

# Mayo Clinic Q & A - Dr. David Douglas -Organ Donor and tran...

#### SUMMARY KEYWORDS

organs, transplant, donor, transplantation, mayo clinic, organ donation, transplant center, organ transplantation, people, donation, year, disparities, donate, country, organ donor, liver, deceased, kidney, register, deceased donor

#### **SPEAKERS**

Dr. Halena Gazelka, Dr. David Douglas, Narrator

- Narrator 00:01 Coming up on Mayo Clinic Q&A:
- Dr. David Douglas 00:03 All donors are tested for COVID-19. Anyone who had active COVID-19 would not be used as a donor. There have been no recorded cases of COVID transmitted from the donor to a recipient from transplantation.
- Narrator 00:16 Even amid the COVID pandemic, Mayo Clinic had a record year in organ donor transplants with more than 2000 solid organ and bone marrow transplantations last year.
- Dr. David Douglas 00:27 Even though we've seen a rise in donation, it's still not enough. And right now, there's over 107,000 people waiting. We are adding a new person to the list every nine or 10 minutes, and unfortunately, about 17 people die every day because there's not enough organs yet

available for transplantation.

- Dr. Halena Gazelka 00:45
  - Welcome, everyone to Mayo Clinic Q&A. I'm Dr. Halena Gazelka. In spite of COVID-19, 2020 proved to be a record setting year for Mayo Clinic's Enterprise Transplant Center. The center performed the most solid organ transplants across its three campuses in Arizona, Florida and Minnesota than any time before in history. Driving this increase is a rise in deceased organ donation. This trend is happening at a national level too. According to the United network for organ sharing, deceased donation increased by 6% to the United States last year. April is Donate Life month. Joining us to discuss solid organ transplantation is Dr. David Douglas, the Chair of the Mayo Clinic Transplant Center. Thanks for being here today. Dr. Douglas.
- Dr. David Douglas 01:35
  Thank you for having me. It's an important message to get out there. So, thank you.
- Dr. Halena Gazelka 01:39

  It is, it's a wonderful time to talk about this since April is Donate Life month. And so, I'm so glad that you're here today. I'm wondering if first just at the beginning here, you could clarify something both for me and for our listeners. I mentioned in the intro deceased organ transplants. And I'm wondering if you can tell us a little bit about organ transplantation, deceased versus living donors, and what organs are used for each of those venues?
- Dr. David Douglas 02:09

  Sure, yes, organ donation, you know, deceased donors, as you mentioned, has been increasing, and that trend actually has been occurring over the last 10 years or so. And deceased donors would include heart, lung, liver, kidney, pancreas, intestines, you know, there are a large variety of organs. Living donor also is available predominantly in kidney and liver. And there's about 6,000 living donations that occur every year predominantly for those organs as well.
- Dr. Halena Gazelka 02:43
  Why do you think that we're seeing an increase in deceased donation of organs?

### Dr. David Douglas 02:48

Well, I think the reason is, is multifactorial, but I think that one of the big reasons is just raising awareness for people of the need for organ donation. As I mentioned, 10 consecutive years we've seen an increase in deceased donation. I think it's remarkable even with the issues with COVID last year that we were still able to increase that number for a 10th year in a row. If you poll Americans, the majority of Americans support organ donation, over 90%. But only about 60% of people are actually registered to be donors. And so, we really made a big effort to educate people on the need for organ donation and how they can register to be a donor and have their wishes identified and known.

Dr. Halena Gazelka 03:29

That's really interesting. We might get back to that in a moment. I wanted to ask you about COVID-19. Do you think that COVID-19, the pandemic, the change in maybe lifestyle values has had an impact on the willingness of individuals to be donors?

Dr. David Douglas 03:47

Well, I think COVID had a huge impact on donation in both ways. It may have made people more aware, but also, it had a huge impact just on health care across the nation. And we talked about deceased donors increasing by 6%, but living donor decreased by 22%, with COVID during 2020, as well. So, if you look at overall transplantation, it was about the same, or maybe even slightly 2% less than the year before. Living donor was down just because of people not being able to travel to transplant centers, donors traveling to their transplant centers, and everything in the cases maybe being delayed or put off because of the COVID impact.

