

Coming to Your Senses
An Iowa Project

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Sponsored by:

- Iowa Lions Foundation
- University of Iowa Hospital and Clinics
 - Department of Ophthalmology and Visual Sciences

Goals of *Coming to Your Senses*

Dedicated to enhancing early detection and treatment of vision disorders in young children between 6 and 48 months through screening and public education.

Why screen young children

- 3-5% of children may develop possible vision problems
- Earlier vision problems are detected the more easily and successfully corrected
- May prevent vision problem by early detection of problem

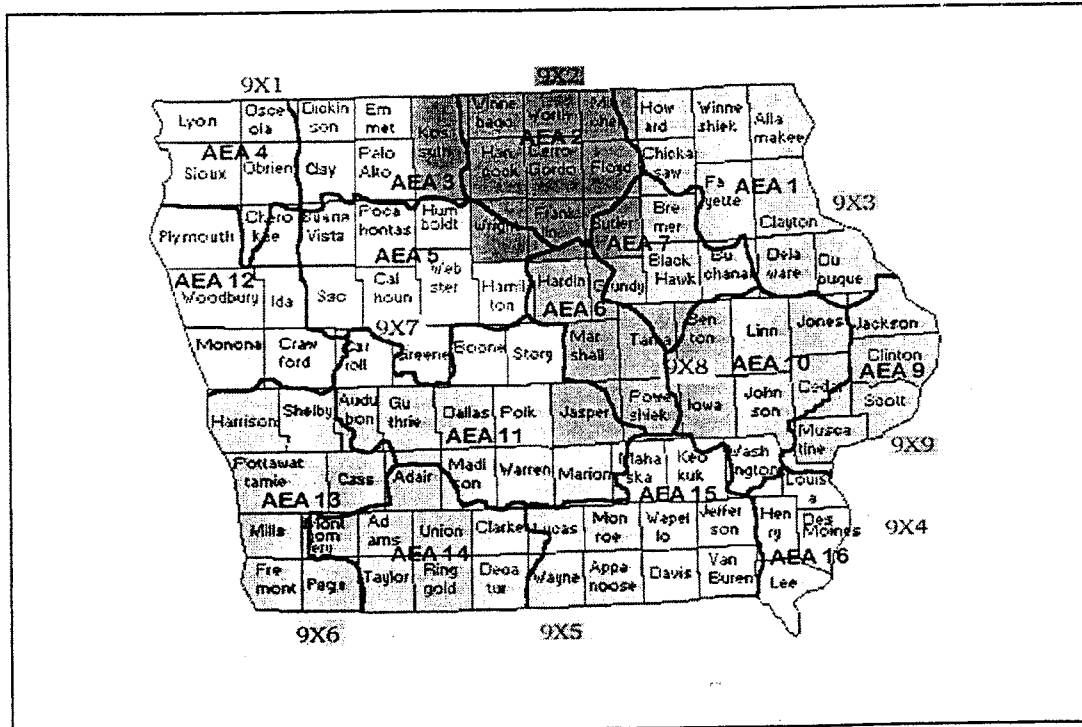
What can MTI Photoscreener™ detect?

- Factors that lead to amblyopia
 - Strabismus: crossed eyes
 - Refractive problems: need for glasses
 - Something inside the eye: media opacities

Why target children from 6 months to 48 months?

- Before 6 months most children's pupils will not dilate enough for a photograph to be interpreted
- After 48 months there are other screening tools and programs

The Screening Process



Project Coordinators Role

- Coordination and Communication
- Help DOC coordinate all screening event
- Help DOC coordinate all training events
- Track and distribute supplies

Photo-Reading Center Assistant

- Results evaluated and recorded
- Daycare's sent copy of Results form
- Parents of children who are referred are sent information packet including lists of local area vision and/or hearing professionals
- Sends summary of results to club contact

Photo-reading Center Assistant

- Conduct follow-up of children referred
- Evaluate and record on retake photographs
- Compile statistical data
- Send out monthly reports

Photo-Reader

- Evaluates all photograph
- Determines if photograph readable
- Diagnosis photograph bases on predetermined criteria

