

## WHO DECIDES? THE ETHICS OF ORGAN TRANSPLANTATION

While the majority of people in most nations support organ donation, not everyone chooses to be an organ donor, and many gravely ill people languish on the organ transplant waiting list. The decision-making process about who receives available organs is an ideal way to give students the opportunity to explore how these decisions are made and who makes them, and to help students consider their own ethical positions in the process.



Sturft: "Organ Transplant Surgery." Getty Images Signature, March 3, 2024. <https://www.canva.com/photos/MAFYWUJTF20/>

### Learning Objectives

Students will be able to:

- Discuss the criteria used to allocate organs for transplant in various countries
- Consider the ethics of how organs are allocated
- Identify the justifications for the various criteria
- Develop and defend their own set of criteria for organ allocation

## RESOURCES

### Videos:

- [Charles' Story](#), NHS Organ Donation
- [Faizan - Waiting for a Kidney Transplant](#), NHS Organ Donation
- [Introduction to Medical Ethics](#), The Study Tube Project
- [Keeping Hope Alive for Patients Waiting for Organ Transplants](#), Click On Detroit | Local 4 | WDIV
- [On Dialysis for 15 Years: North Texas Man Waiting for Kidney Transplant](#), WFAA
- [Organ Donation - Waiting for a Second Chance](#), myangelfund
- [Waiting for a Kidney Transplant - Alysia's Story](#), kidneyfund

### Data Spreadsheets:

- [Organ Allocation in ABE Countries](#)
- [Organ Wait List Lengths](#)

# Activity 1 | What Are the Criteria?

## Brief Description

In this activity, students explore how different countries allocate available organs. Teams research the criteria in various countries and compare how these criteria play into the decision-making process. Finally, the class develops their own set of criteria, writes an explanation of how they developed their criteria, and describes why they included the elements they chose.

**Duration of the Lesson:** 2 50-minute class periods

## Prerequisites

- None

## Preparation

- Preview the transplant waiting list videos, and choose one or more to show students as an introduction to the struggle of patients who are waiting for an organ transplant.
- Decide how you will break the class into teams of three to five students. Each team will research the policies of one country to determine what criteria are used to determine who gets an organ transplant.

## Teaching Sequence

### ENGAGE

1. Show your chosen video(s) to introduce students to the organ transplant waiting list.
2. Discuss students' thoughts and feelings about how they think it would feel to need an organ transplant.

**TEACHER TIP:** Students may have had personal experiences with organ transplantation. Be sure to approach this discussion carefully as these personal experiences may be uncomfortable for these students to discuss.

3. Ask, "How do you think organ recipients are selected? What criteria do you think are considered when determining who gets an available organ?" *Students will likely identify a patient's condition (how ill they are) in determining who gets an organ. Encourage them to try to envision what other criteria might be considered.*

4. Explain that teams will be researching how organs are allocated in various countries and comparing them. Finally, as a group, the class will develop and justify their own criteria for organ allocation.

## EXPLORE

5. Break the class into teams and either assign each team a country to research or allow them to choose. (Make sure each team chooses a different country.) Available country data come from Australia, Canada, China, France, Germany, Ireland, Italy, Japan, The Netherlands, Turkey, the United Kingdom, and the United States. Teams should include information about how organ donors are included on the organ donor registry and what medical and logistical criteria are taken into account in allocating an organ.

Links to data spreadsheets:

- o [Organ Allocation in ABE Countries](#)
  - o [Organ Wait List Lengths](#)
6. Remind teams that they will need to present the information they have found to the rest of the class.
  7. Ensure that teams have access to computers and links to the countries' criteria.
  8. Give teams time to complete their research and to discuss what they have found.

## DISCUSS

9. After teams have completed their research, have them present what they've learned to the class.
10. Make a table on the board or a piece of chart paper and keep track of the criteria that teams have compiled.
11. Discuss the similarities and the differences between the various nations' criteria. The following questions may help spark discussion:
  - o Are there differences in which patients are considered urgently in need of transplant?
  - o How are logistics (distance from recipient, size, etc.) factored into the decision?
  - o Are there lifestyle factors included in the decision-making process?
12. Once all teams have presented their criteria, have a whole-class discussion about students' feelings about the criteria. Do they feel that any criteria are particularly appropriate or inappropriate? Make sure that students justify their thinking.
13. Explain that you will make a class set of criteria. Students will need to propose and justify their criteria, and the rest of the class will be asked to comment and finally vote on which criteria should or should not be included.