Dr. Halena Gazelka 04:31

Yeah, I was going to ask you that I can imagine that the travel has an impact because these people don't always live next to each other when they're donating. We've talked about these chains of donations, but also, we weren't doing elective, or you know, semi urgent, even type of surgeries at Mayo. We were trying to do emergent and urgent surgeries for a period of time. So, I imagine that impacted those numbers.

Dr. David Douglas 04:54

It did I mean, obviously if you have a deceased donor available, then you're going to travel and have that transplant. Transplant is not an elective surgery, but even living

donor, even though it's not considered an elective surgery, if you have a donor identified, you can schedule that. And so, you might be able to delay that or find a more opportune time to have that living donor transplant done.

Dr. Halena Gazelka 05:14

David, I saw a really interesting article on the news the other day where an individual who had COVID-19 apparently, donated lungs to another individual, I think with COVID-19. And I'm wondering, in general, can someone who has had COVID-19 be an organ donor?

Dr. David Douglas 05:33

So, the person will have to be recovered from COVID-19. All donors are tested for COVID-19. Anyone who had active COVID-19 would not be used as a donor. And in fact, it's important just to make that point because there have been no recorded cases of COVID transmitted from the donor to a recipient from transplantation. But, if someone's head COVID and they've recovered, yes. And even living donors if they've had COVID and recovered can, you know, can be living donors as well.

Dr. Halena Gazelka 06:03

Well, that's good information to have. Tell us about the need for donated organs. How many individuals are out there waiting? How many transplants are we talking about a year? What do the numbers look like nationally and at Mayo Clinic?

Dr. David Douglas 06:17

Yeah, it's important to understand even though we've seen a rise in donation, it's still not enough. And right now, there's over 107,000 people waiting for some type of organ transplantation. We're adding a new person to the list every nine or 10 minutes. And unfortunately, about 17 people die every day because there's not enough organs yet available for transplantation. So, even though we're doing great to get the message out there, there's still more that we can do.

Dr. Halena Gazelka 06:48

Wow, that is amazing. That really puts it in perspective. That means that likely that someone that I know, or that my neighbors know, or that our listeners know, is either waiting for a transplant or has passed away while waiting for a transplant. That's pretty significant. David, tell me a little bit about what qualifies someone to be an organ donor.

Do you have to be in a certain state of health to be able to donate your organs?

# Dr. David Douglas 07:14

So that's a good question. I mean, for deceased donor transplant almost anyone can be a donor, I mean, donors are screened. And so, we certainly encourage everyone to registered to be a donor and make your wishes known. There are a lot of misconceptions out there that maybe I'm too old to be a donor. But that's not the case. You know, with livers, we sometimes use livers that are 80 years old or 90 years old, as long as they're in good shape and good biopsies, we can use those for donation. Also, tissue and corneas can be donated as well. The average, you know, a person donating an organ, a deceased donor organ, can save the lives of up to eight people. And also, they can improve the lives up to 75 people with tissue and cornea donations as well. So, you can make a difference, you can make an impact. And so, I'd certainly encourage everyone to register to be a donor, and then it's taken from there. To be a living donor, it's a little bit different. To be a living donor, you do have to be in good shape, and not have significant medical problems, and those are screened as well.

#### Dr. Halena Gazelka 08:19

David, you talked about registering to be a donor. I know in the state of Minnesota, I checked something when I got a new driver's license. Is that true in every state? Is that how you declare that you want to be a donor on your ID or driver's license?

### Dr. David Douglas 08:32

Yeah, there's a couple of ways, you can do it at the DMV, at the Department of Motor Vehicles when you renew your license. Many states though, where licensed renewals may be far and in between as far as years. And so, there are a couple of websites I'd like to make people aware of because you can actually go online, register your wishes to be a donor. Every state has their own registry, but then they are connected and coordinated. So, those two websites would be organdonor.gov. That's a government website that coordinates all the state websites together organdonor.gov, and the other website would be donatelife.net. So, that would be the way you can go and you can register, you know, what organs you'd be willing to donate if the need came.