Roles of Volunteers at Screening

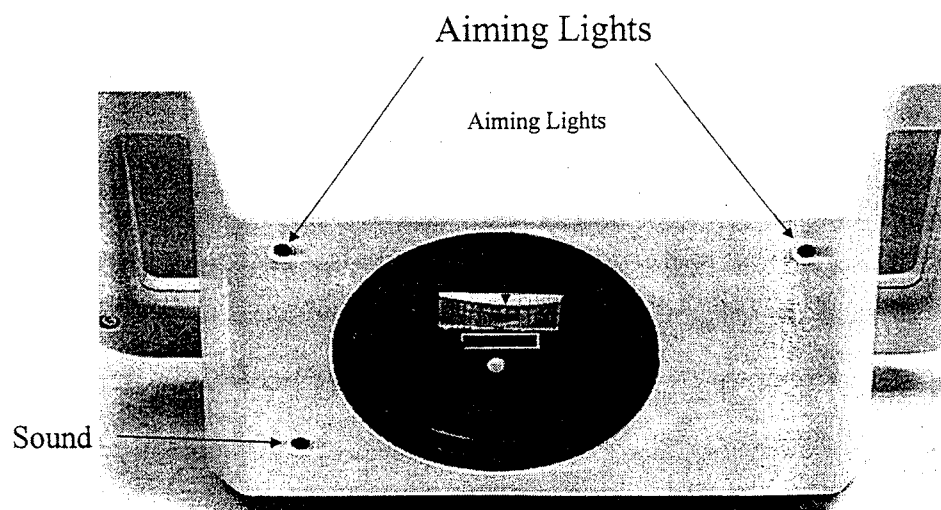
Lions Volunteers

- Club Contact
- Photographer
- Recorder
- Vision Escort

How screening works?

- Club Contact initiates screening event
- Lions team and audiologist do screening
- Screening results mailed to UIHC
- UIHC scores and records results
- UIHC mails results in sealed envelopes back to screening site for distribution to parents
- Lions retake photos if UIHC indicates “unreadable photograph”

