

# Preliminary Findings

2009 Victorian Child Health and  
Wellbeing Survey



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## Background

Interviewing for the 2009 Victorian Child Health and Wellbeing Survey (VCHWS) took place between February and May 2009.

Parents completed interviews on behalf of 5025 randomly selected Victorian children aged under 13 years. A response rate of 75% was achieved. A profile of respondents is provided in Table 1.

Data will feed into the 2010 annual report on the state of Victoria's children. Data relates to children aged from birth to 12 years of age unless otherwise stated.

## When interpreting the VCHWS data...

- ✓ As there are only two time points, trend data cannot be reported. Time series data are usually reported where data have been collected across a greater number of time points.
- ✓ VCHWS is a cross sectional survey – it is possible to identify associations between variables in the dataset but we can not attribute cause and effect.
- ✓ There are no controls for confounding factors in the analysis – e.g. could the increased frequency of smoking among those on health care cards and in rural households really be due to socio economic status or some other variable?
- ✓ Avoid making statements about whether differences are '*statistically significant*'. Statistical significance tests, to compare differences between the means, have not been conducted in this analysis. Comment can be made on the similarities or differences between groups in the population, with reference to whether the confidence intervals of the estimates overlap or not.
- ✓ The estimates provided are based on sample data, and the confidence intervals indicate that there is a 95 per cent probability that the true value lies between the upper and lower limits of the confidence interval. Therefore, if the confidence intervals of two population groups do not overlap, it can be assumed that the true values of the two estimates are unlikely to fall within the same distribution.

## Comparing respondents

The broad characteristics of respondents included in the 2006 and 2009 surveys were very similar - therefore it has been deemed appropriate to compare results from the two surveys (see Tables 1 and 2).

Estimates from the 2009 survey suggest children were slightly more likely to be from families with private health insurance than in 2006. In 2009, 54.5% (lower confidence interval 52.9% – upper confidence interval 56.1%) of children were reported to be from households with private health insurance, compared to 49.7% (48.0 – 51.4%) in 2006.

The proportion of children estimated to be listed as dependents on health care cards was 27.4% (25.8% - 27.6%), no different to 2006.

**Table 1: Profile of subjects (children aged 0 to 12 years) in the 2009 VCHWS**

Selected characteristic	Survey Estimate (weights general population) (per cent)	Lower Confidence Interval (per cent)	Upper Confidence Interval (per cent)
<b>Sex</b>			
Male	51.3	49.7	53.0
Female	48.7	47.0	50.3
<b>Age group</b>			
< 1 year	8.0	7.1	8.9
1 to 4 years	30.3	28.8	31.8
5 to 8 years	30.4	28.9	31.9
9 to 12 years	31.3	29.8	32.9
<b>Area</b>			
Metropolitan Victoria	71.1	70.5	71.7
Rural Victoria	28.9	28.3	29.5
<b>Aboriginal or Torres Strait Islander</b>	<b>1.4</b>	<b>0.9</b>	<b>1.7</b>

**Table 2: Profile of subjects (children aged 0 to 12 years) in the 2006 VCHWS (n=5000)**

Selected characteristic	Survey Estimate (weights general population) (per cent)	Lower Confidence Interval (per cent)	Upper Confidence Interval (per cent)
<b>Sex</b>			
Male	51.3	49.5	53.1
Female	48.7	46.9	50.5
<b>Age group</b>			
< 1 year	7.5	6.7	8.3
1 to 4 years	29.6	28.0	31.2
5 to 8 years	30.7	29.1	32.3
9 to 12 years	32.2	30.6	33.7
<b>Aboriginal or Torres Strait Islander</b>	<b>1.3</b>	<b>1.1</b>	<b>1.5</b>

