What is amblyopia?

Amblyopia is poor vision in an eye that did not develop normal sight during early childhood. It is sometimes called "lazy eye."

When one eye develops good vision while the other does not, the eye with poorer vision is called amblyopic. Usually, only one eye is affected by amblyopia, but it is possible for both eyes to be "lazy."

The condition is common, affecting approximately two or three out of every 100 people. The best time to correct amblyopia is during infancy or early childhood.

How does normal vision develop?

Newborn infants are able to see, but as they use their eyes during the first months of life, vision improves. During early childhood years, the visual system changes quickly and sight continues to develop.

If a child cannot use his or her eyes normally, vision does not develop properly and may even decrease. After the first nine years of life, the visual system is normally fully developed and usually cannot be changed.

The development of equal vision in both eyes is necessary for normal vision.

Some occupations are closed to people who have good vision in one eye only.

People with amblyopia in one eye are more than twice as likely to lose vision in the healthy eye from trauma.

If the vision in one eye should be lost later in life from an accident or illness, it is essential that the other eye have normal vision. For these reasons, amblyopia must be detected and treated as early as possible.

When should vision be tested?

It is recommended that all children have their vision checked by their pediatrician, family physician or ophthalmologist (Eye M.D.) at or before their fourth birthday.

Most physicians test vision as part of a child's medical examination. They may refer a child to an ophthalmologist if there is any sign of eye problems.

New techniques are available to test vision in infants and young children. If there is a family history of misaligned eyes, childhood cataracts or a serious eye disease, an ophthalmologist should examine the eyes during infancy.

What causes amblyopia?

Amblyopia is caused by any condition that affects normal use of the eyes and visual development. In many cases, the conditions associated with amblyopia may be inherited. Amblyopia has three major causes:

STRABISMUS (MISALIGNED EYES)

Amblyopia occurs most commonly with misaligned or crossed eyes. The crossed eye "turns off" to avoid double vision, and the child uses only the better eye. The misaligned eye then fails to develop good vision.

UNEQUAL FOCUS AND REFRACTIVE ERRORS

Refractive errors are eye conditions that are corrected by wearing eyeglasses. Amblyopia occurs when one eye is out of focus because it is more nearsighted, farsighted or astigmatic than the other.

The unfocused (blurred) eye "turns off" and becomes amblyopic. The eyes can look normal, but one eye has poor vision. This is the most difficult type of amblyopia to detect since the child appears to have normal vision when both eyes are open.

Amblyopia can also occur in both eyes if both eyes have very blurred vision. This can happen when there is a high amount of nearsightedness, farsightedness or astigmatism.

CLOUDINESS IN THE NORMALLY CLEAR EYE TISSUES

An eye disease such as a cataract (a clouding of the eye's naturally clear lens) may lead to amblyopia. Any factor that prevents a clear image from being focused inside the eye can lead to the development of amblyopia in a child. This is often the most severe form of amblyopia.