



Lions Eye Bank Network

Lions Eye Banks worldwide provide quality eye tissue for corneal transplants along with research and education.

Lions eye banks perform valuable sight-saving functions. A staff of professionals at the eye bank recover, evaluate and distribute human eye tissue for vision restoration, research and education. Eye surgeons rely on eye banks to supply them with eye tissue for sight-saving procedures for persons who have eye disease or injury.

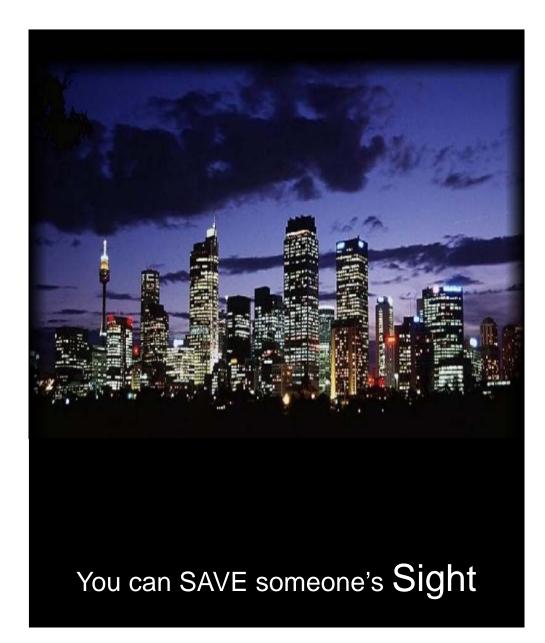
Lions have been providing support for eye banks for nearly 65 years. Currently, there are 53 official Lions Eye Banks throughout the world. Lions Eye Banks are located in Australia, Brazil, Canada, Germany, Hong Kong, India, Italy, Republic of Philippines, Turkey, United States and Puerto Rico.

In Australia, Lions Eye Banks are situated in Sydney, Melbourne and Perth;

Sydney Lions NSW Eye Bank Sydney Eye Hospital 8 Macquarie Street, Sydney NSW 2001 Telephone: 61 02 9382 7288 Email: eyebank@lionsnsweyebank.org.au

Melbourne Lions Eye Donation Service Melbourne (M) Royal Victoria Eye & Ear Hospital 32 Gisborne Street, East Melbourne VIC 3002 Telephone: 61 03 9929 8708 Email: eye-bank@unimelb.edu.au

Perth Lions Eye Bank of Western Australia Lions Eye Institute 2 Verdun Street, NEDLANDS WA 6009 Telephone: 61 08 9381 0770 Email: eyebank@lei.org.au







The Lions NSW Eye Bank

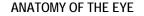
The Lions NSW Eye Bank can provide figures for the number of donors and transplants, how well we are preserving the tissue for transplantation and technological advances. Instead this information is about people and humanity. It is about people making a generous decision at a very difficult time to help give the most wondrous gift, the Gift of Sight.

The recent practice of corneal endothelial transplant surgery provides a glimpse into the future of corneal transplants. Since 1905 when the first successful corneal transplant was performed, the basic approach to corneal transplantation has largely remained unchanged; the full-thickness of the cornea is replaced with a fullthickness transplant. More recently for some patients changes to this technique means that only the layer of the cornea that needs to be replaced has to be transplanted. Outcomes are much improved with faster recovery times and less need for re-transplantation at a later date. It is a huge milestone that we have reached that the 100 year anniversary of the first corneal transplant. It is still considered one of the most successful transplants performed, and one of the most common, with over 450 transplants done in NSW annually.

The Lions NSW Eye Bank is the centre for collection, storage, preparation and distribution of corneas in NSW and the ACT. It also provides eye material to a number of tertiary education institutions for valuable research into the causes of eye disease in the community. If you or your family chose to be a donor then the question of whether the tissue can be used for other eye surgery or research into the causes of blindness is raised. Research will only be an option if your family has

consented to it. Other parts of the eye including the sclera may still be used for transplantation, largely to rebuild the eye shape and is used in reconstruction surgery.

The Lions NSW Eye Bank enjoys a great working relationship with transplanting surgeons, the hospitals and coronial institutions that supply the donors and the community which we serve. We encourage community members who are interested in donation and those people who may be on our waiting list to contact the Lions NSW Eye Bank for any additional information. Optic nerve Macula Fovea Retina



The Lions NSW Eye Bank

is a project of the Lions Clubs of NSW and the ACT in association with the Sydney and Sydney Eye Hospitals and the University of Sydney Department of Clinical Ophthalmology

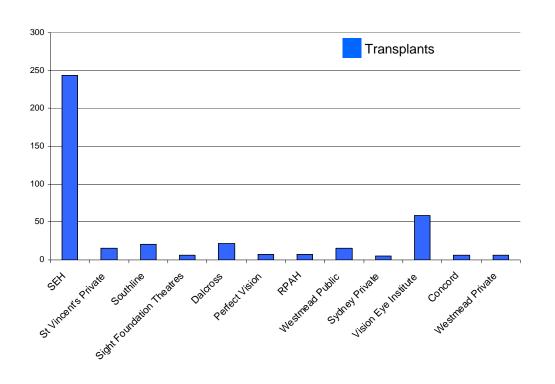
The Lions NSW Eye Bank is a not for profit organization that relies on the financial support of the Lions Clubs, as well as the Department of Health to provide this essential service.

