

# Deadly Kids | Deadly Futures

## Funding Guidelines for Ear and Hearing Health Screening Programs

### Summary: Key Points for Health Service Providers

1. CheckUP has reviewed its funding priorities and policies to ensure they are evidence-based and align with the Queensland Government's Aboriginal and Torres Strait Islander Child Ear and Hearing Health Framework, *Deadly Kids Deadly Futures (DKDF)*.
2. As a result, CheckUP will no longer provide *Healthy Ears – Better Hearing Better Listening* funding for new 'stand-alone' ear and hearing screening programmes in early childhood and/or school facilities. Any existing 'stand-alone' ear and hearing screening programmes will be required to transition to the new model to be eligible for ongoing funding in the future.
3. Funding to enable the delivery of ear and hearing screening programmes in early childhood and/or school facilities will only be considered for new provider bids that meet the following criteria:
  - a. Evidence is provided to demonstrate that the burden of middle ear disease and associated conductive hearing loss warrants intervention of the target cohort;
  - b. The service provider is able to assure CheckUP that no other provider is delivering the same (or a similar) service to the target cohort;
  - c. Funding preference will be given to providers that can demonstrate a screening model that achieves significant coverage of the 0-4 year cohort in the target communities. However, CheckUP acknowledges that population-based screening of this priority group creates practical challenges (see Policy Context section). Where coverage of the 0-4 age group would not be cost effective, the screening service must target all children aged 4-6years in pre-prep, prep and year one.
  - d. The service provider will meet the service delivery standards described in this document.
  - e. The screening to be carried out will include the following minimum age-specific test components:

Mandatory Elements	Description	Age
1. <b>Otoscopy</b>	A visual check of the pinna, ear canal and ear drum.	All ages
2. <b>Tympanometry</b>	An objective check of the middle ear system.	For children older than 6 months
3. <b>Pure tone audiometry</b>	A behavioural check of hearing levels at different frequencies.	Start attempting on children from 3.5 yrs.
4. <b>Otoacoustic emissions</b>	An objective check of the integrity of a person's auditory system, up to and including the cochlea.	All ages

### Introduction

In March 2016 the Ministers for Health and Education released Queensland's Aboriginal and Torres Strait Islander Child Ear and Hearing Health Framework, *Deadly Kids Deadly Futures (DKDF)*. That document, which is the result of collaboration from a range of government and non-government organisations, sets

out an evidence-based and holistic approach to preventing, reducing and managing otitis media and conductive hearing loss among Aboriginal and Torres Strait Islander children.

CheckUP is proud to be a member of the DKDF Steering Committee, and has been working with the Deadly Ears Programme, the Department of Education and Training, Queensland Aboriginal and Islander Health Council and the Institute of Urban Indigenous Health to review its funding priorities and policies to ensure they promote best practice in ear and hearing health services in alignment with DKDF.

These *Funding Guidelines for Ear and Hearing Health Screening Programmes* (the Guidelines) result from that process. They provide direction to providers wishing to be funded under the *Healthy Ears – Better Hearing, Better Listening* programme and which are considering delivering ear and hearing health screening to Aboriginal and Torres Strait Islander children in early childhood and/or school settings.

The criteria set out in this document do not apply to:

- audiology services which are delivered as part of the same provider's whole-of-child health assessments or Ear Nose and Throat specialist clinics;
- providers delivering whole-of-child health assessments and follow-up, which include ear and hearing checks.

## **Service Delivery Standards**

### ***Pre-Delivery Requirements***

#### **1. Child Protection**

The QLD Department of Education and Training requires that health providers visiting state early childhood education facilities and/or schools have:

- a) appropriate qualifications to undertake ear and hearing health checks;
- b) a current Blue Card or exemption notice;
- c) completed child protection training as directed by the school principal;
- d) evidence of indemnity insurance;
- e) written endorsement from the manager/principal of the host facility to undertake the work as described in this document.

