

TISSUE DONATION

Everything you
need to know



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This guide has been drawn up by the Council
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on Organ Transplantation (CD-P-TO).
For more information, please visit
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INTRODUCTION

Every year, thousands of patients benefit from human tissue grafts that improve their quality of life (e.g. corneas), or even save their lives (e.g. heart valves). In most cases, tissues can only be donated after your death. However, some tissues can be removed during certain planned medical interventions (e.g. hip replacement), and you can decide to donate them as a living donor.

Did you know?

For every patient who receives an organ transplant, more than 50 patients receive a tissue transplant.

Each country has its own regulations and legislation governing tissue donation. For example, there may be a national list where you can register your decision to donate (or not to donate) organs and/or tissues after your death. You can also choose which tissues you want and do not want to donate. In some countries, the legislation assumes that if you did not make your wishes clear before your death, your organs and tissues may automatically be used to help others. This is known as 'opting out' as opposed to 'opting in'. However, whatever your feelings



and thoughts about donation, it is important that you discuss them with your family and friends to ensure that your wishes and decisions are respected after your death.

Every country has an organisation or authority that co-ordinates donation and transplantation. This may be at the local, regional or national level, and the authorities can provide you with information about the system in your country and answer any questions you might have.

This booklet provides some basic information about tissue donation. It is intended to provide readers with clear, accurate and balanced information that will help them make informed decisions according to their values.

This guide has been prepared by the Council of Europe European Committee on Organ Transplantation (CD-P-TO), composed of internationally recognised experts, in collaboration with the European Association of Tissue Banks (EATCB) and the European Eye Bank Association (EEBA).



WHAT IS TISSUE DONATION?

Tissue donation is like organ donation in that you can donate parts of your body – for example heart valves, blood vessels, corneas or musculoskeletal tissues – to help others. Donation is governed by a very strict set of ethical principles and the donor’s consent is always obtained beforehand. Like giving blood, tissue donation is an altruistic act; no payment is made for donated tissues.

Did you know?

All tissue donations have to comply with all ethical and legal requirements according to national legislation, whether during life or after death.

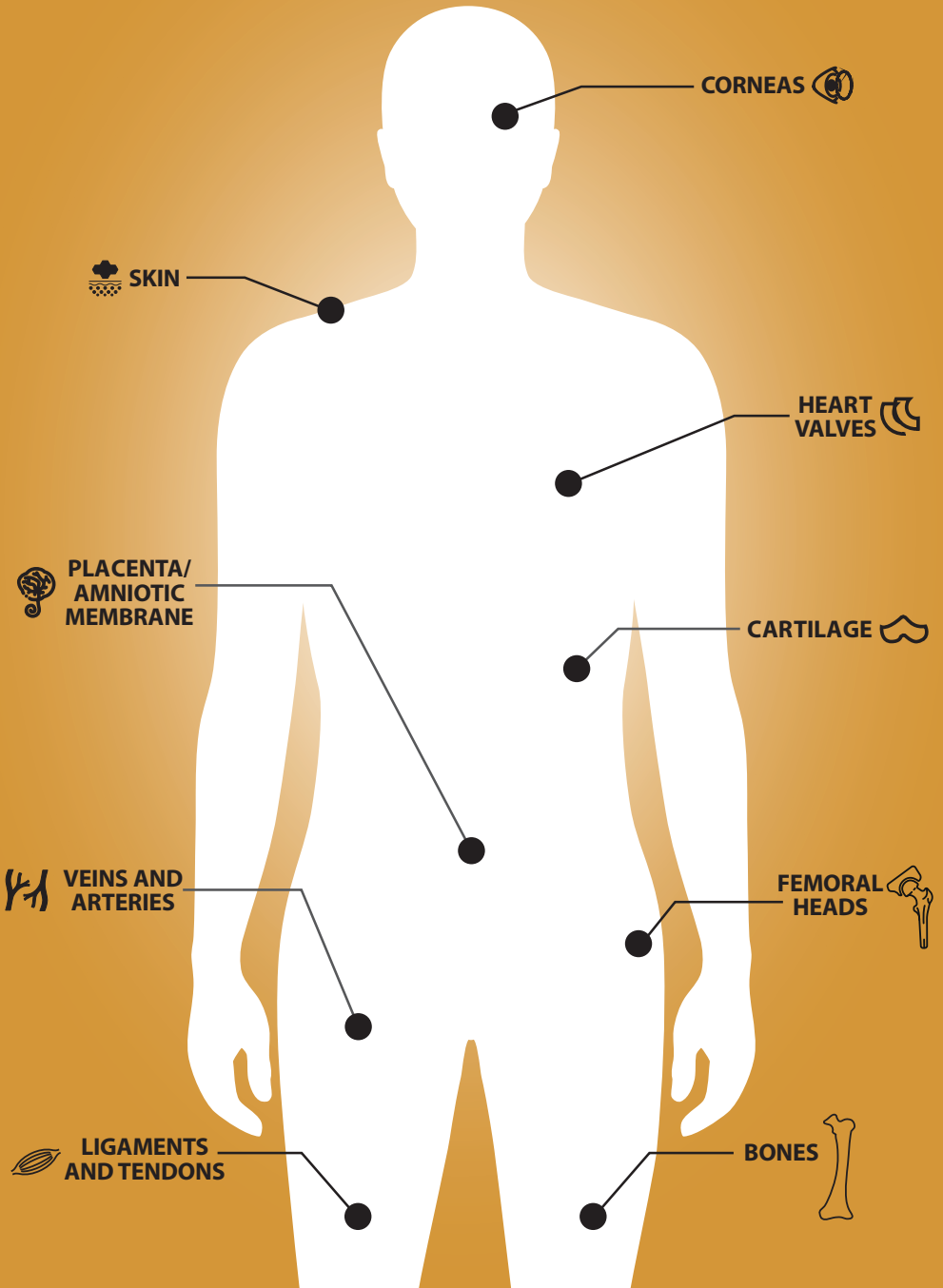
Donated tissues can be used for transplants but also for research purposes or for the development of new treatments. In hospitals, tissue transplants and tissue-based medicines are used to repair or to replace tissues that have been damaged as the result of a birth defect or accident, or through disease. Wherever possible, doctors prefer to use donated tissue to repair such damage as the outcomes for patients are better.

