Queensland preventive health survey methods (adult and child)

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Background

As of 2015, preventive health survey surveillance reports were replaced with an interactive online method of dissemination—the Queensland survey analytic system (QSAS). Older data were reviewed and in some cases reanalysed to ensure results are comparable with current data. QSAS data may differ from previous reports.

Additional resources

Conditions of use
Survey methods (adult and child)
Adult survey sample size information
Adult survey statewide measures
Adult survey regional measures
Data download state results

Child survey sample size information Child survey statewide measures Child survey regional measures Data download regional results

Results available in QSAS

Since 2015, QSAS has been expanded and enhanced. QSAS currently includes

- Headline key health indicators for adults and children
 - o Queensland—persons, males, females
 - o Regions—persons
- Adult risk factor trends
 - o Queensland—persons, males, females, selected additional subgroups
 - o Regions—persons
- Child risk factor trends—Queensland persons
- Adult and child detailed results by subgroups
 - Queensland—age, sex, socioeconomic status, remoteness
 - o Regions—age, sex, socioeconomic status



State and regional reporting

Official government statistics for Queensland are based on annual survey data.

Regional results, however, require combining (pooling) two years of survey data to reach adequate sample size for analysis. For regional to state comparisons, pooled Queensland results are used. Statistically significant differences are indicated in the QSAS visualisation.

Pooled Queensland results are provided for comparative purposes only; official Queensland statistics must always reference the annual results.

Survey methods summary

Data source: the adult preventive health telephone survey series.

Mode: surveys are conducted by computer assisted telephone interview (CATI) using an external provider. All interviews are conducted in English.

Sampling frame

- Adult: 2002 to 2014—random digit dialling (RDD) of landline telephone numbers.
- Child: 2011, 2013, 2014—random digit dialling (RDD) of landline telephone numbers.
- Adult and child: 2015 to current— a list-based frame maintained by Queensland Treasury for official statistical purposes which includes both landline and mobile telephone numbers.

Eligibility

- Adult: persons 18 years and older that reside in a residential household.
- Child: primary parent or caregiver reports on the health and lifestyle of a child aged 5–17 years randomly selected in the household.

Survey weights: all data are population weighted.

Data collection dates: Data collection dates exclude school holidays.

Additional information *Methods for reporting population health status* available from https://www.health.qld.gov.au/_data/assets/pdf_file/0027/441648/methods-report.pdf

Table 1: Adult survey methodology by year

Survey	-		Sample	Survey time	Response	Weighted to
year	Survey start	Survey end	size	(minutes)	rate	ERP year
2002 ¹	8/4/2002	13/6/2002	2,481		75%	2001
2004 ¹	27/4/2004	28/6/2004	2,231	15:00	71%	
2006 ¹	13/10/2006	26/11/2006	1,521		66%	2004
2008 ¹	10/6/2008	4/7/2008	2,002	20:42	47%	
2009 ²	27/01/2009	25/03/2009	7,571	15:30	56%	2008
2010 ³	29/10/2009	22/02/2010	8,959	12:07	65%	2009
2011 ³	11/03/2011	6/06/2011	12,164	15:44	44%	2009
2012 ³	3/10/2011	28/03/2012	19,398	13:26	81%	2011
2013 ³	14/02/2013	22/05/2013	7,791	16:05	77%	2011
2014 ³	2/12/2013	1/07/2014	14,787	16:00	68%	2012
2015 ⁴	19/03/2015	29/06/2015	12,568	17:04	65%	2013
2016 ⁴	4/11/2015	14/03/2016	11,948	14:18	64%	2014
20174	10/10/2016	26/03/2017	12,694	12:48	70%	2016
2018 ⁴	18/10/2017	29/03/2018	12,386	14:18	68%	2016

¹ Omnibus survey (limited indicators available), ² Self reported adult health survey (SRAHS)

³ Self reported health survey (SRHS), ⁴ Adult preventive health telephone survey

Table 2: Child survey methodology by year

Survey year	Survey start	Survey end	Sample size	Survey time (min:sec)	Response rate	Weighted to ERP year
2011 ¹	08/06/2011	28/07/2011	2,484	12:05	86%	2009
2013 ¹	14/02/2013	22/05/2013	2,467	14:09	88%	2011
2014 ¹	6/12/2013	9/06/2014	2,986	11:06	94%	2013
2015 ²	03/06/2015	26/06/2015	2,521	14:51	80%	2013
2016 ²	10/02/2016	15/03/2016	2,504	11:42	84%	2014
2017 ²	6/03/2017	29/03/2017	2,393	17.54	77%	2016
2018 ²	9/10/2017	7/11/2017	2,633	13.30	79%	2016