#### **2. Consent**

Where parents/carers will not be present, providers must work with the host facility to obtain prior written consent from the parent/carer which includes:

- a) Question/s on whether there is any existence of or concerns about ear/hearing/speech problems;
- b) Confirmation of whether the child is under a care management plan for audiology/ENT/speech or related issues;
- c) Consent to share results and recommendations with the host facility (ie school/day care/kindy/etc);
- d) Nomination of the local primary health provider if possible;
- e) Advice on how any follow-up treatment or care is to occur, and the responsibilities therein of the provider, parent/carer and host facility.

A sample proforma consent form is provided in Appendix 1

#### **3. Agreement with local Primary Health Providers**

Providers must obtain prior agreement from the relevant local primary health facilities (nominated above) regarding appropriate referral pathways and protocols for children identified with needs arising from the ear and hearing screening.

## **Delivery Requirements**

Providers will:

1. Deliver services in line with the national [Otitis Media Guidelines](#).
2. Ensure younger children are prioritised for service delivery. Where delivery occurs in schools, children from pre-prep, prep and year one must be seen. Other children, such as those identified with concerns by teachers or parents/carers, may then be seen if capacity allows.
3. Conduct the four tests listed in the Summary box at the start of this document (note: an Ear and Hearing Health Check proforma for all these tests is provided at Appendix 2):
  - a. otoscopy for all ages
  - b. tympanometry for children older than 6 months
  - c. pure tone audiometry for children older than 3.5 years
  - d. otoacoustic emissions for all ages.
4. Conduct a follow-up review ear and hearing check of all children who “did not pass”, to occur at 3 months after the initial ear and hearing check;
5. Provide a copy of all results and recommendations arising from each ear and hearing check directly to:
  - a. the child’s nominated primary care provider using referral pathways and protocols agreed with those providers;
  - b. the child’s family/carer; and
  - c. the host facility (where consented).

These requirements are reflected in the Ear and Hearing Health Service Pathway diagram overleaf.

Note that families may not provide the name of GP or primary health clinic to which the child may be referred if they do pass their check. This may be because they do not have a regular GP or because they have chosen not to provide the name of their GP on the consent form. In such cases, the hearing health check should still be conducted and if the child does not pass:

1. the provider should ask the school whether they have the name of a health practitioner on file for the family (it is an optional field in the state school enrolment form), and
2. if the school does not have that information on file then the child’s family should be provided with a list of local GPs/primary health clinics along with the recommendation that they make an appointment for a clinical assessment.

## **Otitis Media, Conductive Hearing Loss, and the Role of Ear and Hearing Screening**

The rate of otitis media (OM) among Aboriginal and Torres Strait Islander children is among the highest in the world. If left untreated, OM can lead to temporary and sometimes permanent conductive hearing loss (CHL) that can create difficulties in listening, learning, playing and developing relationships. These problems can have a negative effect on the long term trajectory of children’s lives into adulthood.

