## Key messages and summary notes for the Tasmanian data from:

- 1. Participation in Sport and Physical Recreation Survey
- 2. Australian health survey
- Prevalence of diet, physical activity and sedentary behaviours, among Tasmanian secondary school students in 2011

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## 1. Participation in Sport and Physical Recreation Survey

#### Key messages

- Preliminary results of the Australian Bureau of Statistics (ABS) 2011-12 Participation in sport and physical recreation survey were released on 19 December 2012.
- These results indicate that in 2011-12, 69 per cent of Tasmanians aged 15 years and over
  participated in sport and physical recreation at least once in the previous twelve months. This
  is an increase of 4.6 percentage points since the 2009-10 survey with the trend in a positive
  direction.
- In 2011-12, Tasmania had the second highest participation rate of all the states and territories, second only to the Australian Capital Territory, and was above the national rate of 65.0 per cent by 4 percentage points.
- More meaningful, state-level data, particularly around participation in physical activity three times a week or more, will be available in early 2013.

#### Background

The Participation in Sport and Physical Recreation Survey, which is administered by the ABS, has been conducted every four years since 2005-06 as part of the ABS Multipurpose household survey. Due to limitations of the annual Exercise, Recreation and Sport Survey (ERASS), which was administered by the Australian Sports Commission, the Standing Committee on Recreation and Sport agreed to discontinue ERASS from 2011 and transition to using the Participation in Sport and Physical Recreation Survey. As a result, the ABS will now conduct its Participation in Sport and Physical Recreation Survey biennially.

On 19 December 2012, preliminary results from the 2011-12 Participation in Sport and Physical Recreation Survey were released. More meaningful, state-level data, particularly around participation in physical activity three times a week or more, will be available in early 2013.

#### Data

Table 1 presents the proportion of Tasmanians aged 15 years and over who participated in sport and physical recreation at least once in the previous twelve months, for the years 2005-06, 2009-10 and 2011-12. Gender specific data is also included in this table which indicates minimal differences in participation rates between males and females across the time series.

From 2009-10 to 2011-12, there was an increase of 4.6 percentage points of Tasmanians aged 15 years and over who participated in sport and physical recreation at least once in the previous twelve months. Due to the low sample size, the confidence intervals are wide, and no statistically significant difference was detected.

The relative standard error (RSE) for each of the surveys across the time series included in Table 1 indicates that the survey data are sufficiently reliable for most analytical purposes as they are significantly lower than 25 per cent, which is the benchmark utilised by the ABS.

Table 1: Participation in sport and physical recreation at least once in the previous twelve months (%), Tasmania, time series, including relative standard error

	2005-06 (%)	2009-10 (%)	2011-12 (%)
Males	64.6	63.1	69.0
Females	65.7	65.7	69.1
Total	65.2	64.4	69.0
Relative standard error	2.5	2.9	2.1

In 2011-12, Tasmania had the second highest participation rate of all the states and territories, second only to the Australian Capital Territory, and was above the national rate of 65.0 per cent by 4 percentage points.

Table 2: Participation in sport and physical recreation at least once in the previous twelve months, by state and territory, time series

	2005-06	2009-10	2011-12
	(%)	(%)	(%)
Australia	66	64	65
New South Wales	64	63	65
Victoria	65	65	66
Queensland	67	62	62
South Australia	66	62	62
Western Australia	71	65	67
Tasmania	65	64	69
Northern Territory	58	72	66
Australian Capital Territory	80	77	80

While this data provides some indication of participation, regular participation data (defined as three or more times per week for this survey), will provide more meaningful insight of Tasmanians participation in sport and physical recreation activities. Regular participation data is due for release in early 2013.

Table 3 lists the top 10 Australian sport and recreation activities and are provided with a breakdown to state level for 2009-10 and 2011-12. Data for 2005-06 has not been included as definitions of some sport and physical recreation activities changed between surveys and therefore may not be comparable. This list may change if there are activities that are more popular in Tasmania than in other states and territories.

Table 3: Top 10 sport and physical recreation activities

	2009-10		2011-12	
Activity	Tasmanian	Australian	Tasmanian	Australian
	participation rate (%)	participation rate (%)	participation rate (%)	participation rate (%)
Walking for exercise	29.1	21.2	28.5	23.6
Aerobics/fitness/gym	9.1	13.2	15.3	17.1
Jogging/running	4.4	6.8	6.2	7.5
Swimming/diving	6.5	8.5	6.0	7.8
Cycling/bmxing	7.4	5.3	5.8	7.6
Bush walking	5.1	2.7	5.3	2.4
Golf	3.4	4.2	4.5	4.8