#### Dr. Halena Gazelka 09:20

Well, that's wonderful. I wasn't aware of that. So, I learned something today, I always like to learn something. Can you declare which organs you'd want to donate?

- Dr. David Douglas 09:30
  - You can, and you can donate, you can declare if you want to donate your body to research as well. All those things are available. If you want to be a tissue donor, organ donor, all those things can be listed, so your wishes would be known as part of the registry.
- Dr. Halena Gazelka 09:46

I was a little fascinated earlier when you talked about that 90% of Americans believe that organ donation is a good thing, but not so many of us are registered for that. And I am curious whether others might have irrational fears about this. I recall that some of my relatives saying they did not want that on their driver's license, because if they got in an accident, they may not be given care because their organs could be used for someone else. And I admit that sounds a little perhaps paranoid, but I do wonder if there are irrational fears around organ donation that exist that keep people from deciding to donate.

Dr. David Douglas 10:21

That is another one of the unfortunate misconceptions about organ donation. So, organ donation does not occur until someone has already been declared dead. So, there's no, you know, incentive or anything to do anything otherwise. But, you know, once someone has passed away, at least something good can become of that tragedy. And so, there is, as I mentioned, there's a huge need for organ donation. And so, I certainly encourage everyone to register their wishes. You know, if you decide you don't want to be an organ donor, you can also register that as well.

- Dr. Halena Gazelka 10:57
  David, I understand that Mayo Clinic has won some awards this year in organ donation.
  Could you tell us a little about those?
- Por. David Douglas 11:03

  Yeah, so we've talked a little bit about the volumes, and we've seen an increase in volumes across all three of our campuses. But also, equally or even more important, is the outcomes. And so, Mayo Clinic has some of the best outcomes in the country. Every year Interlink is a center of excellence that announces kind of who has the best transplant programs in the country. They pick a Chairman's Award for the top performing transplant program for each organ. And for 2021, Mayo Clinic Arizona's kidney program was chosen

as the top performing kidney program in the country. Mayo Clinic Florida's liver program was chosen as the top performing liver program in the country based on clinical patient outcomes.

Dr. Halena Gazelka 11:45

Wow, that is just amazing. So, what innovations are happening in the field of organ transplantation? And how does Mayo contribute? What is it that we are doing that make our outcomes good enough to be recognized like that?

Dr. David Douglas 11:59

Yeah, there's a lot that we're doing, I think. First, we're trying to better utilize the organs that we currently have available. So, unfortunately in this country, even though I told you there's a huge disparity as far as the need for organ donation, still many organs are discarded that could be utilized. And so, I think one of the things that Mayo Clinic has done, is to better utilize the organs that we have available. Mayo Clinic Arizona has the highest organ offer acceptance rate in the country, meaning that we accept more organ offers than any other program in the country in our liver program. And sometimes we'll use livers or kidneys that may have been turned down by another conservative program. But those are still organs that are can be used with excellent outcomes, as we've mentioned. And so, that's one of the things we're doing is we're better utilizing organs that are currently available. There's also a lot of research innovation going into how can we use organs that may not be ideal or usable now and make those organs use usable. And so, there's a lot of research going on in what we call ex vivo perfusion. So that means you take a deceased donor organ out of the donor, you put it on a machine, a pump, and you actually can pump the organ, whether it be a liver, or a kidney, or a heart or lungs, look at how well they're performing, and then decide if you can maybe improve them or make them better and to be able to utilize those and transplant them successfully. I think that that's really going to be a big thing as far as the future of transplantation as we move forward in the foreseeable next few years.

