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# Oral health of Aboriginal and Torres Strait Islander children

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THE UNIVERSITY  
OF ADELAIDE  
AUSTRALIA



DENTAL STATISTICS AND RESEARCH SERIES

Number 35

# **Oral health of Aboriginal and Torres Strait Islander children**

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**2007**

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ISSN 1321-0254

ISBN 978 1 74024 618 7

#### **Suggested citation**

Australian Institute of Health and Welfare, Dental Statistics and Research Unit: Jamieson LM, Armfield JM & Roberts-Thomson KF 2007. Oral health of Aboriginal and Torres Strait Islander children. AIHW cat. no. DEN 167. Canberra: Australian Institute of Health and Welfare (Dental Statistics and Research Series No. 35).

Published by the Australian Institute of Health and Welfare

Printed by

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# Abbreviations

ABC	Aboriginal Birth Cohort
ABS	Australian Bureau of Statistics
AGDHA	Australian Government Department of Health and Ageing
AIHW	Australian Institute of Health and Welfare
ARCPOH	Australian Research Centre for Population Oral Health
CDHS	Child Dental Health Survey
CHINS	Community Housing and Infrastructure Needs Survey
CPI	Community Periodontal Index
d	deciduous decayed teeth
D	permanent decayed teeth
dmft	deciduous decayed, missing (due to caries) and filled teeth
DMFT	permanent decayed, missing (due to caries) and filled teeth
ERP	estimated resident population
f	deciduous filled teeth
F	permanent filled teeth
m	deciduous teeth missing due to caries
M	permanent teeth missing due to caries
NACCHO	National Aboriginal Community Controlled Health Organisation
NACOH	National Advisory Committee on Oral Health
NHC	Nganampa Health Council
NSW	New South Wales
NT	Northern Territory
OECD	Organisation for Economic Co-operation and Development
ppm	parts per million (in reference to fluoride levels in water)
RRMA	Rural, Remote and Metropolitan Areas
SA	South Australia
SCATSIH	Standing Committee of Aboriginal and Torres Strait Islander Health
SDS	School Dental Service
SES	Socio-Economic Status
se	standard error
SEIFA	Socio-Economic Indices for Areas
SOKS	Save Our Kids Smiles (program)
SRDC	Strategic Research Development Committee

# Symbols

n.a.	not available
%	percentage

# Acknowledgments

This publication has been prepared by the Australian Research Centre for Population Oral Health (ARCPOH). Data cited in this publication were sourced from the Australian Institute of Health and Welfare (AIHW); AIHW Dental Statistics and Research Unit (DSRU); the ABS; SA dental registers; SA Dental Gazettes; and Roberts-Thomson, unpublished data.

We wish to acknowledge the extensive time and effort contributed by the state and territory health authorities, and independent health units, in the collection and provision of the data used in this publication, along with the continued cooperation of individual dentists and dental therapists. Several people have contributed to the editing of this publication. David Brennan and Lorna Lucas of ARCPOH as well as proof reader Jo Mason have worked to improve the consistency, layout and readability of the text.

# Summary

This publication provides a summary of Aboriginal and Torres Strait Islander child oral health using information collected from three data sources: the Child Dental Health Survey, the Aboriginal and Torres Strait Islander Children and Receipt of Hospital Dental Care Investigation and the Study of Aboriginal and Torres Strait Islander Child Oral Health in Remote Communities. The main points of interest are as follows:

- A higher percentage of Aboriginal and Torres Strait Islander children had experienced dental caries than other Australian children at all ages between 4 and 14 years.
- Throughout the states and territories observed, Aboriginal and Torres Strait Islander children had consistently higher levels of dental caries (decay) in the deciduous and permanent dentition than their non-Aboriginal and Torres Strait Islander counterparts.
- Aboriginal and Torres Strait Islander children most affected were those in socially disadvantaged groups and those living in rural/remote areas.
- Trends in Aboriginal and Torres Strait Islander child caries prevalence indicate that dental caries levels are rising, particularly in the deciduous dentition.
- Aboriginal and Torres Strait Islander children aged <5 years had almost one and a half times the rate of hospitalisation for dental care as other Australian children.
- The rate of Aboriginal and Torres Strait Islander children receiving hospital dental care increased with increasing geographic remoteness.
- Less than 5% of remote Aboriginal and Torres Strait Islander pre-school children brush their teeth on a regular basis.
- Many young remote Aboriginal and Torres Strait Islander children experienced extensive destruction of their deciduous teeth.





# 1 Introduction

This chapter outlines the purpose and structure of this publication, *Oral health of Aboriginal and Torres Strait Islander children*.

## 1.1 Purpose

The purpose of this publication is to provide a summary of Aboriginal and Torres Strait Islander Australian child oral health. To achieve this, three data sources were analysed: the Child Dental Health Survey, the Aboriginal and Torres Strait Islander Children and Receipt of Hospital Dental Care Investigation, and the Study of Aboriginal and Torres Strait Islander Child Oral Health in Remote Communities. The first study entailed analysis of data routinely collected for the Child Dental Health Survey (CDHS), a survey of the oral health status of school children enrolled in the School Dental Service (SDS) in each state and territory of Australia. Specific emphasis was on the differences between Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander child dental caries experience. The second investigation involved examination of hospital dental procedure data obtained from the Australian Institute of Health and Welfare (AIHW) National Hospital Morbidity Database, 2002–2003. Data were collected from public and private hospitals across all states and territories, and analysis compared the difference in hospital dental care received by Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander children. The final study involved the aggregation of Aboriginal and Torres Strait Islander child oral health data obtained from remote communities in three states and territories, and comparison with those of national Australian and Aboriginal and Torres Strait Islander child populations respectively.

## 1.2 Structure

The publication is divided into five main chapters: Introduction, Background, Methods, Results and Discussion.

The background chapter (Chapter 2) describes a conceptual framework of Aboriginal and Torres Strait Islander child oral health, determinants of Aboriginal and Torres Strait Islander child oral health, general background characteristics of Aboriginal and Torres Strait Islander children and an overview of Aboriginal and Torres Strait Islander child oral health.

Chapter 3 outlines the methods used in the three investigations, with background information provided where appropriate.

Results of the studies are provided in Chapter 4. The general format is for univariate characteristics to be described followed by bivariate analysis. The latter is generally in the form of oral disease experience of Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander children in association with sociodemographic factors. Dental caries trends are described in the Child Dental Health Survey. In the Study of Aboriginal and Torres Strait Islander Child Oral Health in Remote Communities, remote Aboriginal and Torres Strait Islander children's oral

disease experience is compared with national child oral disease levels and state/territory Aboriginal and Torres Strait Islander child oral health status respectively. A summary of findings for each data source is presented at the end of the chapter.

Chapter 5 presents comparisons with international data on Indigenous children from New Zealand, Canada and the United States of America.

Chapter 6 presents a discussion of findings from each data source, followed by a general discussion in line with principles of the conceptual framework outlined in the background chapter. Concluding remarks end the chapter.