

Organ, Tissue and Eye Donation: Glossary of Terms

AATB: The American Association of Tissue Banks is a professional, non-profit, scientific and educational organization. It is the only national tissue banking organization in the United States, and its membership totals more than 100 accredited tissue banks and 1,000 individual members. The Association was founded in 1976 by a group of doctors and scientists who had started in 1949 our nation's first tissue bank, the United States Navy Tissue Bank. Recognizing the increasing use of human tissue for transplant, these individuals saw the need for a national organization to develop standards, promote ethics and increase donations. The AATB's Standards for Tissue Banking are recognized in both the United States and around the world as the definitive guide for tissue banking. These Standards are the only private tissue-banking standards published in the United States, and they are the most comprehensive and detailed tissue-banking standards in the world.

Actionable Donor Designations (ADD): Taking the appropriate steps in one's home state to ensure that a personal decision to become a donor is documented and honored.

Allocation: The process of determining how organs are distributed. Allocation includes the system of policies and guidelines that ensure organs are distributed in an equitable, ethical and medically sound manner.

Allocation Policies: Rules established by the Organ Procurement and Transplantation Network (OPTN) to guide and regulate organ allocation and distribution in the United States.

Allograft: Tissue or cells recovered from one individual and intended for transplantation into another individual of the same species.

AOPO: The Association of Organ Procurement Organizations is the non-profit organization recognized as the national representative of fifty-eight federally-designated organ procurement organizations (OPOs), serving more than 300 million Americans. As a professional organization, AOPO is dedicated to the special concerns of OPOs, providing education, information sharing, research and technical assistance and collaboration with other health care organizations and federal agencies. Member organizations bring their collective voices to the national conversation about organ and tissue donation to provide hope within reach to the men, women and children across the country waiting for a life-saving organ transplant.

Autograft: Tissue or cells recovered from an individual and transplanted back into that same individual.

Best Practices: Processes and activities shown in practice to be the most effective.

Blood Type: One of four groups (A, B, AB or O) into which blood is classified. Blood types are based on differences in molecules (proteins and carbohydrates) on the surface of red blood cells.

Brain Death: The irreversible end of all brain activity, including involuntary activity necessary to sustain life. Brain death is used as a legal indicator of death.

Candidate: A person registered on the national organ transplant waiting list.

Cancellous: (can-cell-us) An adjective used to describe something as being spongy or lattice-like in character. When referring to bone it describes the type of bone found in the marrow cavities of the long bones.

Cartilage: A form of dense connective tissue composed of cells in a dense matrix. Cartilage comes in several specific types but commonly is associated with the type that is found lining the surfaces of bones forming a joint. Cartilage reduces wear on the bones and allows for smooth movement in the joint.

Collaborative: Multiple organizations that come together to learn about and to create improved processes in a specific topic area. The expectation is that the teams share expertise and data with each other, thus “everyone learns, everyone teaches.”

Conversion, conversion rate: Deaths that meet eligible criteria for donation which lead to someone becoming a donor.

Cornea: The clear outer part of the eye’s focusing system, located at the front of the eye.

Cortical Bone: Bone recovered from the cortex, which is the very hard and dense outer layer of bone found on most elements of the skeleton. Cortical bone has a very specific structure and is responsible for most of the strength associated with bone.

Criteria (Medical Criteria): Criteria for donation are a set of clinical or biologic standards or conditions that must be met.

Cross Match: A blood test to determine compatibility between donor and recipient. A positive cross match indicates incompatibility. If the cross match is “negative,” then the transplant may proceed. Cross matching is performed for many organ transplants.

Cryopreservation: The use of low temperatures to preserve cells or tissue. Often a chemical substance is added to protect the cells from damage during the freezing and thawing of the material.

Deceased Donor: An individual from whom at least one solid organ is recovered for the purpose of transplantation after suffering brain death or cardiac death.

Deceased Donor Transplant: The transplant of an organ from a deceased donor.

Donation after Cardiac Death (DCD), or Donation after Circulatory Death (DACD): also known as non-heart beating donation or cardiac death donation. Donation after cardiac (circulatory) death can occur on neurologically intact donors who do not fulfill neurologic (brain death) criteria prior to circulatory arrest.

