Your baby’s eyes

The eye
Light enters the eye through the cornea, the clear outer skin or window at the front of the eye. It passes through the pupil, the hole in the iris or coloured part of the eye. Light rays are then focused on the retina at the back of the eye that then sends information via nerves to the brain where the pictures are recognised and interpreted. All the parts of the eye form your baby’s eyesight (vision).

Vision milestones for baby’s in their first year
If you have any concerns about your baby’s vision see your doctor or early childhood nurse.

At birth babies:
- Are attracted to faces
- May avoid bright lights by closing eyes
- Eyes may sometimes appear to wander or be turned

At one month babies:
- Start to fix on parent’s face while feeding
- Eyes may sometimes appear to wander or be turned
- Follow large moving objects for a few seconds and begin to show interest in toys

At two months babies:
- Are becoming more interested in toys and objects
- Recognise a parent’s face and can tell it from other faces
- Are starting to make eye contact
- Begin to smile to a smile

At four months babies:
- Can focus on toys held close to them
- Eyes should be straight and move together in all directions
- Are interested in smaller more detailed toys
- Reaches for toys, grasps firmly and regards closely
- Make good eye contact and are interested in facial expressions

At six months babies:
- Become more skilled in using their eyes to find and reach for objects of interest
- Follow objects with head and eyes in all directions
- Are visually alert and curious about their surroundings
- Follow an adult’s movement across the room

At twelve months babies:
- Recognise familiar people from at least six metres away
- Will have binocular vision (the ability to use the eyes together) from 9 months

Common eye problems in children
Strabismus
Strabismus may be known as turned eyes, crossed eyes, squint, or lazy eyes. Strabismus occurs when the eyes point in different directions. When one eye is straight the other may point in, out, up or down. This may be noticeable all the time, or only sometimes. It may be present at birth or appear later. In babies and children with strabismus, the vision in the turned eye will not develop normally. Children do not outgrow strabismus. Treatment is most effective when started at an early age and may include glasses, patching, exercises, or surgery and can be a combination of these.
Treatment is carried out by an Ophthalmologist (eye specialist) and Orthoptist. The aims of strabismus treatment are:

- Good vision in both eyes
- Good appearance
- Coordinated eyes (ie; depth perception)

**Amblyopia**

Amblyopia occurs when one eye becomes lazy because it is not receiving as clear a picture as the other eye. The most common causes of amblyopia are strabismus, refractive error (incorrect focusing power), ptosis (droopy eyelid) and cataract (opacity in the lens). If left untreated it can lead to very poor vision. Vision can often be improved when treatment is started at an early age.

**Chalazion**

Chalazion is a small swelling of the eyelid when there is a blockage in the glands of the upper or lower eyelid. There can be swelling and redness of the eyelid and sometimes ooze can occur. Your child can have many chalazia on their eyelid at any one time, and it can occur in one or both eyes. Initial treatment involves heat compresses and massage of the eyelid toward the eyelid edge in a rolling motion; this should be done at least three times a day. If there is any ooze, your family doctor may prescribe antibiotic ointment or eyedrops to prevent or treat any infection.

**Epiphora**

Epiphora or watering eyes may occur if the duct that drains tears from the eye to the nose becomes blocked. In many cases, blocked tear ducts get better by themselves, but if this doesn’t happen by one year of age, or frequent infection becomes a problem, a small surgical procedure may be necessary. Blocked tear ducts are not the only cause of watering eyes so an eye examination is suggested.

**Signs to watch for**

Consult your family doctor if you are concerned about your baby’s eyes, particularly if:

- One or both pupils have an unusual or white appearance. This may be noticed in photographs.
- There is persistent watering or ooze from the eyes.
- One eye appears to be turned frequently or the eyes do not seem to move well.
- There is extreme sensitivity to light or glare.
- Your child’s head is always tilted/turned to one side.
- Your child sits close to the television and holds books/puzzles at very close range.
- Your child’s eyes do not look the same (for example, one eye is larger than the other)

**Routine screening**

A full eye test is recommended for all infants and children when there is:

- A family history of turned eye (strabismus).
- Lazy eye (amblyopia).
- Strong glasses at an early age (refractive error).
- Premature birth (36 weeks gestation or less).
- Developmental delay.

**Remember**

- Seek medical advice if you have any concerns about your child’s eyes.