Front of Photoscreener™



10 pictures per cartridge, two cartridges per box



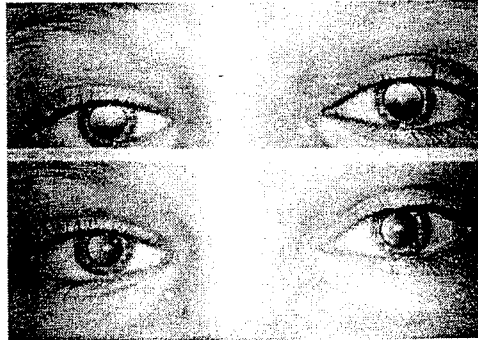
Coming to Your Senses supplies film

Photo-reading Center

Photographic Reflexes

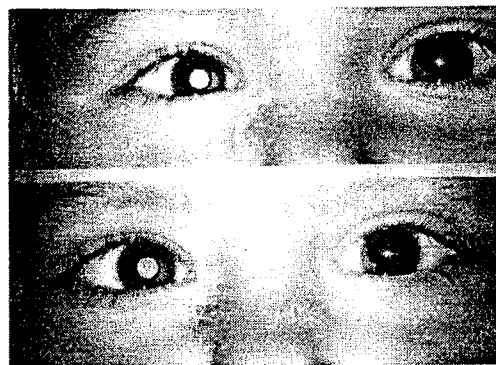
Reflexes

1. Corneal Light Reflex
2. Fundus Reflex
3. Bright Crescent



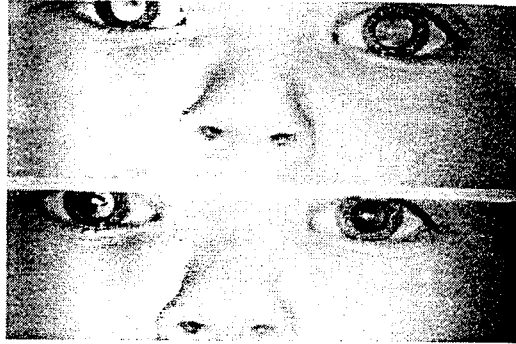
Strabismus

- Asymmetric Corneal Light Reflex
- Brighter Fundus Reflex



Media Opacity

- Abnormal Fundus Reflex



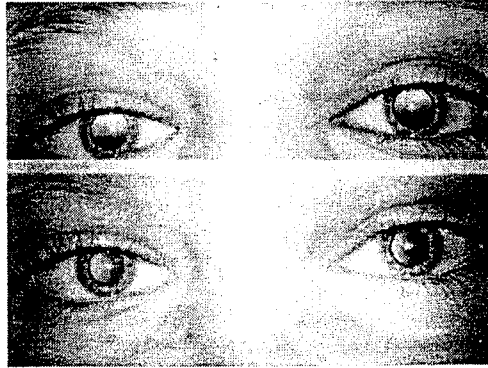
Refractive Error

- Location
 - top and left = myopia
 - bottom and right = hyperopia
- Size
 - correlates to amount of refractive error



Myopia = Nearsightedness

- Bright Crescent
 - Upper Photo = Top
 - Bottom Photo = Left
- Size
 - 2 mm or greater



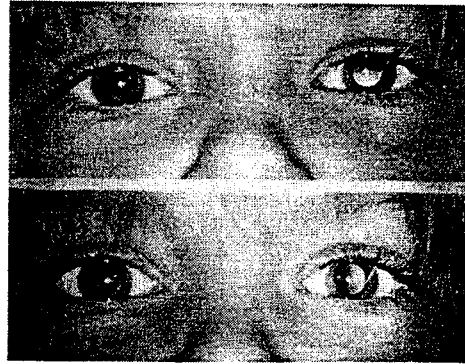
Hyperopia = Farsightedness

- Bright Crescent
 - Upper Photo = Bottom
 - Lower Photo = Right
- Size
 - 3 mm or greater



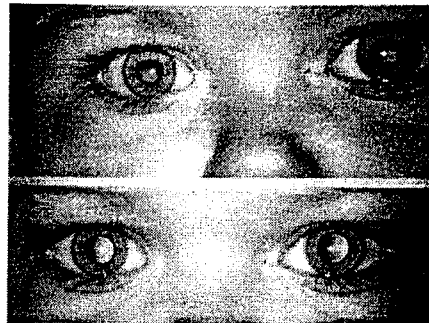
Anisometropia

- Difference in refractive error between the two eyes
- Size
 - 2 mm or greater
- Very amblyogenic



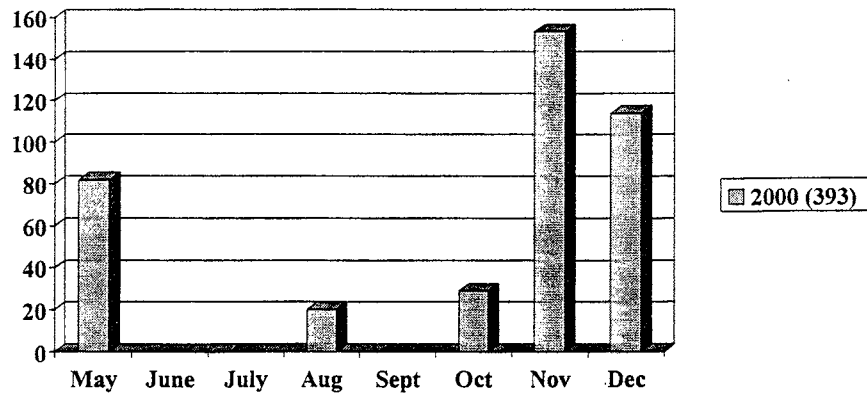
Astigmatism

- Difference in crescent size between upper and lower photograph
- Size
 - 2 mm or greater