- Dr. Halena Gazelka 13:34

  That is really fascinating. Does the quality of the organs have something to do with how long it has been after death that the organs are retrieved for use?
- Dr. David Douglas 13:43
  Well, yeah, that is one of the aspects that go, in I mean, heart and lungs have to go in in a

much shorter period, like four to six hours after donation. Livers can go a little bit longer, maybe 12 to 16 hours, and then kidneys can go 24 to 36 hours. But with this pump technology we may be able to extend that. Then we'd be able to, organs could travel perhaps longer distances to get to the people who need them. And also, organs that you might not be quite sure if it's a good organ to use or not, you can observe it while it's on the pump and see how's it performing? You know, for a liver, how's it, what are the liver tests looking like? Is it producing bile, all these things can be observed and looked at and decide which organs are going to be usable that we can give them to somebody in need.

Dr. Halena Gazelka 14:33

Well, that is really amazing. So, you don't have a lot of time. Can I ask you to explain briefly to our listeners, I understand that the country is divided into regions correct as far as donations and receipt of organs? So, do you primarily use organs that since you work in Arizona, primarily organs that are donated near Arizona or how does it work?

Dr. David Douglas 14:59

That's a good question, and they're changing the organ allocation system because there were some disparities, you know geographically, depending on what region of the country you lived in, you might have more access to organs or not. They're changing the system so that it's based on how far you live away from the donor hospital. And so, most organs in your area or donor hospitals in your area, but we do also get many offers nationally, maybe an organ has been offered to the local programs and they haven't accepted it and that's still an organ that usable and if it can get to us in the right amount of time, we still can use that organ. So, there are some national offers or regional offers that we still utilize.

Dr. Halena Gazelka 15:43

That's really interesting, and speaking of disparities, you know we're doing a lot of talk at Mayo Clinic lately about how we can be certain that we're delivering care equitably without bias to all individuals. Are there any disparities related to organ donations and transplantation that we should be aware of, and what is Mayo Clinic doing to work on these?

Dr. David Douglas 16:05
Yeah, so there are disparities, and we talked already about just the availability of organs that's one huge disparity. But then also, just insurance can be a disparity as far as if you

have insurance. And then also people that live in rural areas or may be far away from a transplant center may not have the same access to transplant. Also, sometimes just people just aren't aware that because transplantation is changing so much what the indications for transplant are, so maybe referring physicians aren't aware that the patients that they're taking care of would qualify for a transplant. So, we're doing a lot to educate referring physicians and patients. With the COVID epidemic, one of the good things that's happened from that is the huge boom in telemedicine. And so, even though you have to come to the transplant center for your transplant, a lot of the care can be done pre and post-transplant with telemedicine to see if someone qualifies for a transplant or to check up on somebody who may live a long distance away from the transplant center. So, that's one of the few things that is positive that's come out of the COVID epidemic is, I think, that telemedicine, transplant and all other is here to stay. You know we're going to see a lot more of that as we move forward in healthcare.

### Dr. Halena Gazelka 17:19

Yes, another silver lining of COVID. I like to look for the silver linings. David tell us what it is like for you. What does it feel like to be able to perform these surgeries that give people another chance at life essentially. What does that mean for you as an individual and for your career and fulfillment in it?

# Dr. David Douglas 17:41

Yeah, well that's one of the reasons that I went into, you know, transplantation is just that. And I always say my favorite day of the year is always the day that we hold our transplant reunion, and that's been delayed with COVID last year but usually we have a day where all patients who've been transplanted can kind of come together for a reception and just to see the nurses and the physicians and show how well they're doing post-transplant. And the thing that impacts me most on that day it's not just the patients that are impacted, but they bring their family members with them. So, you see a daughter that got married that they wouldn't have seen otherwise, or their interaction with their grandchildren, or you know, so it's not just the patients but all the family members that you touch as well with the second chance at life through organ transplantation. So, again that hopefully in the coming years we are able to re-institute that because that is that's definitely my favorite day of the year.

### Dr. Halena Gazelka 18:40

Our thanks to Dr. David Douglas, the chair of the Mayo Clinic Transplant Center. He has been here today to discuss solid organ transplantation with us, and to kick off April, which

is Donate Life Month. We'd encourage you to consider becoming an organ donor. I hope that you learned something today, I know that i did. We wish you a wonderful day.



#### Narrator 19:01

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