Demineralized Bone: Allograft bone that has been treated to remove most of the mineral component of the bone and consists mainly of the connective tissue matrix and proteins. Demineralized bone has osteoinductive properties.

Department of Health and Human Services (DHHS or HHS): The department of the federal government responsible for health-related programs and issues.

Domino Transplant: A procedure in which an organ is removed from one transplant candidate and immediately transplanted into a second patient, with the first patient receiving a new organ from a deceased donor.

Donate Life America (DLA): Formerly the Coalition on Donation, Donate Life America is a national not-for-profit alliance of local affiliates and corporate partners that joined forces to inspire all people to Donate Life[®] through organ, eye and tissue donation. At the core of the organization's education efforts are the ongoing qualitative and quantitative research of public attitudes about organ, eye and tissue donation and the development and dissemination of effective, motivating public service campaigns. Distributed at the national and community level, these multi-media campaigns effectively communicate two core messages: "Transplants give people their life back," and "Here is how you can help."

Founded by the transplant community in 1992, Donate Life America publishes brochures, program kits and other materials; provides technical assistance, training, information and referral services; and coordinates the National Campaign for Organ, Eye and Tissue Donation. It is comprised of national organizational members and local coalitions across the U.S. that coordinate donation related activities at the local level. Volunteer advertising agencies work with the Coalition and its committees to develop targeted mass media campaigns.

Donate LifeSM, Done VidaSM: Since 2000, "Donate Life" and its Spanish-translation "Done Vida" have been the primary slogans and service mark logos of the Coalition on Donation (now Donate Life America.) They promote donation as a forthright, life-affirming action. Donate Life America encourages the widest possible use of its logos and materials in order to provide a sustained, unified national message about donation. Guidelines and policies are in place to ensure consistency, appropriate use, and the integrity of these national logos and materials.

Donate Life Wisconsin (DLW): A not-for-profit organization that is the official organ, tissue and eye donation representatives for the state of Wisconsin, DLW is a group of organizations that come together to educate the citizens of Wisconsin about organ, tissue and eye donation; and the Wisconsin Donor Registry (YesIWillWisconsin.com). Membership includes the state's two organ procurement organizations, four tissue recovery agencies, the Lion's Eye Bank, four transplant centers, the National Kidney Foundation of Wisconsin, the American Liver Foundation and the Wisconsin Department of Health Services. Three additional representatives include a donor family member, an organ transplant recipient and a living donor. The team shares expertise and data, plans education and awareness events, represents Wisconsin at national Donate Life American education events and works with the media to promote donation. Efforts include: outreach to faith communities, National Donate Life month activities and the creation and support of the Wisconsin Donor Registry.

Donation Service Area (DSA): The demographic area that is assigned by the Federal Government to each OPO in the nation. Patients who meet criteria for donation in the hospitals located within the service area must report to their assigned OPO, who will serve that donor.

Donor: Someone from whom at least one organ or tissue is recovered for the purpose of transplantation. A deceased donor is a patient who has been declared dead using either brain death or cardiac death criteria, from whom at least one vascularized solid organ is recovered for

the purpose of organ transplantation. A living donor is one who donates an organ or segment of an organ for the intent of transplantation.

Donor Registries: Available 24 hours a day, seven days a week, online registries provide authorized professionals access to a confidential database of registered organ donors, allowing easy and quick confirmation of an individual's consent to organ donation. All registries are voluntary and, in Wisconsin, are operated by the DHHS, Division of DOT. The Wisconsin registry is located online at YesIWillWisconsin.com.

EBAA: The Eye Bank Association of America, Inc. (EBAA) is a nonprofit organization of eye banks dedicated to restoring sight through the promotion and advancement of eye banking.

End-Stage Organ Disease: A disease that leads to the permanent failure of an organ.

Extended Criteria Donor: Donors who fall outside the normally expected range of criteria for donation. Medical history, age and cause of death issues may place a donor in the extended criteria donor category, but still allow successful donation to occur. Recipients are notified when they are being offered an organ that is an extended criteria organ, and may decline that organ.