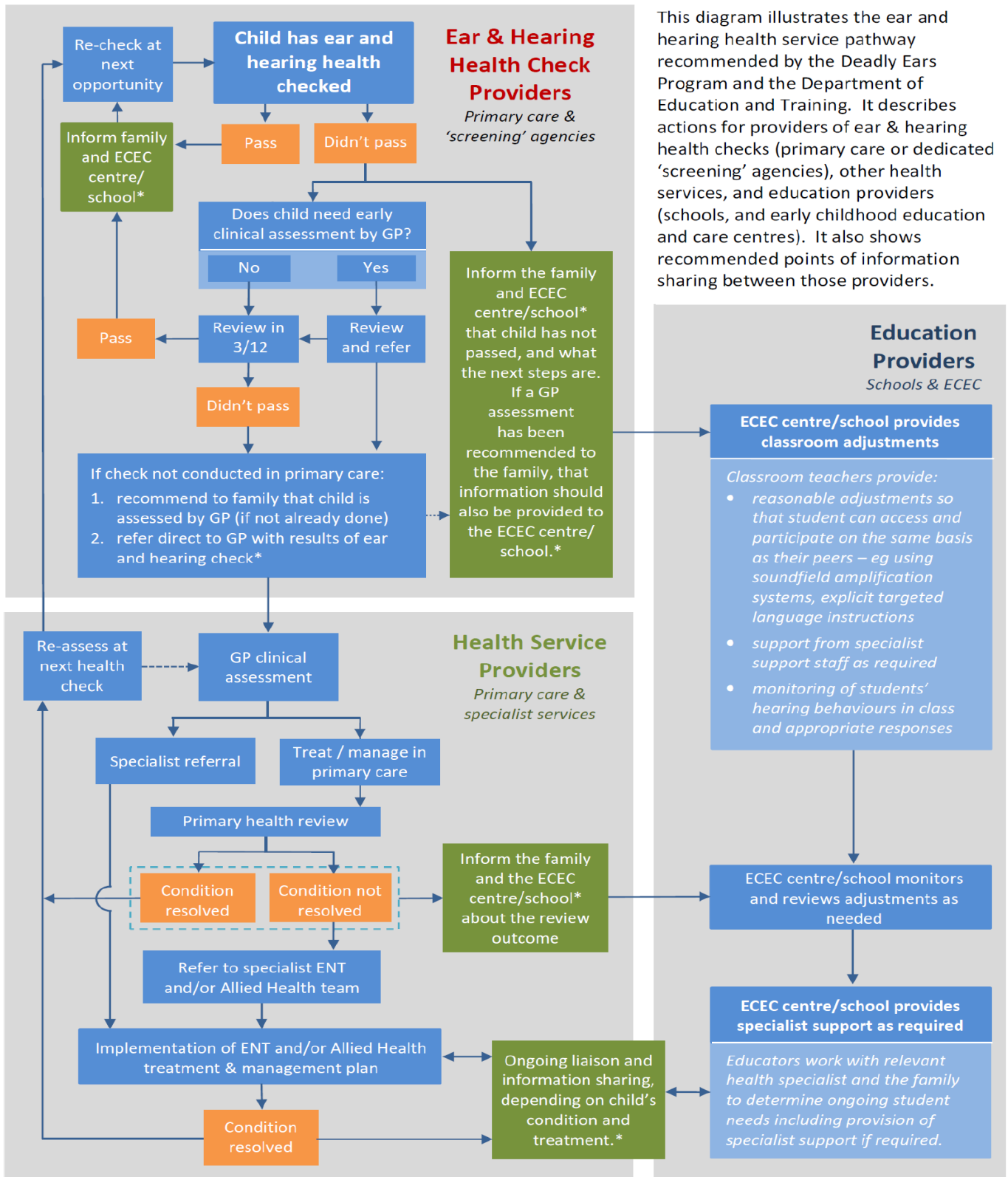
The aetiology and clinical pathway of OM is complex and poorly understood. In many children, OM and associated conductive hearing loss either resolves or fluctuates, but there is evidence that OM among Aboriginal and Torres Strait Islander children tends to be more frequent, longer-lasting and more likely to lead to long-term problems than in other Australian children.

Screening any population for OM and CHL can never do more than provide a snapshot at a point in time. One-off, stand-alone ear and hearing screening will identify those children with ear and hearing concerns which exist only at the time of screening. This is why all children who fail their initial ear and hearing health screening test should be reviewed three months after the initial assessment.

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## Recommended Ear and Hearing Health Service Pathway

This diagram illustrates the ear and hearing health service pathway recommended by the Deadly Ears Program and the Department of Education and Training. It describes actions for providers of ear & hearing health checks (primary care or dedicated 'screening' agencies), other health services, and education providers (schools, and early childhood education and care centres). It also shows recommended points of information sharing between those providers.



