EXPERTS ADDRESS PREVENTION OF DISEASE TRANSMISSION WITH HUMAN ORGANS AND TISSUES

Reston, Va. -- A two-day Workshop entitled “Organ and Tissue Safety Workshop 2007: Advances and Challenges” was held on June 5 and 6, 2007 for over 100 representatives of organizations involved in the use of human organs, eyes, and tissues in the United States and internationally. This workshop was held to find new ways to enhance the safety of organs, tissues, and eyes used for human transplantation. Over 2 million transplants of human tissues, eyes, and solid organs, otherwise known as allografts, are performed each year in the United States. Transmission of infection or malignancy with such transplants is an uncommon complication of such therapies but is an increasingly recognized patient safety issue.

During the meeting, participants:

- Reviewed the epidemiology of infection and malignancy associated with organ and tissue transplantation
- Considered approaches to the tracking of tissues, collecting of data regarding transmission events, and rapid communication to allow timely interventions that will enhance patient safety
- Described current regulatory approaches to patient safety for organs, tissues, eyes, and blood products
- Discussed modern techniques and limitations of screening for organ and tissue donors.
- Presented the current status and future directions for the Transplantation Transmission Sentinel Network (TTSN), a new, secure, Internet-based registry and communications network that tracks data regarding allografts and will link organizations providing organs and tissues, clinical centers, and appropriate regulatory and public health authorities. The goal of TTSN is to enhance the safety of all allografts procured in the USA.
- Discussed intervention on safety issues, including the organ and tissue communities, industry, as well as regulatory agencies to advance public safety.
- Discussed international coordination of safety measures including labeling and tracking of allografts worldwide.

Recipients of organs and tissues receive great benefit from critically needed donations of organs and tissues. Rarely, infections and malignancies are transmitted through the transplant resulting in significant injury or death. This was the second meeting dedicated to the recognition and prevention of disease transmission from organ, tissue and eye donors to transplant recipients. Federal government agencies sponsored the first conference in June 2005 to share information on disease transmission and to consider interventions. The result of that meeting was to focus effort on creating a mechanism to identify and track disease transmission in transplant recipients.
In September 2005, the Centers for Disease Control and Prevention (CDC) awarded a three-year cooperative agreement to develop a “sentinel network” to the United Network for Organ Sharing (UNOS) in an alliance with Association of Organ Procurement Organizations (AOPO); American Association of Tissue Banks (AATB); Eye Bank Association of America (EBAA); American Society of Transplantation (AST); and American Society of Transplant Surgeons (ASTS). This effort resulted in the creation of the Transplantation Transmission Sentinel Network (TTSN). Since the cooperative agreement was initiated, other organizations have joined this effort including the American Association of Orthopedic Surgeons (AAOS), Society of Thoracic Surgeons (STS), and the American Society of Sports Medicine (ASMS).

The June 5 – 6 workshop focused on coordinating existing and parallel efforts by constituent organizations into the TTSN. TTSN is proposed for design completion in 2008; resources for national implementation have not yet been identified. Results of the workshop will be used to guide continuing efforts in national patient safety improvement. The workshop also identified the needs of the organ and tissue communities for new technologies that will be used to screen allograft donors for possible transplant-transmitted diseases.

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The workshop was chaired by Jay A. Fishman, M.D. (Massachusetts General Hospital and Harvard Medical School, Boston, MA), Matthew Kuehnert, M.D. of the Centers for Disease Control and Prevention (CDC, Atlanta, GA) and Michael Joyce, M.D. (Cleveland Clinic Foundation). For more information about the workshop, contact Joyce Hager at hagerjoe@unos.org.