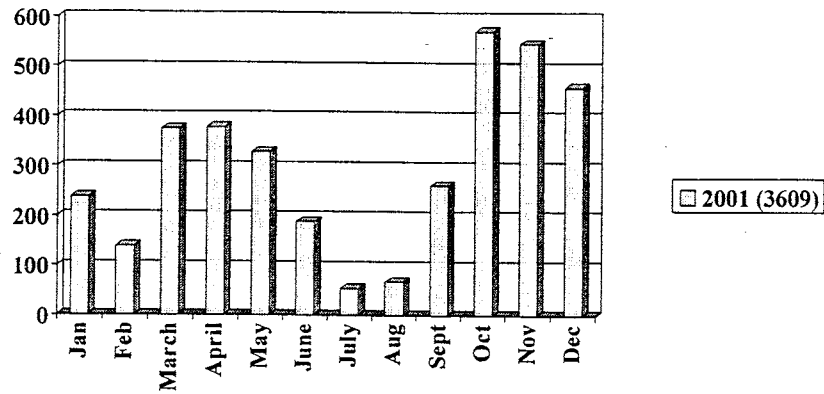


Vision Screening Results

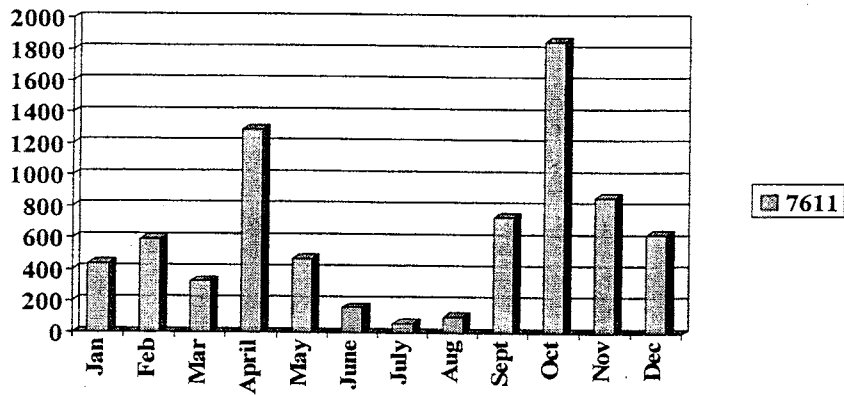
Children Screened in 2000



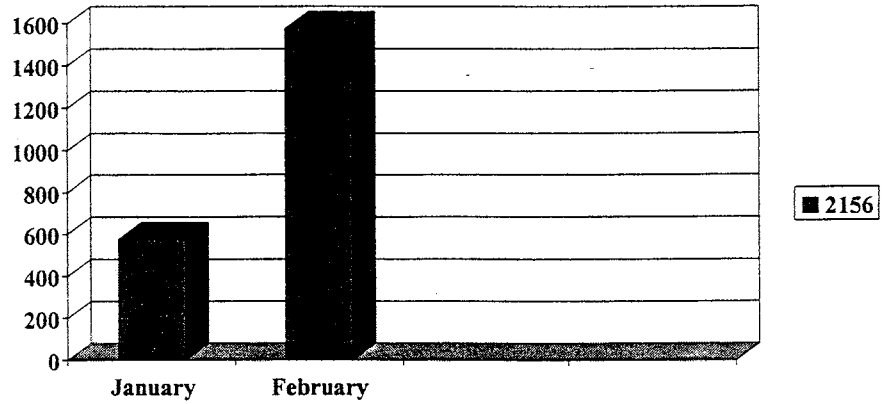
Children Screened in 2001



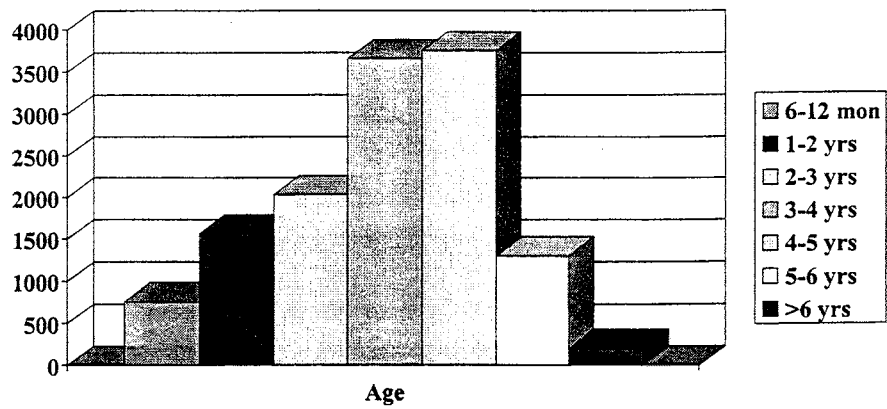
Children Screened in 2002



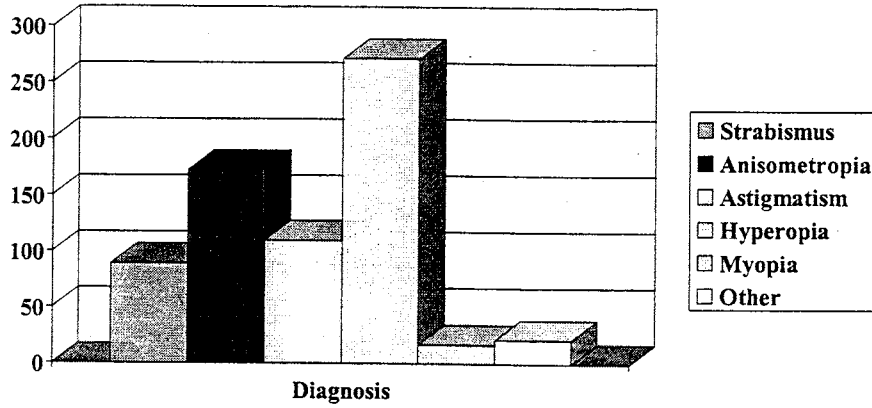
Children Screened in 2003



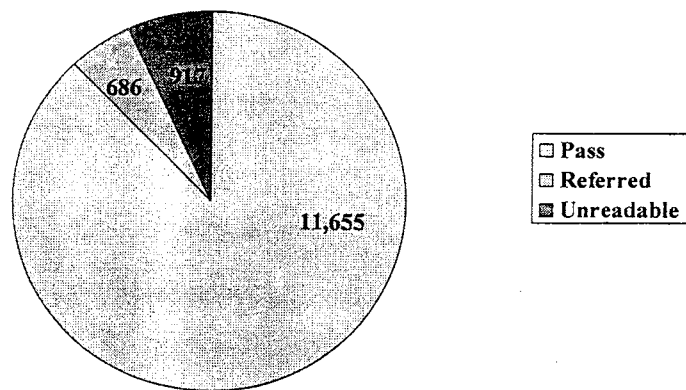
Age Distribution

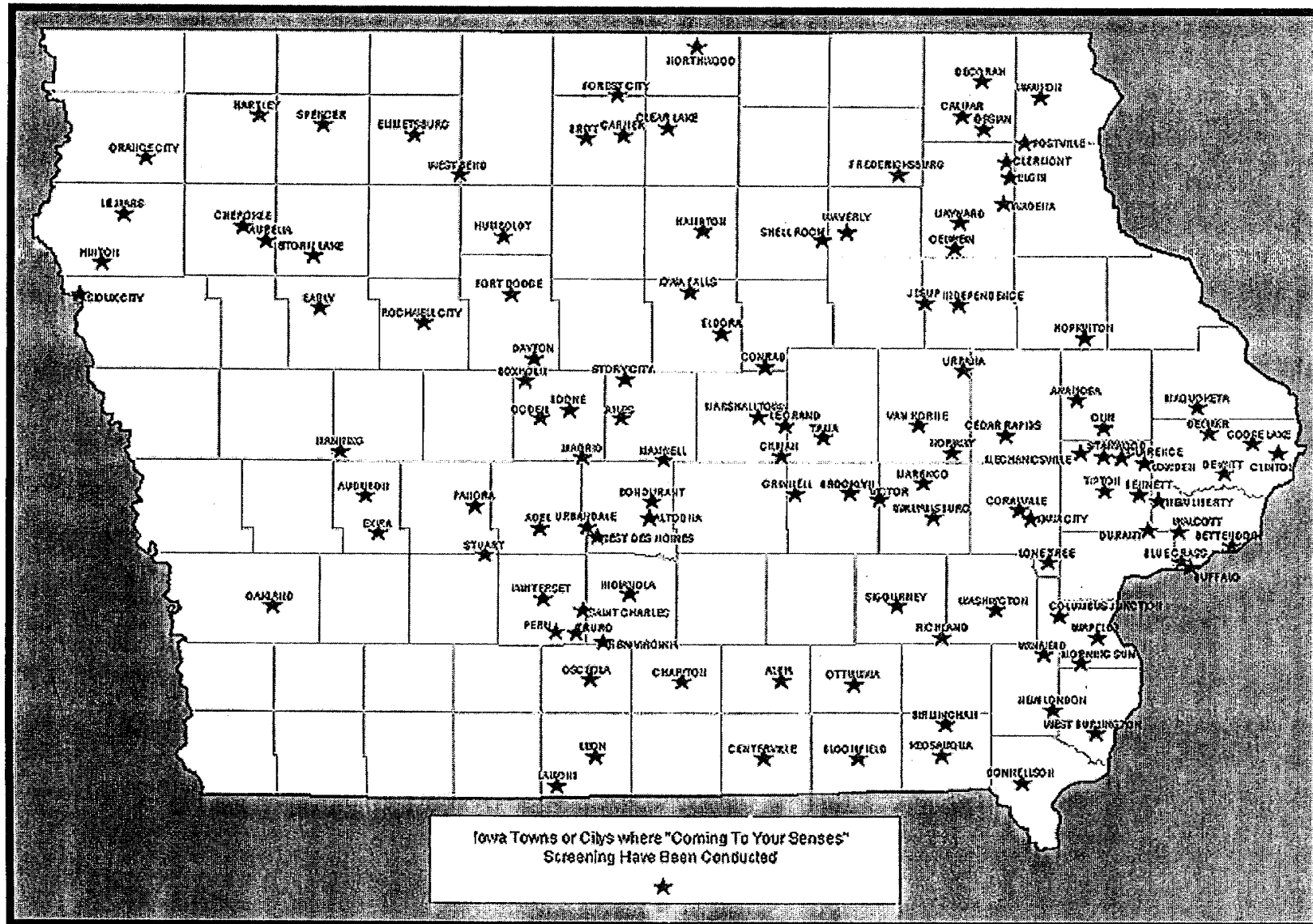


Diagnosis



Children Screened May 2000- March 2003





(back)

Children Screened May 2000- April 2002

Number of Sessions	966
Children Screened	13,258