First Person Authorization Legislation: Legislation that allows donor designation to be indicated on a driver's license, donor registry or an official signed donor document, which gives recovery agencies legal authority to proceed with organ, eye and tissue procurement without consent from the family.

Graft: A transplanted organ or tissue.

Graft Survival: The length of time an organ functions successfully after being transplanted.

Homologous: (hom-all-i-gus) Describes transplanted tissue that provides the same function in its new location. For example, while a graft may come from a leg of a donor and be placed in a spine of a recipient, the function of the graft is fundamentally the same – to provide support.

Infectious Disease Testing: The process of testing blood and tissue to determine suitability for transplant.

Immunosuppressive: Relating to the weakening or reducing of your immune system's responses to foreign material; immunosuppressive drugs reduce your immune system's ability to reject a transplanted organ.

Incompatible Living Donor: A living donor that does not match their intended recipient.

Iris: The colored part of the eye that regulates the amount of light entering the eye.

Kidneys: A pair of organs that remove wastes from the body through the production of urine. All of the blood in the body passes through the kidneys about 20 times every hour. Kidneys can be donated from living and deceased donors and transplanted into patients with kidney failure.

Kidney Exchange: A kidney transplant patient and their incompatible living donor are placed into a kidney exchange program in an attempt to match them with other recipient and donor

pairs. At times, multiple matches are made, creating a kidney “chain” that can include up to 36 pairs of recipients and donors.

Lens: A clear part of the eye behind the iris that helps focus light or an image on the retina.

Liver: The largest organ in the body, made up of a spongy mass of wedge-shaped lobes. The liver secretes bile, which aids in digestion, helps process proteins, carbohydrates, and fats, and stores substances like vitamins. It also removes wastes from the blood. A living donor can give part of their liver, after which the liver will regenerate itself in both the donor and recipient.

Living Donation: When a living person gives an organ or a portion of an organ for use in a transplant. A kidney or portion of a liver, lung, pancreas or intestine may be donated. See also Living Donor, Organ Donation.

Living Donor: A living person who donates an organ for transplantation, such as a kidney or a segment of the lung, liver, pancreas, or intestine. Living donors may be blood relatives, emotionally related individuals, or altruistic strangers. These may also include domino heart or liver transplants. See Domino Transplant.

Lungs: The organs of respiration in which aeration of the blood takes place, consisting of a right and left lung divided into lobes. The right lung has three lobes and the left lung has two lobes.

Match: The compatibility between the donor and the recipient. The more appropriate the match, the greater the chance of a successful transplant.

Match Run: A computerized ranking of transplant candidates based upon donor and candidate medical compatibility and criteria defined in Organ Procurement and Transplantation Network (OPTN) policies. This list is used to allocate each organ.

Medicare: The program of the Federal government that provides hospital and medical insurance, through social security taxes, to people age 65 and over, those who have permanent kidney failure and certain people with disabilities.

Multiple Listing: Being on the waiting list for the same organ at more than one transplant center.

Next of Kin: Under the Wisconsin Donor Registry, the next of kin list follows this order: 1) a health care agent under a power of attorney for health care, or a person who is otherwise expressly authorized in a record that is signed by the donor to make an anatomical gift; 2) a spouse; 3) adult children; 4) parents; 5) adult siblings; 6) adult grandchildren; 7) grandparents; 8) adults who exhibited special care and concern for the decedent; 9) a guardian of the person at the time of death; and 10) any other persons having authority to dispose of the decedent's body

Optic Nerve: A bundle of more than one million nerve fibers that carry visual messages from the retina to the brain.

Organ: A part of the body made up of tissues and cells that enable it to perform a particular function. Transplantable organs are the heart, liver, lungs, kidneys, pancreas and intestines.

Organ Donation: To give an organ or a part of an organ to be transplanted into another person. Organ donation can occur with a deceased donor, who can give kidneys, pancreas, liver, lungs, heart, intestinal organs, and with a live donor, who can give a kidney, or a portion of the liver, lung, or intestine.

Organ Placement Process: When organs are donated, the host OPO accesses the national transplant computer system through the Internet, or contacts the Organ Center at UNOS. Information about the donor is entered into the system and a donor/recipient match is run for each donated organ. The resulting match list of potential recipients is ranked according to criteria defined in that organ's allocation policy (i.e. blood type, tissue type, size of the organ, medical urgency of the patient as well as time already spent on the waiting list and distance between donor and recipient). Each organ has its own specific criteria.

