

# National Dental Telephone Interview Survey 2013

## Identifying and definitional attributes

<b>Metadata item type:</b>	Quality Statement
<b>METEOR identifier:</b>	629709
<b>Registration status:</b>	<ul style="list-style-type: none"><li>• <a href="#">AIHW Data Quality Statements</a>, Standard 27/01/2016</li></ul>

## Data quality

### Quality statement summary:

The National Dental Telephone Interview Survey (NDTIS) is a random sample survey that collects information on the dental health and use of dental services of Australians in all states and territories. The survey includes Australians aged 5 years and over.

- The NDTIS is a source of nationally representative population data on dental health and use of dental services in Australia.
- NDTIS is a sample based survey using telephone interview methodology.
- As with all survey data, these data are subject to sampling error and non-response bias.
- NDTIS consists of several modules covering specific aspects of oral health status, social and demographic information, and dental visiting behaviours. In 2013 modules were added to capture data on a range of dental health issues affecting adults, satisfaction with dental professional seen and data on the type of income support payments received by families with children aged 5-17 years.

**Institutional environment:** The AIHW is a major national agency set up by the Australian Government under the *Australian Institute of Health and Welfare Act 1987* to provide reliable, regular and relevant information and statistics on Australia's health and welfare. It is an independent corporate Commonwealth entity established in 1987, governed by a management board, and accountable to the Australian Parliament through the Health portfolio.

The Institute aims to improve the health and wellbeing of Australians through better health and welfare information and statistics. It collects and reports information on a wide range of topics and issues, ranging from health and welfare expenditure, hospitals, disease and injury, and mental health, to ageing, homelessness, disability and child protection.

The Institute also plays a role in developing and maintaining national metadata standards. This work contributes to improving the quality and consistency of national health and welfare statistics. The Institute works closely with governments and non-government organisations to achieve greater adherence to these standards in administrative data collections to promote national consistency and comparability of data and reporting.

One of the main functions of the AIHW is to work with the states and territories to improve the quality of administrative data and, where possible, to compile national data sets based on data from each jurisdiction, to analyse these data sets and disseminate information and statistics.

The *Australian Institute of Health and Welfare Act 1987*, in conjunction with compliance to the *Privacy Act 1988* (Cth), ensures that the data collections managed by the AIHW are kept securely and under the strictest conditions with respect to privacy and confidentiality.

For further information see the AIHW website <http://www.aihw.gov.au/>.

The NDTIS is conducted on behalf of AIHW by the Dental Statistics and Research Unit (DSRU) located at the University of Adelaide, a collaborating unit of the AIHW. In this capacity the DSRU is subject to the provisions of the AIHW Act and the Privacy Act.

**Timeliness:** NDTIS 2013 was conducted from June 2013 to March 2014. Data from this collection were first published in January 2016 online and as a print-on demand publication (AIHW: Chrisopoulos S, Harford JE & Ellershaw A 2016. Oral health and dental care in Australia: key facts and figures 2015. Cat. no. DEN 229. Canberra: AIHW), available at (<http://www.aihw.gov.au/publications/>).

**Accessibility:** The DSRU produces a number of statistical reports based on the NDTIS, available free of charge from its website (<http://www.adelaide.edu.au/arcpoh/publications/reports>).

Reports are also available from the AIHW website (<http://www.aihw.gov.au/dental-and-oral-health/>).

Data not available online or in reports and customised tables can be requested via the AIHW Digital and Media Communications Unit on (02) 6244 1000 or via email to [info@aihw.gov.au](mailto:info@aihw.gov.au). Queries can also be directed to [arcpoh@adelaide.edu.au](mailto:arcpoh@adelaide.edu.au).

**Interpretability:** NDTIS consists of several modules: oral health status, perceived need, access to dental services and visiting behaviour, treatment received in the previous 12 months, waiting time for dental care, social impact of oral health status, barriers to accessing dental care, cardholder status, dental insurance status and sociodemographics. In 2013 the following modules were included: dental health concerns and type of income support payments received by families with children aged 5-17.

**Relevance:**

The NDTIS is a random sample survey that collects information on the dental health and use of dental services of Australians in all states and territories. The scope of the survey includes both public and private dental services, and emergency as well as general visits (i.e. check-ups and consultations for problems not classified as emergencies).

The survey data included people aged 5 years and over who were resident in households that had a telephone number listed in the electronic White Pages and people who were contactable by mobile telephone. Those who did not have a mobile phone and were not listed in the electronic White Pages were not represented in the sample. As NDTIS does not specifically identify dental services provided through hospitals, or services provided for orthodontic reasons, it was not possible to exclude these services from usage rates.

The target sample size for the 2013 NDTIS was 6,600 adults aged 18 years or older, and 1,400 children aged 5–17 years. The number of survey participants after data editing was completed is provided in the following table.

<b>Age group</b>	<b>Sample size</b>
5–17 year olds	1,616
18–24 year olds	517
25–44 year olds	1,798
45–64 year olds	2,543
65+ year olds	1,482
<b>Total</b>	<b>7,956</b>

**Accuracy:**

Data were collected from a random sample of Australians selected using an overlapping dual sampling frame design. The first sampling frame was created from the electronic product 'Australia on Disc 2012 Residential' supplied by United Directory Systems. This product is an electronic listing of persons/households listed in the White Pages across Australia and is updated annually. Both landline and mobile telephone numbers were provided on records where applicable. A stratified two-stage sample design was used to select a sample of persons from this sampling frame. Records listed on the frame were stratified by State/Territory and region where region was defined as Greater Capital City/Rest of State. A systematic sample of records was selected from each stratum using specified sampling fractions. Once telephone contact was made with a selected household, one person aged 18 years or older was randomly selected. On completion of the adult questionnaire, if the household contained children aged 5-17 years then one child was randomly selected to participate in the survey.

