone who does will give explicit consent during their lifetime to be an organ donor. Some argue that the United States could potentially increase organ donation by using an opt-out system, a system in which it is assumed that everyone wants to donate and that anyone who does not wish to donate will make that explicitly clear during their lifetime. Some countries have tried to introduce legislation to change from the opt-in to the opt-out system and faced opposition, and such a proposition in the United States might also face serious political and religious opposition.<sup>4</sup> The opt-out organ donation system has a “soft”

**Figure 1. The Growing Gap Between Organ Supply and Demand in the U.S.<sup>1</sup>**



**Figure 2.** Actual donors from deceased persons, 2013.<sup>7</sup>

version as practiced in Spain in which the family's wishes are considered. The "hard" version of this opt-out method is practiced in Austria where family consent is not needed.<sup>4</sup> The use of different systems of consent are not the only ways organ donation policy can be impacted, but they are unquestionably important.

Culturally and geologically similar countries Austria and Germany have very different consent rates. Germany, using an opt-in system, has only 12% of the population consenting to organ donation, while Austria, with an opt-out system, has 99.98% of the population consenting. The United States fares better with the opt-in system than Germany does, with 28% of the population consenting. However, this could be improved many times over, especially considering that 85% of Americans would donate their organs as reported in surveys. The consent rates correlate directly with effective donations and shorter waiting lists: the ultimate goal.<sup>3</sup> Some countries do not fall under this pattern of high consent rates despite the use of presumed consent. Greece is an example of low organ donation rates, and a multitude of factors such as availability of intensive care facilities, understaffing to recruit potential donors and the economic crisis have been cited as causes.<sup>5</sup>

The difference between the organ donation consent rate between countries that use the opt-in versus the out-out method occurs because people think that the default plan

is a suggestion favored by the government and society. They do not make the effort to change the default, and making the decision can be stressful and time consuming, while doing nothing is not. Psychologists identify this as the Default Effect, and it influences the individual's decisions made on organ donation.<sup>3</sup> The downside of using the opt-out system is that some non-willing donors will have their organs taken because they did not make the effort to explicitly opt-out. There is also a similar disadvantage to the opt-in system, as people who may have wanted to be organ donors were unable to do so because they did not make it explicitly clear.

Currently, there are limited programs educating the population about organ donation in the United States. The public lacks basic knowledge and understanding of organ donation, i.e. the dire need, living vs. deceased, which organs can be donated during one's lifetime, the time, effort and risk involved. The next of kin also influences organ procurement in both the opt-in and opt-out methods; people should have a discussion with their families expressing their desire to donate their organs. Well-trained transplant coordinators who are physicians and nurses working in the intensive care units of hospitals in Spain have played a key role in increasing organ donation by working with the families of potential organ donors. These programs strengthen organ procurement.<sup>6</sup> Some educational and awareness programs may have the potential to improve donation rates in countries. In the

United States, indication of donor status on driver's licenses is an example of such a program.

Much needs to be done to save the 22 lives lost everyday due to a lack of donated organs.<sup>1</sup> There is potential for the adoption of an opt-out system in the United States to help fight the organ donation crisis, but such a change in policy would certainly face a number of challenges. The federal government, the states, the media and the professional societies each need to take on this responsibility and play their respective roles in changing organ donation policies, educating the public, and addressing the problems with the current system and developing a more secure organ procurement infrastructure.

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All authors declare that they have no conflicts of interest directly relevant to the content of the manuscript.

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