Lesson one: Vision and vision problems

People 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 problems can be prevented, treated or can be helped with assistive products and/or rehabilitation.

Vision problems are commonly caused by refractive error. This is due to the shape of a person's eye.

Refractive error can result in:

- Distance vision problems (myopia or short-sighted)
- Near vision problems (hyperopia or long-sighted)
- Distance and near vision problems (astigmatism)
- Near vision problems in older adults (presbyopia).

Lesson two: Healthy eyes and common eye health problems

Signs of healthy eyes

- No redness or swelling
- No watery or sticky discharge
- Eyelids and eyelashes are free from crust or pus
- Conjunctiva (white part of the eye) is white
- Pupil and lens (coloured part of the eye) is clear – not milky or cloudy
- Both eyes look in the same direction.

Causes of vision and eye health problems

Common causes of vision and eye health problems include:

- Cataracts
- Diabetes
- Eye infections
- Illnesses, especially in young children
- Problems at birth
- Allergies
- Dry eye
- Injuries
- High blood pressure
- Lifestyle and environmental risks.

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: Introduction to primary eye care screening

Learning on TAP primary eye care screen

The Learning on TAP primary eye care screen is a simple process to find out if a person has a vision problem and/or an eye health problem. It also provides guidance on what to do if a problem is found.

Primary eye care screening process					
Step 1: Information Gather information about the person.	**Step 2: Pre-screening questions** Ask about health and any vision and eye concerns.	**Step 3: Vision screen** Complete vision screen (fundus reflex/distance vision/near vision).	**Step 4: Eye health screen** Complete eye health screen.	**Step 5: Take action** Take action and record.	**Step 6: Follow up** Ask the person to return if needed.

Results of the Learning on TAP primary eye care screen help to identify whether a person:

- Requires first aid for eye discomfort or injury
- Requires medication for pain relief
- Could benefit from near vision spectacles
- Requires ☞ referral to an eye health professional or another service.

All people should have access to primary eye care. It is important to think about how people will access primary eye care, and any extra support they might need.

Gather information about the person

Use the Learning on TAP primary eye care screen form (PEC Screen form) to guide you through the screening process.

Ask the person for consent and record their details.

Pre-screening questions

Finding out about the person's eye problem will inform decisions on how to carry out the screen and what actions to take. This includes information about:

- Pre-term or low birth weight baby (if working with young child)
- Eye pain, discharge or itchiness
- Eye injuries
- Blurred vision or other symptoms
- Diabetes and eye health
- Current care from an eye health professional
- Spectacles.

Warning

- If the child is a pre-term or low birth weight baby ⊘ stop screen and ☞ refer to eye health professional urgently
- If person has a chemical eye injury ⊘ stop screen, wash out eye, then continue.

Lesson four: How to carry out a vision screen

There are three types of vision screen:

- Fundus reflex screen – for children 3 years and under
- Distance vision screen – for children over 3 years, and adults
- Near vision screen – for adults 40 years or older.

Fundus reflex screen

Healthy fundus reflex	
Signs of health	**Image**
The colour and brightness of the fundus reflex should be the same in both eyes.	
The fundus reflex can appear yellow, orange or red, depending on the person's skin colour.	Photo credit: Arclight Project, University of St Andrews

Problems with the fundus reflex:

- No fundus reflex, or a difference in colour or brightness of the reflex in each eye
- A white reflex
- Black areas or shadows in the reflex.

To carry out a fundus reflex screen:

- In a room with low light, ask the parent or caregiver to sit comfortably holding the child
- Adjust the ophthalmoscope's power to zero
- Sit about 50 centimetres from the child, with your eyes at the level of the child's eyes
- Hold the ophthalmoscope to your eye and shine into the child's eyes
- Look for bright, equal fundus reflexes in each eye
- Record the result on the Screen form.

If a problem is found finish screen and ☞ **r**efer to eye health professional urgently.

Distance vision screen

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 person.

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	**Distance E – Chart**
Chart		
Age of person	Children 8 years and younger	Children over 8 years, and adults

How person should read the chart		

To carry out a distance vision screen:

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

Result	Action
Yes result to all - The person matches **2 or more** letters correctly on the top line **and 3 or more** letters correctly on the bottom line for **both** eyes.	**Under 40 years** → skip to eye health screen **40 years or older** → continue to near vision screen
No result for one or both eyes.	**Top line** → skip to eye health screen and ☞ **r**efer to eye health professional urgently **Bottom line** → skip to eye health screen and ☞ **r**efer to eye health professional

Near vision screen

The near vision screen is only for adults 40 years or older who **achieve yes to all for both eyes** in the distance vision screen.

- The near E-chart is used to screen near vision. It only has one row of small E's. The N6 next to the row describes the size of the E's.

To carry out a near vision screen:

- The distance between the near E-chart and the person's eyes should be about 40 centimetres, or a distance that is comfortable for them to hold the near E-chart to read.
- Point to each of the five E's. Ask the person to indicate the direction that each E is facing.
- If the person correctly indicates the direction of three or more E's they achieve a pass result.

If the person cannot correctly match three or more E's → Assess for near vision spectacles. If not available ☞ refer to eye health professional.

Lesson five: How to carry out an eye health screen

An eye health screen checks whether a person's eyes look healthy.

To carry out an 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 PEC Screen form.

Eye health problems		Right	Left	Action
Signs of a red eye problem	Redness	☐	☐	→ Guide two: Red eye problems
	Discharge	☐	☐	
Signs of an external eye problem	Crust on eyelids/lashes	☐	☐	→ Guide three: External eye problems
	Swelling	☐	☐	
	Lump(s)	☐	☐	
	Eyelashes turn inwards	☐	☐	
Signs of another eye problem	Coloured part of eye unclear/milky	☐	☐	☞ Refer to eye health professional
	Eyes not looking in same direction	☐	☐	
	Other ✎	☐	☐	
0-3 years and any of the above ☐				→ Guide four: Children 3 years and under
Signs of an eye injury	Chemical	☐	☐	→ Guide five: Eye injuries
	Burn	☐	☐	
	Foreign body	☐	☐	
	Knock or cut	☐	☐	
Unable to complete eye health screen ☐				☞ Refer to eye health professional

Lesson six: Take action and follow up

Section **5. Action taken** on the PEC Screen form lists a range of actions you may take when providing primary eye care. Record all your actions here.

People often require follow up primary eye care. Reasons include:

- Unchanging or worsening symptoms
- Regular vision and eye health checks. This helps to detect and treat vision and eye health problems early.

If a person returns for a follow up visit, record details in section **6. Follow up.**