¹Child health status (CHS), ²Child preventive health telephone survey

Regional detailed results

Available regions

- Hospital and Health Service areas (adult and child)
- Primary Health Networks (adult and child)
- Local government areas (adult only)

Available data

Table 3: Adult pooled datasets

Pooled dataset	Sample size	Weighted to ERP year	
2009–10	16,530	2008	
2011–12	31,562	2011	
2013–14	22,578	2013	
2015–16	24,516	2014	
2017–18	25,080	2016	

Table 4:	Child	pooled	datasets
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Pooled dataset	Sample size	Weighted to ERP year
2013–14	5,453	2013
2015–16	5,025	2014
2017–18	5,026	2016

The population in some LGAs is very small and results are unavailable or do not meet reliability criteria. In some areas, contiguous LGAs were combined to achieve sufficient numbers of participants for reliable reporting (note that there may also be limited information for the unaggregated LGA in QSAS). The aggregated LGAs are

- Rest of Central West HHS: Barcoo (S), Blackall Tambo (R), Boulia (S), Diamantina (S) and Winton (S) LGAs
- Rest of North West HHS: Burke (S), Carpentaria (S), Cloncurry (S), Doomadgee (S), McKinlay (S), Mornington (S) LGAs
- Rest of South West HHS: Bulloo (S), Paroo (S), Quilpie (S) LGAs

Unfortunately, this method could not be applied to all small areas and consequently not all LGAs are represented.

QSAS contains aggregate results. The underlying unit record file (URF) data were collected by survey with a complex sampling design requiring analysis by specialist statistical software. Using QSAS results to calculate additional statistics (for example results for combined regions, indicators, or sociodemographic sugroups) is statistically inappropriate and will not produce valid results. Such approaches are strongly discouraged.

Regional boundaries change over time—for example the Queensland Government de-amalgamated four LGAs in 2014. QSAS Users are responsible for defining their regions of interest and knowing whether comparability may be affected by historical boundary changes. To assist, LGAs are identified with their respective ABS Australian Statistical Geography Standard (ASGS) code in the sample size tables. Of note, there are instances where boundaries have changed but the region name has remained identical.

Trend results

Trend results are expressed as annual percentage change (APC). APC measures the average percentage increase or decrease per year. Annual data are used for trend analysis for adults (state and regional) and children (state).

PHB trend analysis methods are described in *Trends in preventive health risk factors 2002–2013* available from https://www.health.gld.gov.au/_data/assets/pdf_file/0025/442636/trends-gld-2002-2013.pdf and

Methods for reporting population health status available from https://www.health.gld.gov.au/ data/assets/pdf file/0027/441648/methods-report.pdf.

Prevalence results

Results are expressed as a population prevalence or mean. Results are population weighted.

Prevalence is the number of persons with a health condition or behaviour at a point in time divided by the population at risk and is reported as a percentage.

Mean is the average of a result across the population or subpopulation.

Relative standard errors (RSE) and releasability

RSE are used to exclude results that do not meet statistical reliability criteria.

RSE is calculated as: RSE% (x) = (standard error(x) / x) * 100

Releasability based on RSE is defined such that estimates with an RSE

- less than 25% are considered reliable (and are displayed in graphs/tables)
- between 25–50% should be interpreted with caution
- greater than 50% are not considered reliable (excluded from graphs/tables).

In any reproductions of these data, Users are strongly encouraged to identify results with RSE limitations.

Results are also omitted to protect participants' privacy, specifically where there are less than 50 total participants or less than 10 with the characteristic of interest. QSAS conditions of use specify that Users must not generate or disseminate omitted results.

Confidence intervals (CI)

All results include 95% CIs so that Users can assess the precision and reliability of results. CIs are similar to margins of error in that they provide the range of values that would likely contain the result if the entire population was included in the survey.

Cls can also be used to identify statistically significant differences. This conservative method involves determining when 95% Cls do <u>not</u> overlap. When Cls do not overlap, there is a statistically significant difference between regions or subpopulations.