\*Note: consent is required for sharing information at all points marked with an asterix.

It is also important to note that while screening checks described in the Summary text box above can identify the presence of a hearing loss, they do not diagnose either otitis media or the nature of the hearing loss. That requires referral to primary health care and specialist audiology. Therefore, all children who do not pass their ear and hearing health screening checks should be referred for an assessment by a general practitioner. Indeed, given the potential impact of untreated hearing loss it is imperative that anyone with concerns about a child's ears and/or hearing ensures the child is immediately seen by the local primary/community health centre.

## Policy Context

### Lack of Evidence for Stand-Alone Screening

There is little evidence to support "stand-alone" ear and hearing screening. The Australian Institute of Health and Welfare<sup>1</sup> (AIHW) cites it as an example of an intervention that "doesn't work", stating that, "*Population based screening as a sole strategy has not been found to reduce the prevalence of ear disease among Indigenous children. A coordinated approach comprising disease prevention, treatment and management is required.*" [p2]

Oberklaid *et al* (2002)<sup>2</sup> note that "*the follow-up of those who undergo a screening test is as important as the test itself*" [p19]. A major issue highlighted in evaluations of ear and hearing screening programs<sup>3</sup> has been the lack of follow-up with subsequent care.

Hopkins and Morris (2009) conclude "*resources that might be used in screening for otitis media in Indigenous [children] would be better used in... strategies that improve the routine care i.e. surveillance (diagnosis and management) of otitis media in the community setting.*" [p.8]

The AIHW also notes that, "*an effective surveillance strategy can be built around regular (or opportunistic) child health checks.*" [p9]

The DKDF framework's "best practice model" (appendix A) advocates a move to "*embedding ear and hearing healthcare into existing child health services rather than relying on the delivery of stand-alone ear and hearing services such as hearing screening programs conducted in primary schools*" and "*...it is recommended... [that] the reliance on school-based hearing screening programs as the predominant method of identifying child ear and hearing health is reduced*".

### Prioritising Younger Children

The DKDF framework also states that, "*the earlier a child with middle ear disease and associated hearing loss is provided with support, the greater the likelihood developmental and functional impacts will be minimised on their speech, communication and learning skills.*" For this reason, DKDF and its associated Action Plan prioritise interventions such as routine ear and hearing health checks, and engagement by primary health care, for children aged 0-4 years.

*Population-based* ear and hearing screening for children aged 0-4 years presents significant practical challenges because only a small proportion of the cohort may attend an early childhood centre on any given day. This is particularly likely in communities which may have lower full-time employment, and therefore parents at home and/or extended family childcare arrangements. For this reason, these funding criteria extend to screening for the 4-6 age group (in accordance with DKDF's Best Practice Model of Care)

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<sup>1</sup> Closing the Gap Clearinghouse (AIHW & AIFS) 2014. Ear disease in Aboriginal and Torres Strait Islander children. Resource sheet no. 35. Produced by the Closing the Gap Clearinghouse. Canberra: Australian Institute of Health and Welfare & Melbourne: Australian Institute of Family Studies.

<sup>2</sup> Oberklaid F, Wake M, Harris C, Hesketh K, Wright M (2002) *Child health screening and surveillance: a critical review of the evidence*. Canberra: National Health and Medical Research Council

<sup>3</sup> ARTD Consultants 2008. Evaluation of the Aboriginal otitis media screening program: final report: report to the NSW Department of Health. Sydney: ARTD Consultants. See also Morris P, and S Hopkins (2009). Rapid Evidence Summary – Does ear health screening improve outcomes in young children? <http://www.healthinonet.ecu.edu.au/otherhealth-conditions/ear/reviews/other-reviews>

because clinical evidence indicates that this cohort also tends to have high prevalence of OM and CHL. Once children aged 4-6 years have been screened, targeted screening of children aged 7 and older can occur for those identified with concerns by teachers or parents/carers.