Pictures Taken	22,751
Unreadable (Rate)	917 (6.92%)
Referred (Rate)	686 (5.17%)

Lions

- Lions Clubs = 400
- Members =>12,000

- Number of Lions Trained = 1200

Future Goals

- Increase awareness
- Increase number of children screened
(186,000 in target age range)
- Increase follow-up
- Team with Area Education Agencies
- State support

Legislation

Complete Eye Exam

vs

Vision Screening

Cost

Complete Eye Exam	\$149/child
Vision Screening	\$9.80/child

“Coming to Your Senses”
Web Site:

<http://webeye.ophth.uiowa.edu/ctys>

Coming To Your Senses Project Budget

Personnel	
Project Coordinator	\$52,000
Coordinate all screening throughout the state	
Photoreader (\$1.00/child)	\$25,000
Evaluate all photographs	
Photoreading Center Assistant	\$48,000
Manage the day-day operations	
Distribute screening results	
Enter all results into database	
Office Management	
Supplies	\$3,000
Printing	\$5,000
Postage	\$5,000
Phone	\$3,000
Equipment	
Film	\$90,000
(Screen 25,000 children)	
(2 exposure per child at \$1.80/exposure)	
Photoscreeners (2 additional camera's per year)	\$7,000
Follow-up	
Phone	\$3,000
Postage	\$2,000
Supplies	\$2,000
Total cost to screen 25,000	\$245,000
Total cost per child	\$9.80