FAST FACTS & STATS

"Of all the senses, sight must be the most delightful." ~ Helen Keller

More sensory neurons are dedicated to vision than the other four senses combined, and giving the gift of sight – through cornea donation – can be life-giving and life-changing. But what does it really mean?

"Eye donation" doesn't mean the entire eye is transplanted; instead, only the cornea (the clear, dome-shaped surface that covers the front of the eye) is replaced, restoring sight for those with cornea-related blindness. The entire eye can be used for research and education, potentially helping untold thousands of people regain their sight as researchers gain new understanding of the cause and effects of eye conditions that lead to blindness.

Historical facts:

- The first human corneal transplant was performed in 1905 by Dr. Eduard Zirm in Olomouc, Czechoslovakia.
- The first U.S. transplant was performed in New York City by Dr. R. Townley Paton in 1937.
- The first eye bank – a non-profit organization that recovers, evaluates, prepares and distributes eyes donated for use in corneal transplantation, research and education – opened in 1944 in New York City.
- The Eye Bank Association of America, established in 1961, is the oldest transplant association and was formed by a group of ophthalmologists and eye bankers.

Statistics:

- 50,930: Number of corneas provided for transplant in the U.S. in 2017, meeting 100% of U.S. demand.
- 33,367: Number of corneas exported, helping restore sight worldwide.
- 12 million: Corneal disease cases worldwide that result in blindness or visual impairment—and that could be reversed with cornea transplants.
- 1,865,396: Number of men, women, and children who have had their sight restored worldwide through the work of EBAA members since 1961.
- 68,565: U.S. donors of ocular tissue in 2017.
- 95-98%: Success rate of corneal transplants.
- $6.0 Billion: Lifetime economic benefit of corneal transplants performed in 2017 in the U.S.
- 135,203: Total corneas donated from 68,565 donors in 2017 in the U.S

The Process:

Eye, organ, and tissue donor registration can be done via RegisterMe.org, individual state registries, or through the Department of Motor Vehicles. It is important for prospective donors to notify their family of their decision because the family's cooperation with a medical/social history interview is required before transplantation.

While cornea donation and transplantation is similar to that of organs, there are some differences that make cornea donation much more common:

- Unlike organs and other bodily tissues, the cornea does not have a blood supply; it instead gets oxygen through direct contact with the atmosphere. This means that there is no need to match blood types, so anyone can donate to anyone else.

- Corneas are recovered after the donor has passed away, typically within 12 hours after death—resulting in a far larger pool of available donors.

- Cells of the cornea can be kept alive for up to two weeks from recovery to transplant, which provides ample time for the recovery and preparation of the tissue.

- With a wider supply of available corneas, and transplant procedures that typically take less than an hour, cornea recipients can plan their surgeries to fit into their schedule.

FAST FACTS & STATS CONT'D

Donated eyes/tissue and the donor's medical and social history are evaluated by the eye bank in accordance with the Eye Bank Association of America's (EBAA) strict Medical Standards, as well as with U.S. Food and Drug Administration (FDA) regulations. In addition to these standards for evaluating safety of donors and donor tissues, the EBAA also provides standards for eye banks to use in training personnel to evaluate donor eyes. With the recipient's safety in mind, only corneas that have met strict evaluation guidelines set forth by the EBAA and FDA are distributed.

To learn more about cornea donation and transplantation, visit eyedonationmonth.org.

EYE DONATION MONTH
NOVEMBER 2018