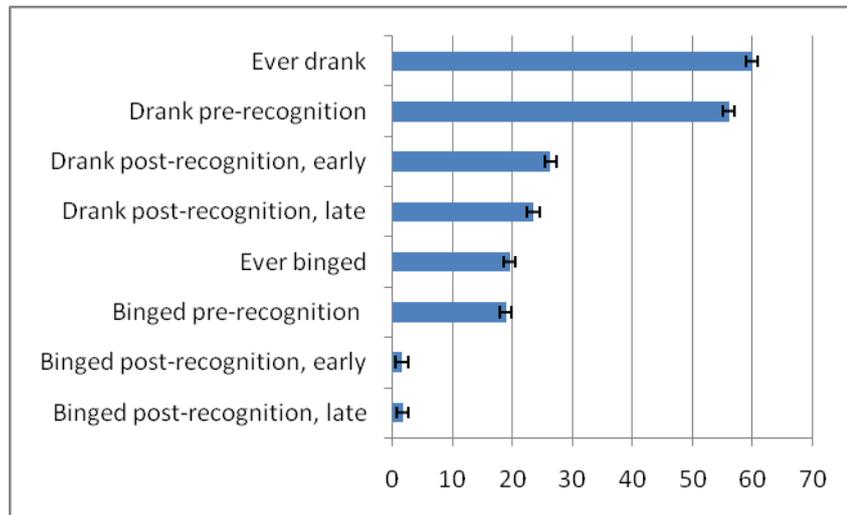
## Outcome: Optimal antenatal and infant development

### Prenatal health

The majority of Victorian mothers (59.8%, 55.4-64.2%) recalled drinking alcohol at some point during pregnancy, however most had done so in moderation (see Figure 1).

The VCHWS also collected data on whether mothers had “binged” (drinking more than 4 alcoholic drinks in one day) on alcohol during pregnancy. 19.5% (16.1- 22.9%) of mothers with infants aged under 2 years recalled binge drinking during their pregnancy. Women were most likely to have binged on alcohol early in their pregnancy, before awareness of the pregnancy. Generally, consumption of alcohol was also less common once women were aware they were pregnant.

**Figure 1: Proportion of Victorian mothers with infants under 2 years who recalled drinking alcohol during pregnancy, by drinking behaviour and stage of pregnancy, 2009**



\*Pre-recognition: ie before aware of pregnancy

18.3% (15.0 -21.7%) of infants aged under 2 years had mothers who had smoked cigarettes during pregnancy. Again, there was evidence of women trying to adopt healthier lifestyles during pregnancy. 18.2% (14.8-21.5%) of infants had mothers who smoked early in pregnancy whilst 7.0% (4.9-9.1%) of infants had mothers who reported smoking cigarettes late in pregnancy.

Very similar patterns of alcohol consumption and smoking during pregnancy were reported in the 2006 VCHWS.

**Note** - Changes in national recommendations: women who are pregnant or planning to conceive are now advised that avoiding alcohol is the safest option.

## Outcome: Optimal physical health

### Proportion of children with 'good health'

Most Victorian children were reported to have 'good health' or better in 2009 (98.5%), similar to the 2006 survey results (98.0%).

### Asthma (1 to 12 years)

11.2% (10.2 - 12.3%) of children had current asthma (had ever been diagnosed with asthma by a doctor, and had experienced asthma symptoms or taken asthma medication in the past year), and of these, 67.0% (62.2 - 71.7%) had an asthma action plan in place.

## Outcome: Healthy teeth and gums

### Oral health status (6 months to 12 years)

The majority of children (77.7%, 76.3 - 79.1%) were reported to have excellent or very good oral health. Parents were less positive when reporting their child's oral health in comparison to their child's general health.

- ✓ 18.2% (16.9 - 19.5%) of children had experienced toothache. Of these children 27.7 % (24.0 - 31.4%) had toothache severe enough to disrupt sleeping.
- ✓ 17.5% (16.3 - 18.8%) children had a filling.
- ✓ 4.7% (4.0 – 5.4%) of children were reported to have had treatment in a dental hospital under general anaesthetic.
- ✓ 7.5% (6.7 – 8.4%) of children have had a tooth extracted.

Reports of children's oral status did not differ from the 2006 data. As in 2006, there was compelling evidence that children living in rural Victoria were more likely to have experienced dental health problems. Rural children were more likely to have experienced a toothache, had a filling, a tooth extraction or to have received treatment in a dental hospital under anaesthesia.

The disparity in the oral health status of children living in rural and metropolitan areas of Victoria is likely to be explained (in part) by access to fluoridated drinking water.

### Oral health behaviours

As in 2006, 70.0% of children aged 2 to 12 years were reported to brush their teeth at least twice a day.

Parents with children aged under 8 years are advised to assist with tooth brushing as young children lack the manual dexterity to brush their teeth effectively (ref: the oral health guidelines for Victorians). Approximately one in five children (20.3%, 18.3 -22.3%) had a parent or carer who reported never assisting their child with tooth cleaning.

