**PROCEDURE**

## Cover test

| Scope (Staff): | Community health staff |
| Scope (Area):  | CACH, WACHS |

This document should be read in conjunction with this [DISCLAIMER](#).

### Aim

Detect a manifest strabismus in preschool and school-aged children.

### Risk

Undetected or unmanaged vision impairment can have a significant effect on a child’s social, psychological development, educational progress, and long term social and vocational outcomes.

### Background

Alignment of the eyes during the early years of life is considered critical for development of binocular vision. Amblyopia is a condition that occurs when there is altered visual input or abnormal binocular interaction resulting in diminished vision in one or both eyes. Amblyopia is unique to children but is preventable if the child receives adequate treatment in childhood. The prevalence of amblyopia is approximately 1% - 4% of preschool children. Strabismus is the most common cause of amblyopia and is the term used to describe any anomaly of ocular alignment. It can occur in one or both eyes and in any direction.

The Cover Test is used to detect strabismus. Vision development is said to be complete by the time the child is eight years of age, however some aspects of visual development will already be complete by the time the child reaches school age. The National children’s vision screening project conducted in 2008, recommended that a vision screen should be conducted for all children at around 4 years of age, with an allowable range from 3.5 to 5 years.

The Cover Test (CT) forms part of the overall vision assessment along with the Corneal Light Reflex Test (CLR) and testing for visual acuity, as age appropriate.

For further information on vision refer to Community Health Manual (Internet link or HealthPoint link):

- **Vision** guideline, which includes information on development of vision; normal vision behaviours; vision problems; common vision defects, including strabismus; common eye disorders, including amblyopia; visual acuity tests; and rationale for vision screening.

- **Universal assessment** using the CT should be offered at the School Entry Health Assessment, unless there is evidence of the child being under the care of an optometrist or ophthalmologist.
- Targeted assessment using the CT should be offered to children aged 3 years and older where strabismus is suspected by parent/caregiver, teacher or health professional, or where there is another vision concern.

**Key Points**

- This test should be undertaken by staff with appropriate training only.
- Prior to performing the test, it is important to obtain a history from the parent/caregiver. Refer to the risk factors and red flags listed in the Vision guideline. The School Entry Health Assessment Parent Questionnaire (CHS 409-01) contains questions which aim to highlight parental concerns about their child’s vision.
- In children 3 years of age and over, the CT and CLR Test should be performed prior to the visual acuity testing and contribute to the overall assessment of the eye.
- Community health staff should practice overarching infection prevention and management. Hand hygiene is to be performed at all appropriate stages of the procedure.

**Equipment**

- Small toy to attract child’s attention
- Occluder if desired. Using the hand is acceptable as long as there are no gaps between the fingers.

**Process**

<table>
<thead>
<tr>
<th>Steps</th>
<th>Additional Information</th>
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<tbody>
<tr>
<td>1. Engagement and consent</td>
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<tr>
<td>• Explain the procedure to the child and parent/caregiver if present.</td>
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<tr>
<td>• Ensure written or verbal parental consent has been obtained prior to proceeding with testing.</td>
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<tr>
<td>Refer to Appendix A ‘Special circumstances’ in <em>Universal contact 4 years (School Entry Health Assessment)</em> guideline if screening is indicated and consent not able to be obtained for a school aged child.</td>
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<tr>
<td>This test should be performed before the distance vision test using the Lea symbols chart.</td>
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<td>Allow sufficient time for discussion of concerns.</td>
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<td>Encourage parent/caregiver to support and be involved with the procedure where appropriate.</td>
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<td>If obtaining verbal consent, discuss with the parent/caregiver whether they consent to sharing of information with relevant school staff.</td>
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<tr>
<td>Section 337(1) of the Health Act 1911 authorises nurses specified in the schedule to examine a child without parent consent if required.</td>
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<tr>
<td>2. Preparation</td>
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<tr>
<td>• Sit or stand the child comfortably.</td>
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<tr>
<td>• The examiner should sit or stand in front of child, facing the child square on,</td>
<td></td>
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<tr>
<td>The child and the examiner should be at approximately the same height and square on.</td>
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<tr>
<td>The object used to attract the child’s...</td>
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</tbody>
</table>
### Cover test

<table>
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| - about an arm’s length (30-50 cm) away from the child.  
  - Observe the child’s eyes, head posture and alignment while child is in a relaxed state. | - attention should remain still.  
  - Note any abnormalities with the child’s eyes.  
  - Abnormal head posturing may indicate visual difficulty, including strabismus. |

### 3. Testing strategies

- Ask the child to fixate on the interesting object held 30-50cm (an arm’s length) from the child’s eyes.
- Cover one eye with hand or other occluder (e.g., a palm-sized piece of plain cardboard) and observe for any movement of the uncovered eye.
- Cover the eye for approximately three (3) seconds.

The child must be able to keep their head still and maintain fixation during the procedure.

Cover the eye from the side of the face, not from the front with hand in the stop sign position.

Hand or card is to be held close to the eye (but not touching the eye).

Cover the eye for long enough to be able to recognize any movement.

The direction that the uncovered eye moves to pick up fixation on the target indicates the direction of misalignment.

It is important to note that when there is no movement it may be because the child has limited or no vision in the uncovered eye.

The process may be repeated several times to obtain clarity of findings.

### 4. Repeat with the other eye

The process may be repeated several times for both eyes to obtain clarity of findings.

### 5. Explain results

To parent/caregiver (if present) or inform parent/caregiver by telephone or in writing.

For outcome and referral pathway see below.

### 6. Documentation

Documentation of the CT should include at least one of the following descriptors for each eye:

- No movement
- Movement.

Descriptors relate to the movement or absence of movement of the uncovered eye identified in Steps 3 and 4 of the Testing Strategies.

Document findings according to local processes.

### Outcome
Where the CT reveals movement (positive result) in a child’s eye/s on the initial screen, the CT, CLR and visual acuity should be rechecked as soon as practical, within 3 months.

If any other anomalies are observed during the assessment, nurses should use their clinical judgement and either follow the child up or refer e.g., ptosis of the eye.

It is recommended that staff use the correct terminology when discussing any vision results with the parent or caregiver. The use of the term ‘lazy eye’ can be misleading as it can relate to several different eye conditions. A squint is a more accurate description.

**Referral**

**Referral Pathway**

Children who have a positive CT on re-check should be referred to a medical practitioner for referral to an ophthalmologist. Results of all visual parameters should be included in the referral.

Always obtain parental consent for referral.

The *Clinical handover/Referral form* (CHS 663- CACH only) form should be used to refer the child to their medical practitioner.

WACHS nurses should follow local processes as required; this may involve referral to an optometrist to expedite assessment, treatment and prioritising ophthalmology services.

**Referral feedback**

It is recommended that when there is no feedback received from the medical practitioner and/or ophthalmologist that the referral should be followed-up with the parent or caregiver and outcomes carefully documented.

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**References**


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**Related internal policies, procedures and guidelines**

The following documents can be accessed in the Community Health Manual via the [HealthPoint](#) link or the [Internet](#) link

- Corneal light reflex test
- Distance vision testing (Lea Symbols Chart)
Physical assessment 0-4 years

Universal contact 4 years (School Entry Health Assessment)

Vision

**Related internal resources and forms**

The following resources and forms can be accessed from the [HealthPoint CACH Intranet](#) link

Clinical handover/Referral form (CHS 663)

**Clinical handover** – Operational procedure for internal or external referrals

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This document can be made available in alternative formats on request for a person with a disability.

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Reviewer / Team: Clinical Nursing Policy Team

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