Tennis	2.3	4.1	2.8	4.2
Netball	2.5	2.2	2.5	2.5
Soccer (outdoor)	1.2	3.4	2.2	2.7

#### Important considerations

- Physical activity data derived from this survey is not comparable to the National Physical Activity Guidelines (1999), which recommends adults participate in at least 30 minutes of moderate intensity physical activity on at least five days of the week.
- 'Participation rate' is participation in sport and physical recreation at least once in the previous twelve months.
- 'Regular participation' in physical activity in this survey is three times a week or more.
- Types of physical activities excluded from this survey are gardening, housework, walking or cycling for transport, manual labouring and other forms of occupational physical activity. Therefore, it does not represent a holistic perspective of physical activity participation.
- No information was collected regarding the intensity in which the sport or physical recreation was undertaken, such as moderate or vigorous.
- Comparisons cannot be made between the ERASS data and the Participation in Sport and Physical Recreation Survey because of a number of differences in the survey methodology and the volunteer nature of respondents for ERASS, compared to the legislative requirement for respondents for the ABS Participation in Sport and Physical Recreation Survey.
- Results of the 2005-06, 2009-10 and 2011-12 Participation in Sport and Physical Recreation Survey's are generally comparable. There are some differences in the questions that were asked between some surveys, such as types of facilities used for sport and physical recreation activities and definitions of some sport and physical recreation activities (see heading 'Data comparability' in the ABS explanatory notes for this survey).

#### Reference

Australian Bureau of Statistics [ABS]. (2012). Participation in sport and physical recreation, Australia, 2011-12. Cat. No. 4177.0

# 2. Australian health survey - physical activity data

#### Key messages

- The first results of the Australian Health Survey 2011-12 were released on 29 October 2012, which includes some physical activity data at the state level.
- The results indicate that in 2011-12:
  - 30.6 per cent of Tasmanians aged 18 and over met the National Physical Activity Guidelines of 30 minutes of moderate-intensity physical activity on most, preferably all days of the week. This is an increase of 2.7 percentage points from the 2007-08 survey whereby 27.9 per cent of Tasmanians aged 18 and over met the National Physical Activity Guidelines.
  - Participation increased across all age groups with the exception of moderate levels of physical activity amongst 25-34 year olds.
  - The proportion of people undertaking a high level of activity saw the greatest increase in participation from 22 400 people in 2007-08 to 34 700 people in 2011-12, representing an increase of 12 300 people.
- A key measure of *Tasmania's plan for physical activity 2011-2021* is to increase the rates of participation in physical activity by different age groups by 10 percentage points by 2021.
   While the results from the 2011-12 survey are encouraging for Tasmanians aged 18 years and over (as physical activity levels have at least not worsened), none of the changes are statistically significant from the 2007-08 results.

#### Background

The 2011-12 Australian Health Survey (AHS) is the largest and most comprehensive health survey ever conducted in Australia. It is administered by the Australian Bureau of Statistics (ABS) and combines the existing ABS National Health Survey (NHS) and the National Aboriginal and Torres Strait Islander Health Survey together with two new elements - a National Nutrition and Physical Activity Survey and a National Health Measures Survey.

The first results of the AHS were released on 29 October 2012, which focuses on long-term health conditions and risk factors including physical activity. Further results will be released progressively throughout 2013-14, including comprehensive information on physical activity and sedentary behaviour, which are scheduled for release in June 2013. Aboriginal and Torres Strait Islander physical activity results are scheduled for release in June 2014.

#### Data

On the basis of the National Physical Activity Guidelines, which recommends at least 30 minutes of moderate-intensity physical activity on most, preferably all, days of the week by adults, the 2011-12 survey categorised respondents physical activity levels and intensity as sedentary, low, moderate and high, based on the recall of exercise they undertook in the last week.

Table 1 presents a time series of the level of exercise undertaken for fitness, recreation or sport amongst Tasmanians aged 18 and over, from 2001 to 2011-12. The level of physical activity categories in this table is grouped in order to readily identify the proportion of Tasmanian adults who achieve the National Physical Activity Guidelines.

The type of exercise included in this data conceptually excludes physical activity undertaken for reasons other than fitness, recreation or sport, for example household duties, gardening and labouring. As a result, the data should not be interpreted as necessarily indicative of overall activity levels of persons, or of their fitness. Walking for transport was included, however it has been determined by the ABS that the data on this topic specifically is of poor quality and should be used with caution.

Table 1: Level of exercise undertaken for fitness, recreation or sport in the last week (%), 18 years and over, Tasmania, time series

Level of physical activity	2001 (%)	2004-05 (%)	2007-08 (%)	2011-12 (%)
Sedentary/low	71.6	70.4	72.1	69.4
Moderate/high	28.4	29.6	27.9	30.6
Total	100	100	100	100

From 2007-08 to 2011-12, the proportion of Tasmanians who are sedentary or have low levels of participation in physical activity decreased from 72.1 per cent to 69.4 per cent. While this result is encouraging (as physical activity levels have at least not worsened), the decrease is not statistically significant.

Further findings from the data currently available for Tasmanians 18 years and over indicate that from 2007-08 to 2011-12:

- The number of people undertaking moderate levels of exercise has increased from 79 500 to 81 800. This represents an increase of 2 300 people.
- The number of people undertaking a high level of activity has increased from 22 400 to 34 700. This represents an increase of 12,300 people.
- Participation increased across all age groups with the exception of moderate levels of physical activity amongst 25-34 year olds.