To include Australian households that were not listed in the White Pages a second sampling frame was used that consisted of 20,000 randomly generated mobile telephone numbers. This sampling frame was supplied by Sampleworx and the mobile telephone numbers were created by appending randomly generated suffix numbers to all known Australian mobile prefix numbers. As the mobile numbers did not contain address information the sampling frame could not be stratified by geographic region. A random sample of mobile numbers was selected from the frame and contacted to establish the main user of the mobile phone. Providing this person was aged 18 years or older they were asked to participate in the survey. On completion of the adult questionnaire, if the adult's household contained children aged 5-17 years then one child was randomly selected to participate in the survey.

The NDTIS sample consisted of 6,931 persons participating from the electronic White Pages sampling frame (the EWP sample) and 1,025 persons participating from the randomly generated Mobile number sampling frame (the Mobile sample).

Testing of the NDTIS questionnaire program was conducted during April and May 2013 and involved informal in-house testing and a pilot test conducted with Adelaide residents. Indigenous status is recorded but due to the small number of Indigenous persons surveyed estimates cannot be considered to be representative of the Indigenous population.

An overall participation rate of 34.3% was achieved in the 2013 survey. Households that were out of scope or unable to be contacted are excluded from the calculation of participation rates. A total of 38,108 unique telephone numbers were called resulting in 6,348 households with one or more completed interviews. The participation rate

for the EWP sample was 34.7% with stratum participation rates ranging from 27.4% in Sydney through to 48.7% in non-metropolitan South Australia. The participation rate for the Mobile sample was 32.3%.

<b>Stratum</b>	<b>Total sample</b>	<b>Out of scope</b>	<b>Unable to contact</b>	<b>Could contact but not resolved</b>	<b>Refusal</b>	<b>Participating households</b>	<b>Per cent participation</b>
<b>EWP Sample</b>							
Sydney	4,396	1,538	650	133	1,469	606	27.4%
Balance of New South Wales	2,364	833	259	54	769	449	35.3%
Melbourne	3,323	1,033	460	111	1,146	573	31.3%
Balance of Victoria	1,793	565	224	36	583	385	38.3%
Brisbane	2,460	907	326	61	726	440	35.9%
Balance of Queensland	2,594	901	362	64	849	418	31.4%
Adelaide	2,278	1,045	277	57	510	389	40.7%
Balance of South Australia	1,375	602	161	29	285	298	48.7%
Perth	1,934	607	255	59	682	331	30.9%
Balance of Western Australia	1,259	399	197	35	398	230	34.7%
Hobart	1,258	454	174	34	357	239	37.9%
Balance of Tasmania	1,139	358	145	29	352	255	40.1%
Australian Capital Territory	2,046	720	359	50	498	419	43.3%
Darwin	1,650	632	267	55	466	230	30.6%
Balance of Northern Territory	1,646	660	341	43	385	217	33.6%
<b>Total</b>	<b>31,515</b>	<b>11,254</b>	<b>4,457</b>	<b>850</b>	<b>9,475</b>	<b>5,479</b>	<b>34.7%</b>
<b>Mobile Sample</b>	<b>6,593</b>	<b>2,401</b>	<b>1,498</b>	<b>376</b>	<b>1,449</b>	<b>869</b>	<b>32.3%</b>
<b>TOTAL</b>	<b>38,108</b>	<b>13,655</b>	<b>5,955</b>	<b>1,226</b>	<b>10,924</b>	<b>6,348</b>	<b>34.3%</b>

As with all survey data, these data are subject to sampling error and non-response bias. Data are weighted and the magnitude of sampling error is indicated by 95% confidence intervals included with all published estimates.

Interviews were rendered invalid if they were missing the demographic data necessary to derive the survey weights. These requirements were the sex, age, residential location, and for persons selected from the EWP sampling frame, the number of persons resident in the household who were eligible for selection. Due to incomplete data, 7 records (0.1%) were excluded from the final dataset.

For those records which were able to be weighted there were very few missing data

items. Consequently, all weighted records generated useable data for analysis.

Detailed description of survey methodology can be found in the 2013 National Dental Telephone Interview Technical Report at

<http://www.adelaide.edu.au/arcpho/publications/reports>

**Coherence:**

The NDTIS has been conducted regularly since 1994. While some changes have been made to the questionnaire and methodology over time, the data items used to derive most estimates have been consistent over time. Specific questions asked in each NDTIS are listed in appendices to the technical reports for each survey. These technical reports are available at

<http://www.adelaide.edu.au/arcpho/publications/reports/>

## Data products

**Implementation start date:** 01/06/2013

## Source and reference attributes

**Reference documents:**

AIHW: Chrisopoulos S, Harford JE & Ellershaw A 2016. Oral health and dental care in Australia: key facts and figures 2015. Cat. no. DEN 229. Canberra: AIHW