14. As students discuss, continue to keep track of the running list of criteria they suggest. During the discussion, note the reasoning students use with each of the criterion.
15. Finally, compile the final “class criteria” list and discuss it. Give students the opportunity to challenge agreed-on criteria and ensure that students feel that all the criteria they suggest are justified.
16. Finally, show the first minute of the video [Introduction to Medical Ethics by the StudyTube Project](#).
17. Tell students that their homework is to watch the final 11 minutes of the video and be prepared to discuss what is meant by the “four pillars of medical ethics.”

## EXTENSIONS

### Bias in the System?

Have students read the article “[No Time to Spare](#)” from WebMD. Ask students to write a paragraph or have a discussion in which students identify the barriers to organ transplant for people of color and suggest ways that these barriers might be overcome.

### Could a Machine Decide?

Ask students to consider the possibility of artificial intelligence (AI) making decisions about organ allocation and then to write an opinion letter about the potential and pitfalls of AI in organ donations. The following articles can serve as a starting point for students’ research:

- “[How AI Changed Organ Donation in the US](#),” from *Quartz*
- “[Can AI Fairly Decide Who Gets an Organ Transplant?](#)” from the *Harvard Business Review*
- “[Five Ways Artificial Intelligence Promises to Transform Organ Transplant](#),” from the Mayo Clinic
- “[Augmenting the Transplant Team with Artificial Intelligence: Toward Meaningful AI Use in Solid Organ Transplant](#),” from *Frontiers in Immunology*

# Activity 2 | Denied!

## Brief Description

In this activity, students examine recent cases in which people were removed from the organ transplant waiting list. They investigate the reasons for the removal and discuss their own feelings about the reasons for the denials.

**Duration of the Lesson:** 1 50-minute class period

**TEACHER TIP:** Unfortunately, some of these stories ended tragically, and it is easy for students to find updated information online. Please see the Extension “Unhappy Endings” for more information about how best to discuss these updates with students.

## Prerequisites

- None

## Preparation

- Review the videos and articles in the Resources list and determine which ones you believe are appropriate for your students. Be aware that these articles present some controversial and troubling ethical issues about who is allowed to receive a life-saving organ transplant and who isn't, and it may be difficult for some students to handle.
- Prepare yourself to help students undertake respectful dialogues. Vanderbilt University's Center for Teaching has developed a teaching guide that can help you prepare to facilitate difficult conversations. Explore the guide here: [Difficult Dialogues](#).

## Teaching Sequence

### ENGAGE

1. Remind students of the criteria for organ distribution they examined and their own class criteria. Ask, “Why do you think it is important to have these criteria?” Students should recognize that there are not enough organs available and that there must be some rules for allocating the organs that ARE available.
2. Discuss the importance of medical ethics and ensuring fairness in medical treatment. This is likely to cause strong reactions in students. It is important for them to express their opinions respectfully. See Preparation for a teaching guide that will help you facilitate this conversation.

## RESOURCES

### Videos

- [After Denial, Obese Man Receives Liver Transplant](#), KARE 11
- [Dying Woman Denied Transplant Due to Alcohol Use](#), CBS News: The National
- [Woman Denied Organ Transplant Over Refusal to Get COVID-19 Vaccine](#), CBS News

### Articles

- [“Cherron Gilmore Was Denied a Heart Transplant Four Times. Then She Came to VCU Health,”](#) from VCUHealth.org
- [“Denying Renal Transplantation to an Adolescent Medical Cannabis User: An Ethical Case Study,”](#) from Pediatric Transplantation
- [“Liver Transplant Dilemma: The Alcoholic Medicaid Patient,”](#) from University of Richmond Scholarship Repository
- [“Mental Disabilities and Organ Transplant Lists,”](#) from WebMD
- [“Organ Transplants for HIV/AIDS Patients,”](#) from Stanford Health Care
- [“Queensland Health Confirms Organ Transplant Recipients Need to Be Vaccinated for COVID,”](#) from 7 News Australia
- [“Teenager Denied Heart Transplant Over History of ‘Noncompliance’ and Trouble with the Law,”](#) from ABC News
- [“The First Pig-Heart Transplant Patient was Denied a Human Heart after Failing to Follow Doctors’ Orders,”](#) from Business Insider
- [“Transplant in a Patient with Comorbid Psychiatric Illness: An Ethical Dilemma,”](#) from Bulletin of the American College of Surgeons