However, the 0-4 age group remains the priority for prevention and early intervention. CheckUP will prioritise funding for providers who can demonstrate that their screening model is able to reach a significant proportion (75% or above) of 0-4 year old children in any given community.

#### **Definition of Terms<sup>4</sup>**

Screening refers to any measurement that aims to identify individuals who could potentially benefit from an intervention for otitis media and/or conductive hearing loss. It is not diagnostic, and requires referral to primary health care for diagnosis and necessary treatment.

Ear and hearing screening/checks relate to screening for otitis media and/or conductive hearing loss, and includes the following assessments at age-appropriate stages, plus subsequent recommendations for management and treatment:

- otoscopy;
- tympanometry;
- screening audiometry, and
- otoacoustic emissions testing.

Stand-alone screening means there is no other health check provided to the child at that time by the service provider, and the service provider does not refer children who fail their ear and hearing health check for primary health assessment and management using referral protocols and pathways agreed beforehand with local primary care providers.

Audiology in this context refers to the delivery of diagnostic assessments in relation to middle ear disease and associated conductive hearing loss.

Surveillance<sup>5</sup> differs from screening in that:

- It targets many aspects of child health, growth and development;
- It is part of routine care, and the follow-up with intervention when required is inherent;

An example of surveillance in this context would be the inclusion of ear and hearing checks in routine and opportunistic child health checks.

#### Delineating between “Screening” and “Surveillance”

The World Health Organisation<sup>6</sup> says “*Screening is often thought of (and in practice often is) a cross-sectional, short-term operation*” [eg. one-off school screening] ...“*while surveillance conveys rather a long term vigil over the health of an individual or of a population*” [eg. routine age-appropriate child health checks].

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<sup>4</sup> A range of useful definitions is available in Oberklaid F, Wake M, Harris C, Hesketh K, Wright M (2002) *Child health screening and surveillance: a critical review of the evidence*. Canberra: National Health and Medical Research Council

<sup>5</sup> Morris P, and S Hopkins (2009). Rapid Evidence Summary – Does ear health screening improve outcomes in young children? <http://www.healthinfonet.edu.au/otherhealth-conditions/ear/reviews/other-reviews>

<sup>6</sup> Wilson JMG, Jungner G (1968) *Principles and practice of screening for disease*. Geneva: World Health Organization, as cited in Morris P, and S Hopkins (2009), *ibid*.

## Support for Providers

Providers can access the following support:

1. The national Otitis Media Guidelines provide advice on diagnosing and managing otitis media in Aboriginal and Torres Strait Islander children. They include a range of resources to help educate families, children and health workers about the condition, including key messages translated into five Indigenous languages. The Guidelines can be found online [here](#).
2. Training in Ear and Hearing Checks in Qld is available as follows:
  - a) The NSW TAFE is funded by the Australian Government to deliver accredited training in alignment with the Otitis Media Guidelines. The TAFE's EarTrain program helps health professionals identify and treat otitis media and other hearing conditions in Aboriginal and Torres Strait Islander children. To be eligible for this training, participants must be a health professional who provides primary health services to Aboriginal and/or Torres Strait Islander Peoples. Further information about the program can be found [here](#).
  - b) The [Deadly Ears Program](#) has developed an online training package to help nurses and health workers conduct ear and hearing health checks with Aboriginal and Torres Strait Islander children. The package is publicly accessible through the Queensland Government's iLearn platform [here](#).
3. The Australian Government has an arrangement with [Sonic Innovations](#) to support services with ear and hearing screening equipment. Please contact this organisation if your organisation requires screening equipment.
4. It is very important to deliver effective health promotion and education about strong ear and hearing health in Aboriginal and Torres Strait Islander children. There are a range of useful resources available to early years staff, educators, health professionals and families available from:
  - a) The Australian Government's [Care for Kids' Ears](#) campaign;
  - b) [The Deadly Ears Program](#); and
5. Providers working under this measure are strongly encouraged to review <http://www.cultureawarenessporthealth.com.au/>
6. It is also worth checking whether specific education and training supports exist within your organisation.