WHICH TISSUES CAN BE DONATED AND HOW CAN THEY BE USED?

After death, the most commonly donated tissues are:

- ✓ **Skin:** can be used to treat serious burn injuries. It is normally removed from the legs or back of the torso. Skin is never removed from areas of the body that might be visible during a funeral.
- ✓ **Bones:** can be used to replace bones that need to be removed because of cancer, or replace bone that has been damaged by

Examples of tissues that can be donated



accidents or disease. The grafts are usually taken from the limbs.

- ✓ **Tendons:** can be used to replace torn or broken tendons and help to restore mobility. The grafts are taken from the joints, mainly the knee and ankle.
- ✓ **Blood vessels:** may be used to replace diseased and blocked blood vessels. The grafts are usually obtained from the chest, abdomen or legs.
- ✓ **Heart valves:** can be transplanted to treat children born with heart defects and to replace damaged heart valves in adults.
- ✓ **Cornea:** this is the transparent front part of the eye that covers the iris and pupil. Cornea grafts can be used to restore sight to blind or partially sighted people.

Tissues that can be donated by living donors include:

- ✓ **Amniotic membrane:** this is the innermost layer of the sac in which the baby develops. Women giving birth by Caesarean section may donate their placenta, so that the amniotic membrane can be removed and banked. It is generally used to treat wounds on the surface of the eye but also for skin replacement.
- ✓ **Femoral heads:** they are removed during joint replacement surgery and may be used in other joint replacement surgeries or procedures to repair damaged spines. In some cases, bone grafts are also used in maxillofacial surgery as bone filling material.
- ✓ **Heart valves:** these can be taken from hearts removed from some patients

undergoing heart transplant. The heart valves are processed and used to replace damaged heart valves in other patients.

Did you know?

During your lifetime you can donate various tissues, such as amniotic membrane, and other tissues that are discarded during certain surgeries.

Unlike donated organs, which must be used immediately, donated tissues can be stored in tissue establishments for longer periods of time, from days to years depending on the tissue, providing more flexibility for transplants. Tissues are processed and tested according to set requirements to ensure that the transplanted tissues are safe for the recipient. Tissue establishments are authorised and inspected by their national competent authority.

WHO CAN BE A TISSUE DONOR?

In most cases, human tissues can only be donated after your death. However, there are some situations where tissue is removed during an operation, for example in hip replacement or after a Caesarean section (to obtain the amniotic membrane). These tissues can be donated to help others while you are alive.

The identity of donors and their relatives is protected and recipients of donated tissues will not be able to contact them directly. However, in some countries recipients may be allowed to send letters of thanks to donors or their relatives.

Tissue donation also differs from organ donation in that potential deceased tissue donors may be found in places other than hospital intensive care and emergency units. In general, almost anyone can be consid-

ered as a tissue donor for at least one kind of tissue. Depending on the tissue and other factors, donation may take place up to 72 hours after death. Specific quality and safety criteria are used to determine whether a person is eligible as a donor. A medical team makes sure that all donors comply with these criteria.

To reduce the risk of disease transmission, a review of the donor's medical and lifestyle history (including a possible interview with the relatives about these topics) as well as a physical examination will take place and relevant tests (including blood samples) are performed. Based on the results, a health-care professional will determine which tissues may be donated and used.

Tissue donation can save or improve the quality of life of patients. However, due to their human origin, they also carry some risks and it is important to prevent the transmission of any disease coming from the donor. For this reason, the medical history of potential donors and other potential personal and behavioural risks are thoroughly checked and tests carried out to minimise health threats to recipients.





WILL TISSUE DONATION AFFECT FUNERAL ARRANGEMENTS?

The donation and procurement procedures are scheduled in such a way as to allow the funeral arrangements to proceed as planned.

Did you know?

Tissue donation is carried out like any other surgical procedure, with the utmost respect for the donor, and is never an impediment to carrying out funeral arrangements.

Donated tissues are always removed with the greatest care and respect. Procurement is performed by trained professionals and the donor is treated with the utmost respect and dignity. After donation, the body is restored to normal appearance using special prostheses or materials to replace the donated tissue. This means that families can spend time with their relatives after the procurement procedure and that an open-casket funeral is still possible.

TAKE HOME MESSAGES

Donated tissues can dramatically improve the quality of life for recipients, and help save lives.

Tissues from one deceased donor may be transplanted into as many as 100 individuals. Some other tissues can be provided only by living donors, as long as the donation procedure does not carry risk to the donor.

If you want to make a real difference by becoming a tissue donor, check what steps you may need to take in your country and, most importantly, tell your family and friends that you want to be a donor so they can support your decision.



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