Screening of tissue donors is a critical step in ensuring tissue safety. Screening is a complex, multidisciplinary process that begins every time a family says “yes” to the option of donation and ends when tissue is released for transplant. Tissue banks vary in what is considered a suitable donor.

**Regulating tissue banks**

The Food and Drug Administration (FDA), the primary regulatory body for the tissue banking industry, sets mandatory standards related to donor suitability. The FDA’s primary focus is to prevent the transmission of communicable diseases associated with use of donated tissues. The FDA's Good Tissue Practices, effective in 2005, include the Donor Eligibility Rule, which requires all tissue banks to screen for communicable diseases such as HIV, hepatitis, syphilis, and Creutzfeldt-Jakob disease. These regulations set the baseline for donor suitability that all tissue banks must follow.

The American Association of Tissue Banks (AATB) is a voluntary association dedicated to ensuring that human tissues intended for transplant are safe and free of infectious disease, of uniform high quality, and available in quantities sufficient to meet national needs. The AATB not only requires donor screening and testing similar to the FDA but also focuses on the operational and organizational aspects of tissue providers. More information is at [www.aatb.org](http://www.aatb.org).

**Additional donor criteria**

Tissue banks can also set their own donor criteria above those required by the FDA and AATB. Examples of criteria that may differ among tissue banks are donor age, evidence of osteoporosis, and malignancies, among others. In selecting a tissue bank, it is important to know and understand the differences in donor criteria and the effect these differences may have on the safety and quality of tissue. An example is donor characteristics that could affect the structural integrity of bone allografts, such as the donor’s age, steroid exposure, and osteoporosis. A recent study published in *Spine* found that 50% (7 of 14) of tissue banks that process structural bone allografts accept donors with a diagnosis of osteoporosis, and 43% (6 of 14) have no upper age restriction for these types of grafts.

**Tissue donation coordinators**

Also important to understand is who is involved in the donor screening process within a tissue bank and the experience of the medical director responsible for the final decisions. Some banks employ experienced critical care RNs as tissue donation coordinators to assist with the review of donor records and the initial suitability process. These coordinators are
responsible for authorizing the recovery of tissue from potential donors who meet the criteria for donor suitability. The coordinators have 3 main functions: to support the preliminary screeners, to protect the recovery team, and to honor the gift of the tissue.

**Preliminary screening**

The preliminary screeners are employed by a recovery or screening organization and are trained to obtain complete medical and social histories and consents. Preliminary screening is challenging. It is not easy to speak with the family who has experienced a recent unexpected death of a loved one. Because the screeners are often individuals in entry level medical positions, such as EMTs or college students, the coordinator’s role is to make sure all information to determine if the donor is suitable is collected.

Another aspect of the coordinator’s role is to reduce the risk of disease transmission to the recovery teams. Generally, serology testing is performed after tissue recovery. Recovery teams rely on the discussion between the screener and the tissue bank coordinators to uncover potential high-risk behavior in donors that could increase the odds of serologies being positive for pathogens.

**Honoring the gift**

A major component of donor screening is “honoring the gift.” When a family consents to donation, the intent is for the tissue from their loved one to provide life-changing grafts for recipients. The tissue bank coordinators want to accept as many donor referrals as possible. They work to maximize the chances that a donor for whom consent has been obtained will complete the screening process and provide transplantable grafts. “Honoring the gift” also means that sometimes coordinators need to explain to families the rationale for why the tissue bank is unable to accept the potential donation.

— Jodi Togerson, BSN, CTBS

**References**


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**Reasons for musculoskeletal allograft recalls 1999-June 30, 2007**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
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<tbody>
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<td>Improper donor evaluation</td>
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**Total recalls: 49,133**