### Service use

The proportion of children who were reported to have visited the dentist in the last 12 months was no different to 2006. In comparison to the 2006 results, in 2009 children were more likely to have made their last visit to see

a dentist at a private practice and were less likely to have seen a dentist from the school dental service (see Table 1). This reflects changes in service structures, where Dental Health Services Victoria now targets engagement at the family rather than school level, concentrating on students with higher levels of need for dental services, and integrating service delivery into public dental services more broadly. Meanwhile, children's reported attendance at other government or public dental services and dental hospitals was no different to in 2006.

**Table 3: Use of dental services – location of last dental visit (children aged 6 months to 12 years)**

Location	2006			2009		
	Percent	LCI*	UCI#	Percent	LCI*	UCI#
Private Dentist	<b>64.1</b>	62.0	66.1	<b>70.7</b>	68.8	72.6
School Dental Service	<b>27.1</b>	25.2	29.0	<b>18.2</b>	16.5	19.8
Other Government / Public Dentist	<b>7.5</b>	6.3	8.6	<b>8.7</b>	7.5	9.9
Dental Hospital	<b>0.9</b>	0.6	1.3	<b>2.0</b>	1.5	2.6
Other	<b>0.2</b>	0.0	0.3	<b>0.3</b>	0.0	0.5
Unknown	<b>0.3</b>	0.0	0.2	<b>0.2</b>	0.0	0.3

\* lower confidence interval # upper confidence interval

The oral health guidelines for Victorians recommend that dental visits begin in infancy, to get the child familiar with attending. The majority of pre-school children (70.8%, 68.0 – 73.5%) have never been to a dentist. Data from the School Entrant Health Questionnaire suggests that parents' most common child health concern at school entry is their child's oral health.

The Maternal and Child Health (MCH) service standards recommend promotion of dental visits, and dental health status to be checked at 18 months and 3.5 years, however MCH nurses are not equipped to undertake comprehensive dental examinations.

In 2009, the majority of Victorian children (79.6%, 77.6 - 81.6%) aged 2 to 7 years were using either low fluoride or fluoride free children's toothpaste as recommended in the Oral Health Guidelines for Victorians.

## Outcome: Adequate exercise and physical activity

### Physical activity and inactivity

The VCHWS data relating to physical activity has been in high demand since the 2006 survey.

In 2006, 71.2% (69.2 -73.1) of children aged 5 to 12 years were reported to be physically active for at least 60 minutes everyday. The 2009 data suggest fewer children were meeting the national physical activity guidelines with 60.3 (58.2 to 62.4%) of children active for at least 60 minutes everyday.

As in 2006, children living in rural Victoria were more likely to meet physical activity guidelines, and there was again evidence of a drop off in physical activity as children aged.

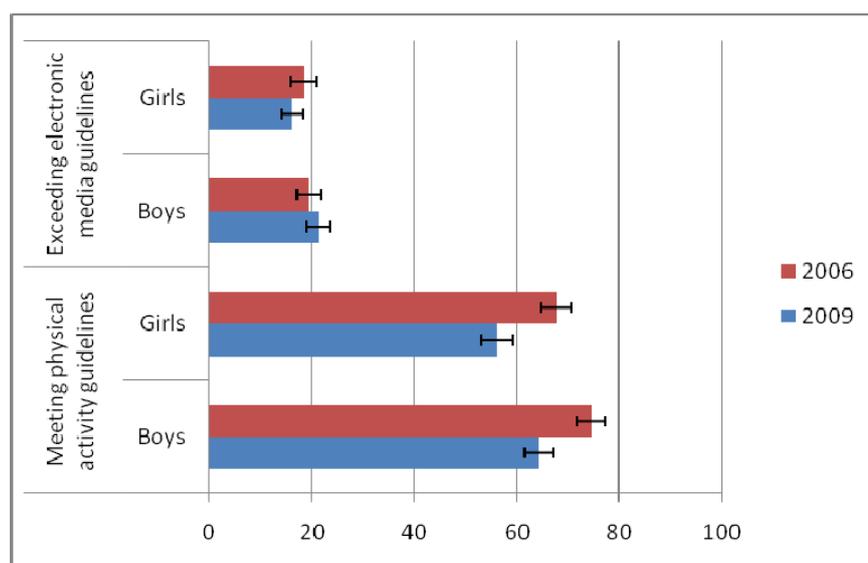
Boys were also more likely to meet physical activity guidelines compared to girls.

Inactivity was monitored by asking parents to report on their child's use of electronic media (including screen time spent in front of computers, television, DVDs, etc). National guidelines recommend children should not exceed more than two hours with electronic media each day.