The Eye Bank would like to thank those in the community who support eye donation for the purposes of corneal transplantation. For those that receive the Gift of Sight they are the recipients of a precious gift from another human being. But most importantly we would like to thank the donor families, without their generosity of consenting to donation, corneal transplantation would not be possible.



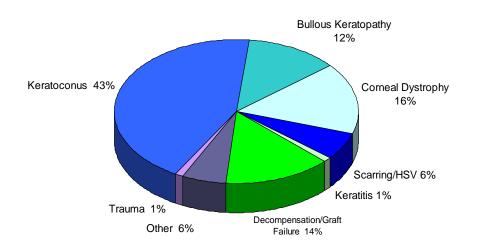
Distribution of Corneas

The majority of corneal transplants are performed in hospitals in the Sydney metropolitan area. However 25 transplants were done in regional hospitals. This services patients who cannot be transported to Sydney for their transplant and allows for post-operative follow up and for the patients to be cared for by families in their own homes. More importantly it ensures that country patients are not put at a disadvantage.



- 444 (95%) of corneal transplants were supplied to metropolitan Sydney hospitals
- 68% of all corneas were supplied for private procedures
- 244 (52%) of all corneal transplants were performed at the Sydney and Sydney Eye Hospital
- Many of the transplants were conducted as a day surgery procedure

Indications for Corneal Transplantation



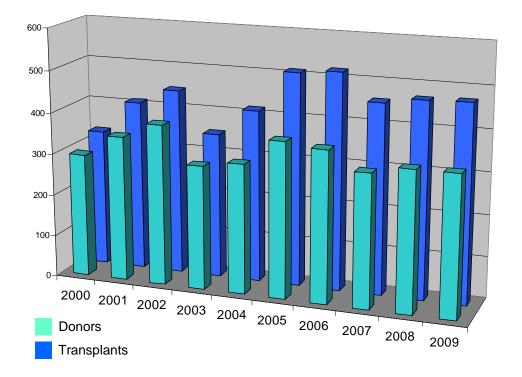
The reason for those in the community requiring a corneal transplant has not changed significantly. Young patients with a disease called Keratoconus still account for the largest percentage of recipients. Many of these people with Keratoconus are in their teenage years and early 20's, and it is a disease that usually affects both eyes. These are people who are trying to study, learning to drive, getting their first job. Their lives are put on hold till they can have a corneal transplant.

These figures are based on those that are currently on the Eye Bank's waiting list for a corneal transplant in 2009. The figure for those who suffer from endothelial decompensation and graft failure may be artificially inflated due to the changes in the recent surgical techniques. We would expect that this figure will fall as surgical techniques improved.

Many of our older recipients suffer from a painful condition called Bullous Keratopathy, for these people it is about alleviating the pain as well as restoring vision. Many of our older donors will be utilized for corneal transplants supplied to patients with Bullous Keratopathy. Age, poor eyesight or wearing glasses will not prohibit people from becoming an eye donor. In most cases it is an optical rather than a medical problem. It is more about whether the cornea is healthy and suitable to be used for transplantation.

Keratoconus (43%), Bullous Keratopathy (12%) and Corneal Dystrophies (16%) account for 71% of all transplants undertaken in NSW.

Donor Numbers and Transplants



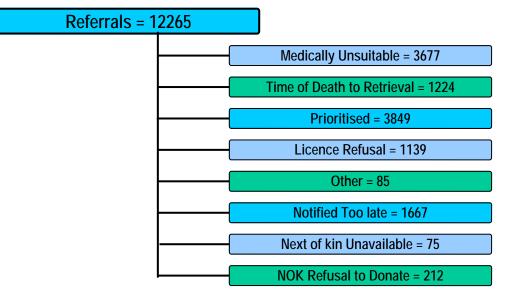
- In 2008, 469 corneas were transplanted from a total number of 337 donors
- Of the potential 674 eyes, 125 were unsuitable for transplantation. The three main reasons corneas were not used were;

(a) medical unsuitability (8%), half of which were people who chose to donate for research only due to a known medical contraindication.

- (b) unsuitable after laboratory evaluation (7%), or
- (c) serology testing (3%)
- There were also 74 eyes donated suitable for a partial thickness transplant (lamellar graft)
- 24 Corneas were supplied for emergency transplants

Realistic Donor Numbers

We are often asked why, where there are so many people who die each day are we short of donors. There are a number of reasons for this. The decision by members of the community to donate their eyes to restore sight by corneal transplantation is a personal one. It is often influenced by emotion or based on a lack of knowledge. Families may be concerned about the appearance of a loved one after the donation has occurred, or whether funeral arrangements will be delayed. Every care is taken to maintain the appearance of the donor. The eye is restored with a prosthesis, so with the eyes closed the donor will look exactly the same. As the procurement must take place within several hours of death, families may proceed with funeral arrangements.



337 Donations

From these referrals, primarily from public hospitals and coronial institutions within the greater Sydney metropolitan area, there was a total of 337 donors.

The medical suitability is always based on risk of transmission to the recipient. Being notified more than 12 hours after the patients death, or being unable to procure the eyes within the critical 12 hour window period would also rule out a potential donor.

Where the potential donor had indicated a refusal to donate on his/her licence then no approach will be made to the family.