3. Ask students to name the four pillars of medical ethics that they learned about in watching the [Introduction to Medical Ethics](#) video by the StudyTube Project in the last session.
4. As students name the four (beneficence, non-maleficence, autonomy, and justice), make a column heading on the board or on a piece of chart paper for each of the principles.
5. Discuss each of the principles and make note of students' thoughts about what each of the principles means.
6. Finally, ask students to consider their class criteria for organ distribution and then ask, "Do you think the criteria that we came up with meet the four pillars of medical ethics? Why or why not?" Students will likely have a variety of responses to these questions. Give them time to discuss their ideas respectfully and alter their criteria if they feel it is necessary.

## EXPLORE

7. Break the class into their teams from Activity 1 and assign each team one of the articles or videos that you chose from the Resources list.
8. Have teams read the article or watch the video that they have been assigned. They should make a list of the reasons that were cited for organs being denied and discuss the reasons in terms of the pillars of medical ethics. Do they feel that the decision to deny an organ for these reasons is ethical? Why or why not?
9. Remind teams that they will need to present their conclusions to the rest of the class.
10. Give teams time to read or watch their source information and discuss what they have found.

## DISCUSS

11. After teams have finished, have them present their scenarios (explain why an organ might be denied) and their thoughts about whether the denial meets the standards of medical ethics.
12. Give students time to ask questions after each team presents. Do they have different thoughts about how the decision is or is not ethical?
13. After all teams have presented, discuss whether their work today impacted their thinking about the class criteria.
14. Revisit the class criteria and edit based on students' revised thinking.

## EXTENSIONS

### Opt-in or Opt-out

Have students explore the system by which consent for organ transplant is given in your country and debate whether they think that system is the best and why. Opt-in systems require organ donors to explicitly opt in to donating their organs, whereas opt-out systems assume that you will be an organ donor unless you explicitly say you will not be. These resources may help students research:

- [“Organ Donation: Opt-in or Opt Out,”](#) from Baylor College of Medicine
- [“Assessing Global Organ Donation Policies: Opt-In vs Opt-Out,”](#) from Risk Management and Healthcare Policy
- [Organ Donation Models, Eijkholt and Fleck - Episode 8,](#) No Easy Answers in Bioethics Podcast

### Unfortunate Outcomes

Some of the stories covered in this lesson ended tragically. Diem Saunders, a person of Indigenous Canadian heritage, never received their transplant after being denied. They [died in their home in Labrador in September of 2021](#). Their mother says they died from accidental suffocation and other complications.

[Anthony Stokes was killed in a police car chase](#) after receiving a new heart. After initially being controversially rejected for a potentially life-saving transplant due to what the hospital described as a “history of non-compliance,” the 15-year-old received a new heart. Two years later, in an apparent botched home invasion and armed robbery, he died in a high-speed crash while trying to evade police.

Sixty days after receiving a genetically modified pig heart, [57-year-old David Bennett died](#) from complications that arose about 6 weeks after the initially successful operation. The capillaries surrounding his new heart exploded, depriving the heart of the necessary oxygen needed to function. Several possibilities as to why this happened remain, such as organ rejection, the presence of a virus that occurs naturally in pigs, or the heart being attacked by anti-pig antibodies.

These stories may prove controversial but could also provide good foundations for ethics lessons and potential classroom debates. If you choose to include such lessons, please consider potential societal justice hot topics, such as race and class. Because Diem Saunders was of Indigenous heritage, Anthony Stokes was Black, and David Bennett was incarcerated, there may exist some potential

biases (both internal and external) that you should account for and factor in when deciding to assign extensions that include these types of unhappy endings. While these stories could potentially provide valuable ethics lessons for students, special attention should be paid to how the information is introduced. Below are some resources that could prove useful.

- [“Guidelines for Discussing Difficult or High-Stakes Topics,”](#) from CRLT
- [“Teaching About Controversial Issues: A Resource Guide,”](#) from the Choices Program at Brown University
- [“How to Teach Controversial Issues in the Classroom,”](#) from Learning by Inquiry

For more ABE content on organ transplantation, see:

- [Ethical Questions Around Transplanted Organ Distribution](#) (blog post)
- [Changing Organ Donation with Biotechnology](#) (pocket lesson)