A minority of children (18.8%, 17.2 - 20.4%) aged 5 to 12 years exceeded the recommended screen time. The proportion of children estimated to exceed the guidelines was no different to 2006.

While boys were more likely to be meeting physical activity guidelines, they were also more likely to be exceeding two hours a day with electronic media (see Figure 2). A similar pattern has been observed nationally (see results from the *2007 Australian National Children's Nutrition and Physical Activity survey*).

**Figure 2: Proportion of Victorian children aged 5 to 12 years meeting physical activity guidelines, and proportion exceeding electronic media guidelines, 2006 and 2009**



The most common method of travelling to school was by car. On average Victorian children made 6.5 trips to school by car (out of a possible 10 trips) in a usual week, compared to just 2 trips on foot. For children living within 2 km of their school, the car was still the predominant method of transport. On average, these children made 5.7 trips to school by car in a usual week compared to 3.6 trips on foot. Trips to school made by bike or public transport were relatively uncommon.

## **Outcome: Adequate nutrition**

### **Fruit and vegetable intake**

Data on childhood nutrition was amongst the most commonly requested data from the 2006 VCHWS.

#### **Fruit**

In 2009, the majority of Victorian children (89.2%, 88.0-90.5%) aged 4 to 12 years met the national recommendations for the minimum daily intake of fruit (excluding fruit juice). Most children in this age group only needed to eat one serve per day to meet the minimum guidelines.

Almost all children in the 5 to 8 year age group were meeting the daily guidelines for fruit intake (96.8%, 95.8-97.9%). Of the children who did not meet the guidelines, most were 12 years of age (when the guidelines jump from 1 to 3 recommended serves of fruit per day). This is reflected in a lower proportion of children in the 9 to 12 year age group meeting the minimum daily recommended intake (80.0%, 77.7 - 82.3%).

The overall proportion of children meeting the minimum daily guidelines for fruit intake in 2009 was very similar to 2006.

#### **Vegetables**

A minority of Victorian children (37.6%, 35.7 - 39.6%) aged 4 to 12 years met the guidelines for minimum daily intake of vegetables in 2009 (includes potatoes). Younger children were again more likely to be meeting daily recommendations. 44.7% (41.7 - 47.7%) of children aged 5 to 8 years met targets compared to 27.9% (25.2 - 30.7%) of children aged 9 to 12 years.

The proportions of children meeting the guidelines for minimum daily vegetable intake were again extremely similar between the 2009 and 2006.

Compared to national data from the 2007 Australian National Children's Nutrition and Physical Activity Survey, the proportion of Victorian children meeting vegetable guidelines appears to be favourable. As only a minority of Victorian children met the guidelines for vegetable intake, there is still room for improvement.

Only 34.7% (32.8 - 36.6%) of children were meeting the minimum daily recommended guidelines for both fruit and vegetable intake in 2009. The drop off in the proportion of children meeting nutritional guidelines as they age is a concern. Lower proportions are still observed among Victorian adults. The proportions of children meeting the minimum daily recommendations for fruit and vegetable intake are presented in Table 4.

For further information on adult nutrition, refer to the Victorian Population Health Survey 2007: [www.health.vic.gov.au/healthstatus/vphs\\_current.htm](http://www.health.vic.gov.au/healthstatus/vphs_current.htm)

**Table 4: Proportion of children who meet the minimum daily recommended guidelines for fruit and vegetable intake (children aged 4 to 12 years)**

	Estimate (%)	Standard error (%)	95% CI Lower limit	95% CI upper limit	relative standard error (%)
<b>Met Fruit Target</b>	<b>89.2</b>	<b>0.6</b>	<b>88.0</b>	<b>90.5</b>	<b>0.7</b>
Did Not Meet	10.5	0.6	9.3	11.7	5.8
Unknown	0.3	0.1	0.1	0.5	40.4
<b>Met Vegetable Target</b>	<b>37.6</b>	<b>1.0</b>	<b>35.7</b>	<b>39.6</b>	<b>2.7</b>
Did Not Meet	62.1	1.0	60.1	64.0	1.6
Unknown	0.3	0.1	0.1	0.5	35.2
<b>Met Both Fruit And Veg Guidelines</b>	<b>34.7</b>	<b>1.0</b>	<b>32.8</b>	<b>36.6</b>	<b>2.8</b>
Vegetable Only	2.9	0.3	2.2	3.6	11.7
Fruit Only	54.6	1.0	52.6	56.6	1.9
Neither	7.7	0.5	6.6	8.7	6.8
Unknown	0.1	0.1	0.0	0.3	57.4

## Outcome: Healthy adult lifestyle

### Exposure to tobacco smoke

The majority of Victorian children live in smoke free households.

