Lesson one: Vision in children

Children can experience various vision problems of different levels of severity. To see well, each part of the eye needs to be working properly. The eyes need to work together. Most vision difficulties can be prevented, treated or can be helped with assistive products and/or rehabilitation.

Vision problems are commonly caused by 'refractive error'. Refractive error can result in:

- Distance vision problems (myopia) (short-sighted)
- Near vision problems (hyperopia) (long-sighted)
- Distance and near vision problems (astigmatism).

Other common causes are eye health problems such as infections and cataracts.

Lesson two: Eye health

To see well both eyes must be working properly. If a child's eyes are not healthy, it affects how well their eyes can work.

Recognising what healthy eyes look like and knowing the signs of possible eye health problems is part of sensory screening.

Signs of healthy eyes

Part of eye	Signs of health
Eyelids and eyelashes	- Free from crust or pus - No watery or sticky discharge.
White part of the eye	The white part of the eye appears white.
Coloured part of the eye	The coloured part of the eye appears clear (not milk coloured / cloudy).
Eye	Both eyes are looking in the same direction.

Examples of healthy eyes:

Eye health problems can be caused by:

- Diabetes
- Eye infections
- Lifestyle and environmental risks.

Diabetes can affect a child's eye health, potentially leading to vision loss or blindness, if not managed properly. Children with diabetes should have regular eye check-ups by trained eye care personnel and be under the care of a doctor or diabetes service.

Eye infections in children are common and early treatment is important to avoid serious complications. Untreated infections can lead to the need for surgery and can result in permanent eye damage.

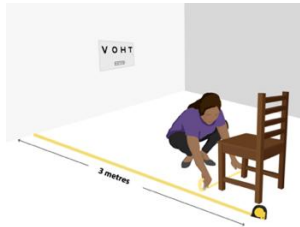A person's lifestyle and environment can lead to vision and eye health problems.

> **Warning**
>
> Identifying eye health problems early is important. If untreated, eye health problems can cause permanent damage to the eyes. This can cause vision loss.

Lesson three: Preparing for screening

Planning the screening programme requires Ministry approvals and includes identification of referral pathways and processes for local eye and ear care services. It is important to organize and check screening paperwork, equipment and identify additional personnel to help on the screening day. The screening checklist will guide you.

On the screening day

Step	Actions	Image
1. Set up the space	• Position furniture and vision charts.	
2. Prepare children with consent to be screened	• Explain you will check for signs of eye and ear problems to see if they need help for their eyes or ears • Show them the vision charts and pen torch • Reassure them that nothing you do will hurt them.	

Lesson four: Vision and eye health screen

The Screen form will support you to carry out sensory screening with each child and make a plan.

Information about the child

Gather paperwork for the child and accurately copy information from the Consent form into the Screen form.

Pre-screening questions

The pre-screening questions will inform decisions on how to carry out the screen and follow-up referrals. This includes information about:

- Spectacles
- Hearing aids
- Diabetes and eye health
- Concerns about vision or hearing.

Distance vision screen

Vision is screened by checking a child's distance vision, using a vision chart. The process for carrying out a vision screen is detailed in the Screen checklist. The Screen form is used as a guide to conduct the vision screen and record the results.
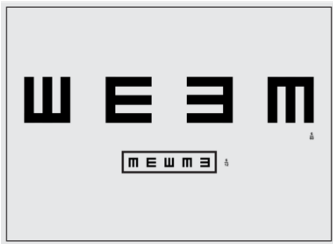
Vision charts

There are two different vision charts that can be used in the distance vision screen. The type of chart used will depend on the age of the child.

For both charts there are two rows of letters:

- One large row (6/60)
- One small row (6/12).

The numbers next to each row of letters describe the size of the letters.

	HOTV Chart	E – Chart
Chart		
Age of child	Children 8 years and younger	Children over 8 years
How child should read the chart		

How to carry out a distance vision screen

1. Using a pen or finger, point to each letter on the top line.
2. Ask the child to point to the matching letter on the HOTV pointing card or indicate the direction of E's if using the E chart.
3. Continue to the bottom line and repeat.
4. Record results on the Screen form.

Result	Action
Child matches **2 or more** letters correctly on the top line **and 3 or more** letters correctly on the bottom line for **both** eyes.	**Pass**
If **No** result for any eye.	☞ **Refer** to eye care personnel

Eye health screen

An eye health screen checks whether a child's eyes look healthy. If an eye looks unhealthy it should always be checked by eye care personnel. Signs that eyes are healthy include:

- Eyelids and eyelashes are free from crust or pus
- No watery or sticky discharge
- The white part of the eye appears white

- The coloured part of the eye is clear (not milk-coloured/cloudy)
- Both eyes are looking in the same direction.

For the eye health screen:

1. Always wash and dry your hands with soap or sanitizer gel before **and** after every eye health screen.
2. Look closely at each eye using a torch.

3. Record results on the Screen form.

Result	Action
If both eyes are healthy.	**Pass**
If one or both eyes are not healthy.	☞ **Refer** to eye care personnel