

## **Lions Eye Research Study affecting Children and Adults a Worldwide project - Keratoconus**

Lions have had long involvement in eye care and research ever since Helen Keller challenged Lions to become "Knights of the blind" in 1925

This is the first known worldwide study in to Keratoconus to be undertaken. It is thought that NZ has possibly the highest prevalence and incidence in the world.

### **What is Keratoconus?**

Keratoconus is a progressive thinning disorder of the Cornea, which is like the glass on your watch.

We don't know the true incidence but we believe that it disproportionately affects Maori and Pacifica students and adults. The good news is that we now have a safe and effective treatment to halt its progression if it is diagnosed early.

Untreated Keratoconus can result in multiple surgical procedures and a lifelong burden of preventable visual loss. Mild Keratoconus can be treated with glasses; moderate Keratoconus requires Contact lenses. Severe Keratoconus needs Corneal Transplant surgery

The optimum time to scan students is Year 9 and Year 11 Students in order to approach schools and undertake this study we had to firstly obtain Ethics approval.

Informed consent must be obtained from both the parents/caregivers and the students. Firstly a Visual acuity (standard eye chart test) then the scanning with specialist equipment - Auto refraction and Pentacam topography - which has been installed into a specially set up van and is conducted by a trained technician

### **Schools scanned in 2015 – 840 students**

Mana College, St Catherine's College, Porirua College

**Results** - 840 students

659 year 9, 181 year 11, - 5 cases of Keratoconus (all year 11)

11 cases of possible/hidden Keratoconus

### **Schools to be scanned 2016 – 1500+ students**

St Bernard's College, Newlands College, Wellington Girls, St Patricks (Kilbirnie)

Wellington College, Taita College, Scots College, Marsden Collegiate

St Patricks (Silverstream), Naenae College, Rongotai College, St Marys