In 2009, 74.8% (73.4 -76.2%) of children aged under 13 years were reported to live in a smoke free household (a household where no adult was reported to be a smoker). This compared favourably to the 2006 data, when 68.1% (66.5- 69.6%) of children were reported to live in smoke free households.

In both the 2006 and 2009 surveys, children living in rural Victoria and children listed as dependents on health care cards were more likely to live with a smoker.

Among those children who did not live in smoke free households, 85.8% (83.6 to 88.1%) lived with a smoker (or smokers) who reported always smoking outside the home. In 2006, the proportion of children who lived with smokers who always reported smoking outside was lower, 78.8% (76.3 to 81.2%).

**Note** - the Victorian tobacco reforms launched December 2008, [www.health.vic.gov.au/tobaccoreforms/vtcs.htm](http://www.health.vic.gov.au/tobaccoreforms/vtcs.htm) include a ban on smoking in cars while children are present that will come into effect early in 2010 – we do not collect data on this specific issue.

## Outcome: Parent promotion of child health and development

### Reading to children

In 2009, 48.3% (46.6 - 50.0%) of children aged from 6 months to 12 years were being read to on a daily basis by a family member. This was slightly higher than the 43.1% (41.4 - 44.8%) of children who were read to on a daily basis in 2006.

Not surprisingly, preschool children were most likely to be read to by a family member. 76.4% (73.9 - 79.0%) of children aged 1 to 4 years were read to on a daily basis in 2009.

On average, children aged 5 to 12 years of age read to themselves for pleasure for an estimated 4.5 hours a week.

**Note** – Premier's reading challenge: [www.education.vic.gov.au/prc](http://www.education.vic.gov.au/prc)

## Outcome: Ability to pay for family essentials

### Family circumstances

The 2009 VCHWS coincided with a period of extended drought, the Victorian bush fires, and the global economic crisis. As a result there was some expectation of families experiencing increased financial or emotional strain. However the VCHWS data relating to family finances and emotional health were very similar to that collected in the 2006 survey.

### Finances

Approximately one in twenty (4.9%, 4.2 - 5.5%) children aged 0 to 12 came from a household where the main carer reported that there had been a time in the last 12 months when they had run out of food and had not been able to afford to buy more (ie 'food insecure' households). As in 2006, the most common sources of support reported for families who had run out of food were relatives (42.6%), welfare agencies (20.4%) and friends (14.0%).

- ✓ 21.7% of children from food insecure households had a main carer who reported skipping a meal when food had run out.
- ✓ 12.7% (11.5 - 13.8%) of children were from households where the main carer reported that they would not be able to raise \$2000 in an emergency - a similar proportion to 2006.

As in 2006, single parents were less likely to report financial security. 31.3% (27.0 - 35.7%) of single parents reported that they would not be able to raise \$2000 in an emergency compared to 8.8% (7.7 - 9.8%) of couple parents. Similarly, 16.3% (13.0 - 19.6%) of single parents reported that their household had run out of food in the previous 12 months compared to 3.2% (2.6 - 3.9%) of couple households.

## Outcome: Positive family functioning

### Social and emotional health

Family functioning was assessed using the General Functioning Scale of the McMaster Family Assessment Device (a validated set of questions used to provide a measure of family functioning). 6.9% (6.1 - 7.8%) of Victorian children were from families classified as having unhealthy family functioning. However, the result was not significantly different to 2006, where 8.1% (7.2 - 9.0%) of children were estimated to come from families with unhealthy family functioning.

Within the VCHWS, the child's main carer was invited to complete the Kessler 6, a tool to identify adults at risk of mental health problems. In the 2009 survey, a small minority (3.7%, 3.0 - 4.4%) of children had parents who were classified as being at risk of mental health problems. There was no evidence to suggest that the proportion of parents identified as being at risk of mental health problems was any different to 2006, when 2.9% (2.3 - 3.8%) of children had a main carer at risk of experiencing mental health difficulties.

**Note** - an inappropriate cut off point was used when we first reported the family functioning data in 2006. While there may be higher figures quoted in the 2006 Annual report, these have been corrected in subsequent reports.