Using the match list of potential recipients, the host OPO's organ procurement coordinator or the Organ Placement Specialist in the Organ Center contacts the transplant center of the highest ranked patient, based on policy criteria, to be offered the organ. If the organ is turned down, the next potential recipient's transplant center on the match list is contacted until the organ is placed. Once the organ is accepted for a patient, transportation arrangements are made and transplant surgery is scheduled. See also: Wait List, Waiting Time.

Organ Placement Specialist: Organ Center personnel responsible for coordinating the organ matching process among OPTN members.

Organ Preservation: Methods used to preserve organs while they are out of the body, between procurement from a donor and transplantation into a recipient.

Organ Procurement: The removal or retrieval of organs from a donor for transplantation.

Organ Procurement Organization (OPO): An organization designated by the Centers for Medicare and Medicaid Services (CMS), an OPO is responsible for the procurement of organs for transplantation, hospital services, donor family services and the promotion of organ donation. OPOs serve as the vital link between the donor and recipient and are responsible for the identification of donors, and the retrieval, preservation and transportation of organs for transplantation. They are also involved in data follow-up regarding deceased organ donors. As a resource to the community OPOs engage in public education on the critical need for organ donation. See also Donation Service Area (DSA).

Organ Procurement and Transplantation Network (OPTN): In 1987, Congress passed the National Organ Transplant Act that mandated the establishment of the OPTN and Scientific Registry of Transplant Recipients. The purpose of the OPTN is to improve the effectiveness of the nation's organ procurement, donation and transplantation system by increasing the availability of and access to donor organs for patients with end-stage organ failure. The Act stipulated that the Network be a non-profit, private sector entity comprised of all U.S. transplant centers, organ procurement organizations and histocompatibility laboratories. These members, along with professional and voluntary health care organizations and representatives of the general public, are governed by a Board of Directors that reports to the Division of Transplantation, HRSA and ultimately HHS. UNOS holds the OPTN contract

Osteoarticular Graft: An allograft that is composed of the bone, articular cartilage and tendons of a joint that is used to replace a diseased or damaged joint in the recipient. In many cases the use of an osteoarticular allograft can prevent the amputation of a limb.

Osteochondral Graft: An allograft consisting of cartilage.

Osteoinductive: The ability of a material or substance to induce undifferentiated cells within the marrow or connective tissue to differentiate into cells capable of producing bone.

Pancreas: Irregularly shaped gland that lies behind the stomach and secretes pancreatic enzymes into the small intestines to aid in the digestion of proteins, carbohydrates and fats. Islet cells within the pancreas secrete glucagon, which regulates blood sugar levels and insulin, which lowers blood sugar levels. If the pancreas fails, the individual becomes diabetic, and may need to take insulin. The pancreas can be donated and transplanted.

Patient Survival: The length of time a patient survives after receiving a transplant.

Placement: The process of allocating donated organs via the match system.

Potential Donor: A patient who meets the criteria for brain death with no absolute contraindications to organ donation as defined by a standardized list from the International Classification of Diseases, Ninth Revision.

Procurement: The surgical procedure of removing an organ from a donor. Also referred to as "recovery."

Pupil: The opening at the center of the iris. The iris adjusts the size of the pupil and controls the amount of light that can enter the eye.

Recipient: A person who receives a transplant.

Recovery (Organ): The surgical procedure of removing an organ or organs and/or tissue from a donor.

Rejection: A phenomenon that occurs when a recipient's immune system attacks a transplanted organ, tissue, or cell. Immunosuppressive drugs help prevent or treat rejection.

Renal: Having to do with, or referring to, the kidneys.

Retina: The light-sensitive tissue lining at the back of the eye. The retina converts light into electrical impulses that are sent to the brain through the optic nerve.

Re-transplantation: Due to rejection or failure of a transplanted organ, some patients receive another transplant.

Retrieval: The surgical procedure of organ, tissue or eye recovery. Also referred to as "procurement."

