

Tissue Donation Fact Sheet for the Medical Examiner, Coroner, and Investigator



Musculoskeletal Transplant Foundation Position Statement

The MTF Medical Examiner/Coroner Advisory Committee believes and supports the position of the National Association of Medical Examiners (NAME) regarding the procurement of tissues and organs for transplantation. "Donation can be accomplished in virtually all cases without detriment to evidence collection, postmortem examination, determination of cause and manner of death, or the conduction of criminal or civil legal proceedings. Although our primary function is to investigate death, enabling transplantation is one of the few opportunities we have to directly save and improve lives. "—NAME

Definitions of Tissue Recovered — Tissues listed may be recovered

- Split thickness surface/epidermal skin
- Full thickness/dermal skin often recovered in grafts including hypodermis
- Upper extremity humerus, radius, ulna, in some cases scapula, and soft tissues
- Lower extremity pelvis, femur, tibia, fibula, foot bones and associated connective tissue such as achilles tendon, hamstrings, and patellar
- Heart valves recovery of whole heart including the aortic arch and pulmonary trunk/arteries for valve removal
- Vascular grafts saphenous vein, femoral/popliteal artery/vein. Aortic grafts such as descending thoracic aorta (DTA) and aortoiliac graft (AI) including abdominal aorta with iliac branches
- Pericardium recovery of pericardial heart sac
- Connective tissue/tendons hamstrings, fascia, and structures commonly from knee, ankle, hip, shoulder, and elbow
- Eye cornea (clear window at front of eye) or sclera (white portion of eye "globe")

Uses for Donated Tissue



Eye: Eye diseases, distorted vision, corneal blindness, trauma repair



Bone: Limb salvage due to cancer and trauma



Skin: Life threatening burns, permanent hernia repair, and permanent post-cancer reconstruction



Heart-for-valves: Heart conditions req. valve replacement

Pericardium: Oral and ocular surgery, dura mater repair



Tendons/Ligaments: Repair due to trauma and degeneration



Potential Tissue Donors

- Infancy to elderly donation age criteria set locally
- Absence of systemic infection
- No high-risk lifestyle factors (refused as blood donor)
- Some malignancies are acceptable

Tissue Recovery

- Pre-autopsy recovery preferred to meet time restrictions, reduce postmortem bacterial growth and allow sterile recovery of heart-for -valves, pericardium, vascular grafts, bone, and connective tissue
- Can take place up to 24 hours after asystole or last known alive
- Cooling of body must start within 12 hours of death and time "un-cooled" cannot exceed 15 hours
- Usually done in an O.R. or equivalent setting
- Care taken to replace bones with prosthetics and reconstruct
- All incisions closed with care at conclusion of case

Cardiac Pathologist Services

When the heart is recovered for heart valve recovery, the heart can almost always be examined by a pathologist who can provide the following ser-

- Complete cardiac pathology report including heart weights, final diagnoses, gross examination, microscopic report, and photomicrographs
- Remaining heart tissue and microscopic slides can be returned to the forensic pathologist
- Consult with your local recovery agency regarding what their cardiac processor provides

Authorization (previously known as "informed consent")

Varies based on the UAGA (Uniform Anatomical Gift Act) adopted by each

Most Common: 1st Person – Donor consents for self via driver's license, state registry, or legal document. Legal NOK hierarchy is specified according to UAGA in each state.

Common Needs of ME/C

- Preservation of evidence
- Adequate sample collection
- Documentation of injuries
- Determination of cause and manner of death

MTF ME/Coroner



Solutions

- Communication and collaboration between ME/C and Recovery Agency
- Develop policies, procedures and protocols addressing forensic needs including:
 - Collection of specimens
 - Photography
 - Chain of custody
 - Documentation of injury
 - Collection and preservation of evidence
 - X-ray prior to recovery

Common Needs of Recovery Agency Solutions

- Increase tissue donation by honoring donor/family wishes
- Release tissue quickly
- Timely release of autopsy findings
- Adequate intravascular blood specimens for testing

- Direct referral of potential donors by ME/C
- Pre-autopsy recovery
- Avoid non-sterile invasive procedures before recovery
- Receive final autopsy report in timely manner

References and Resources

- Pinckard K, Wetli CV, Graham MA. "Position Paper on Medical Examiner Release of Organs and Tissue for Transplantation." 21 Feb. 2006. <www.thename.org \rightarrow public documents \rightarrow position papers \rightarrow select from list> or <http://mtf.org/pdf/positionpaperdonationfinal.pdf >
- Goldstein B, Shafer T, Greer D, Stephens BG. Medical examiner/coroner denial for organ donation in brain-dead victims of child abuse: controversies and solutions. Clinical Intensive Care. 1997;8:136-141
- Wetli CV, Kolovich RM, Dinhofer RL. Modified Cardiectomy: documenting sudden cardiac death in hearts selected for valve allograft procurement. American Journal of Forensic Medicine and Pathology. 2002 Jun;23 (2):

A better approach...

Local Organ / Tissue Bank Logo Space Here

...caring for donors and their families.