**Appendix 1: Sample Consent Proforma**



## Ear and Hearing Check CONSENT FORM

Name of School or Day-Care: \_\_\_\_\_

### Dear Parent / Guardian

It is important for health staff to conduct regular ear and hearing checks on children. An ear and hearing check simply gives us a **SNAPSHOT** of your child's ear and hearing health. It is **NOT** a diagnostic assessment and further follow-up may be required.

We are asking for your consent to allow your child to participate in this ear and hearing health check. Your consent will provide trained health staff with the authority to:

- Check your child's ears and hearing, and if needed, re-test and follow-up your child.
- Share results with other health and education staff in your community, such as Health Workers, Child Care Staff, Teachers, Audiologists, Speech Pathologists, and Doctors including Ear Nose and Throat Doctors (ENTs). This will ensure your child receives support from health and education providers.

Your consent applies **only** to ear and hearing checks, which involves the following procedures:

- **Otoscopy** (This is the first check we do; it shows us how your child's ear, ear canal and ear drum look.)
- **Tympanometry** (This is the second check we do, it tells us how well your child's ear drum and middle ear is working;
- **Audiometry** (This is the final check we do; it tells us how well your child can hear different sounds.)

**Results of this assessment will be given to you.** The results will **also** be sent to your local GP as nominated by you below. If we need to use your child's results in our statistics no one will be able to identify your child.

Prior to providing written consent if you have any questions please contact the service provider who will be conducting these checks on **(07)** \_\_\_\_\_

<b>Local GP service:</b>	
<b>GP's Full name:</b>	
<b>Address of service:</b>	
<b>Telephone number of service:</b>	

**Please complete the questions on this form and return it to your school or day-care provider. An OPTION must be ticked and a SIGNATURE is required.  
(one child per form)**

My child identifies as:  Aboriginal  Torres Strait Islander  Both  Neither

My child has a **diagnosed** hearing problem and is under the care of a specialist:  YES  NO

Please select **ONE** of the following options:

I give consent for my child to be checked for a 12 month period only. After that, you will need to sign another consent form for this to continue.

or

I do **not** give consent for my child to be checked.

Child's name: \_\_\_\_\_

Other name: *If your child is also known by another name/s, please provide details:* \_\_\_\_\_

Child's sex:  Female  Male Date of birth: \_\_\_\_\_

Home Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ School: \_\_\_\_\_ Grade: \_\_\_\_\_

Parent's/Guardian's name: \_\_\_\_\_ Date: \_\_\_\_\_

Signature of Parent/Guardian: \_\_\_\_\_

**You can withdraw consent at any time, either verbally or in writing.**

**CONSENT WITHDRAWN:** \_\_\_\_\_ Date: / /

\_\_\_\_\_  
Name of witness / parent / guardian

## Ear and Hearing Check CONSENT FORM

Name of School or Day-Care: \_\_\_\_\_

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- Check your child's ears and hearing, and if needed, re-test and follow-up your child.
- Share results with other health and education staff in your community, such as Health Workers, Child Care Staff, Teachers, Audiologists, Speech Pathologists, and Doctors including Ear Nose and Throat Doctors (ENTs). This will ensure your child receives support from health and education providers.

Your consent applies **only** to ear and hearing checks, which involves the following procedures:

- **Otoscopy** (This is the first check we do; it shows us how your child's ear, ear canal and ear drum look.)
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- **Audiometry** (This is the final check we do; it tells us how well your child can hear different sounds.)

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Please select **ONE** of the following options:

I give consent for my child to be checked for a 12 month period only. After that, you will need to sign another consent form for this to continue.

*or*

I do **not** give consent for my child to be checked.