Sclera: The sclera is the white outer wall of the eye. It is a tough, fibrous tissue that extends

from the cornea to the optic nerve at the back of the eye. The sclera gives the eye its white color.

Spinal Fusion: A surgical procedure designed to stabilize and immobilize adjacent vertebrae. This procedure is performed for a variety of reasons, including herniated disks, degenerative diseases and traumatic injury. The use of allograft/autograft bone is very common. The process may be used alone or in conjunction with various manmade prosthetic devices.

Split Liver: A split liver transplant occurs when the donor liver is divided into segments and then transplanted. These segments may be transplanted into more than one recipient, or a segment could be transplanted into a child for whom an entire adult liver would be too large.

Status: An indication of the degree of medical urgency for patients awaiting heart or liver transplants. Examples: status 1A, status 1B, or status 2.

Survival Rates: Survival rates indicate the percentage of patients that are alive and the grafts (organs) that are still functioning after a certain amount of time. Survival rates are used in developing OPTN policy.

Tissue: An organization of a great many similar cells that perform a special function. Examples of tissues that can be transplanted are blood, bones, bone marrow, corneas, heart valves, ligaments, saphenous, veins, skin and tendons.

Tissue Typing: A blood test that evaluates how closely the tissues of the donor match those of the recipient.

Transplant Center: A hospital that performs transplants, including qualifying patients for transplant, registering patients on the national waiting list, performing transplant surgery and providing care before and after transplant.

Transplant Team: The diverse group of professionals at the transplant center who work to make a transplant successful. Each person on the "transplant team" is an expert in a different area of transplantation. The transplant team includes all or some of the following professionals:

- Clinical transplant coordinators have responsibility for the patient's evaluation, treatment, and follow-up care.
- Transplant physicians are doctors who manage the patient's medical care, tests, and medications. He or she does not perform surgery. The transplant physician works closely with the transplant coordinator to coordinate the patient's care until transplanted, and in some centers, provides follow-up care to the recipient.
- Transplant surgeons perform the transplant surgery and may provide the follow-up care for the recipient. The transplant surgeon has special training to perform transplants.
- Financial coordinators have detailed knowledge of financial matters and hospital billing. The financial coordinator works with other members of the transplant team, insurers, and administrative personnel to coordinate and clarify the financial aspects of the patient's care before, during, and after the transplant.

- Social workers help patients and their families understand and cope with a variety of issues associated with a patient's illness and/or the various side-effects of the transplant itself.

United Network for Organ Sharing (UNOS): The private, nonprofit membership organization that coordinates the nation's transplant system through HRSA's OPTN contract. As OPTN contractor, UNOS is responsible for meeting all contract requirements. As contractor since the first OPTN contract award in 1986, UNOS has established and continually strives to improve tools, systems and quality processes that support OPTN contract objectives and requirements. These include:

- Managing the national organ transplant waiting list
- Collecting, managing and reporting of sensitive clinical data in a secure, fail-safe environment
- Facilitating an open, inclusive forum for development and continuous refinement of evidence-based policies and standards
- Member and policy performance assessment to ensure equitable, safe treatment of candidates and recipients
- Increasing donation and making the most of every organ that is donated through professional education, outcomes research, patient services and resources and public and professional education
- Continuously improving the care, quality of life and outcomes of organ transplant candidates and recipients

Ventilator: A machine that "breathes" for a patient when the patient is not able to breathe properly.

Vitreous gel: A clear gel that fills the eye.

Wait List: The list of candidates registered to receive organ transplants. When a donor organ becomes available, the matching system generates a new, more specific list of potential recipients based on the criteria defined in that organ's allocation policy (e.g., organ type, geographic local and regional area, genetic compatibility measures, details about the condition of the organ, the candidate's disease severity, time spent waiting, etc.)

Waiting Time: The amount of time a candidate is on the national wait list. Waiting times can be influenced by many factors, including:

- blood type (some are rarer than others)
- tissue type
- height and weight of transplant candidate
- size of donated organ
- medical urgency
- time on the waiting list
- the distance between the donor's hospital and the potential recipient
- how many donors there are in the local area over a period of time and the transplant center's criteria for accepting organ offers