<b>Child's name:</b>			
<b>Other name:</b>	<i>If your child is also known by another name/s, please provide details:</i>		
<b>Child's sex:</b>	<input type="checkbox"/> Female <input type="checkbox"/> Male	<b>Date of birth:</b>	
<b>Home Address:</b>			
<b>Telephone:</b>		<b>School:</b>	<b>Grade:</b>
<b>Parent's/Guardian's name:</b>		<b>Date:</b>	
<b>Signature of Parent/Guardian:</b>			
<b>You can withdraw consent at any time, either verbally or in writing.</b>			
<b>CONSENT WITHDRAWN:</b>		<b>Date:</b> / /	
_____ <b>Name of witness / parent / guardian</b>			

**Appendix 2: Ear and Hearing Check Proforma (Overleaf)**



Children's Health Queensland  
Hospital and Health Service

## Ear and Hearing Check

(Affix patient identification label here)

URN:

Family Name:

Given Names:

Address:

Date of Birth:

Sex:  M  F  I

**STATUS:**  Aboriginal  Torres Strait Islander  South Sea Islander  Non-Indigenous  Unknown

**CHECK:**  Initial  Review  Opportunistic

**School/Grade:**

**Facility seen at:**

**Attended with:**

### 1. What is the Current Situation?

Ear concerns  Hearing concerns  Concerns with **Speech/Language**

**Comments:**

### 2. Otoscopy

	Right	Left
Intact and clear ear drum	<input type="checkbox"/>	<input type="checkbox"/>
Unable to view ear drum (wax)	<input type="checkbox"/>	<input type="checkbox"/>
Red/bulging ear drum	<input type="checkbox"/>	<input type="checkbox"/>
Dry perforation	<input type="checkbox"/>	<input type="checkbox"/>
Discharge	<input type="checkbox"/>	<input type="checkbox"/>
Foreign body (add comment below)	<input type="checkbox"/>	<input type="checkbox"/>
Other/did not test (add comment below)		

**Otoscopy comments:**

### 3. Tympanometry

	Right	Left
<b>Type A</b> Consistent with normal middle ear (the peak is under, in or above the box)	<input type="checkbox"/>	<input type="checkbox"/>
<b>Type B</b> Consistent with middle ear pathology (there is no peak, check ECV)	<input type="checkbox"/>	<input type="checkbox"/>
<b>Type C</b> Consistent with blocked Eustachian tube (the peak is to the left of the box)	<input type="checkbox"/>	<input type="checkbox"/>

Did not test (add comment below)

**Tympanometry comments:**

### 4. Otoacoustic Emissions

	Right	Left
Pass	<input type="checkbox"/>	<input type="checkbox"/>
Refer	<input type="checkbox"/>	<input type="checkbox"/>
Did not test (add comment below)		

**OAE comments:**

### 5. Audiometry

	Right	Left
500Hz	dB	dB
1000Hz	dB	dB
2000Hz	dB	dB
4000Hz	dB	dB
Did not test (add comment below)		

**Audiometry comments:**

## RESULTS AND FOLLOW-UP

### CHILD PASSED

Review at next scheduled child health check, school health check or when child presents opportunistically

### CHILD DID NOT PASS

Contact family and discuss results. Assist with the arrangement of any future appointment/s:

- GP/ Nurse Practitioner review
- Reassess ears and hearing in 3 months
- Audiology review

### ADDITIONAL RECOMMENDATIONS

- Keep ears dry when swimming (ear plugs/putty provided)
- Use a wax softener
- Tissue spearing (and demonstrated to family)
- Breathe / Blow / Cough
- Eat crunchy fruit and vegetables

**Clinician name:**

**Signature:**

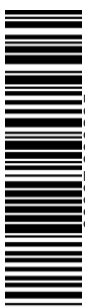
**Designation:**

**Date:**

**Copies:**  Parent/Carer  School/Early Years  GP/Community Health/Hospital

DO NOT WRITE IN THIS BINDING MARGIN

EAR AND HEARING CHECK



00007:800295