Considering physical activity levels for Tasmanians aged 15 years and over, from 2007-08 to 2011-12, the following observations are made:

- Sedentary decreased from 35.2 per cent to 34.5 per cent
- Low level decreased from 36.0 per cent to 33.7 per cent
- Moderate increased from 22.1 per cent to 22.2 per cent
- High level increased from 6.8 per cent to 9.6 per cent

It is noted however that none of the changes from 2007-08 to 2011-12 are statistically significant.

#### Important considerations

- Types of exercise covered in the AHS were walking, moderate and vigorous exercise for sport, recreation or fitness. Moderate exercise consists of activity undertaken for fitness, recreation or sport that causes a moderate increase in heart rate or breathing, while vigorous exercise causes a large increase in a person's heart rate or breathing. Level of exercise is determined based on the frequency, intensity and duration of exercise.
- The majority of data on exercise for fitness, recreation and sport were collected in the 2011-12 NHS with the same methodology and questions used in the 2007-08 survey, and therefore most results are considered directly comparable. It should be noted however that the 2011-12 NHS collected information for exercise in the last week, while the 2007-08 NHS collected this information for the last week and the two weeks prior to the interview. Care should be taken to ensure the correct time frames are used in any comparison of exercise levels between the two surveys.

 More detailed information on exercise based on eight days of pedometer readings and more detailed physical activity questions will be available upon release of results from the National Nutrition and Physical Activity Survey in 2013.

## Reference

Australian Bureau of Statistics [ABS]. (2012). Australian Health Survey: First Results, 2011-12. Cat. No. 4364.0

# 3. Prevalence of diet, physical activity and sedentary behaviours, among Tasmanian secondary school students in 2011

#### Background

The Australian Secondary Students' Alcohol and Drug Survey (ASSAD) was first conducted in 1984 and since then has been repeated at three-yearly intervals. In 2002, questions relating to diet and physical activity were introduced in the survey, with further physical activity questions added in 2005, and repeated in 2008. In 2011 several additional questions relating to Sunsmart behaviours, diet, physical activity, sedentary behaviour and social support were included.

## Key physical activity findings

Between 2005 and 2011:

- The proportion of 12 to 15 year old students engaging in vigorous or moderate physical
  activity on each of seven days in the past week significantly increased from 12 per cent to 18
  per cent. For 16 to 17 year old students, there were no significant changes in this level of physical
  activity for the same period.
- The proportion of 12 to 15 year old students watching television/videos/DVDs for three hours or more on an average school day between significantly decreased from 37 per cent to 26 per cent. For 16 to 17 year olds, there was a slight decrease from 37 per cent to 30 per cent.
- The percentage of 12 to 15 year old students using the internet/playing computer games for three or more hours on an average school day increased from 20 per cent 28 per cent.
   Among students aged 16 to 17, the percentage increased significantly from 19 per cent to 35 per cent.

#### Physical activity conclusions from p. 70-72 of the 2011 report

Results from the 2011 survey show that only a small percentage of secondary school students in Tasmania are meeting the recommended daily minimum levels of at least one hour of moderate to vigorous physical activity (Department of Health and Ageing 2004). Also, a significant percentage of Tasmanian students are exceeding recommended levels for sedentary behaviours.

Around 50% of students engaged in at least 30 minutes of moderate or vigorous activity between one and three times in the past week. However, 13% of students said they did no moderate physical activity for at least 30 minutes in the past week, and 11% of students said they did no vigorous physical activity for at least 30 minutes in the past week.

Findings were similar concerning levels of vigorous or moderate physical activity lasting for at least 60 minutes in the past week. Overall, only 17% of students were exercising at this level on each day of the week. Across both age groups, males were more likely than females to report the recommended minimum levels of physical activity in the past week. The percentage of students exercising at this daily level in 2011 increased for 12-to 15-year-old males and females compared with 2005, while remaining the same for the older group.

When asked to indicate the type of physical activity engaged in, 36% of students said that they played sport for one hour or less on an average school day when they are not at school. Sixty-four percent of students said that they went for a walk for one hour or less on these days, while 44% said they went running for one hour or less on these days.

Students were mostly encouraged to participate in physical activity by family, friends, their school, coaches or teachers (22%), followed by television ads/programs (19%) and social networking sites (13%). Students were mostly discouraged by the weather (46%), transport/means of getting there (19%) and the cost of the activity (14%). Parents and friends were the greatest sources influencing students to participate in physical activity. Students who have someone influencing them to participate

in physical activity (41%) were more likely than students with no-one influencing them (33%) to have met the physical activity guidelines on five or more days of the past week. When asked why they participated in physical activity, 81% of students said they participated 'to have fun' and 79% said they participated 'to keep healthy'.

Students who consumed snacks five or more times in the past week were less likely to engage in the recommended level of physical activity on 3-4 days of the past week, compared to students who ate snacks 0-2 times in the past week.

A majority of students from both age groups reported that they did homework for less than two hours on an average school day. Around 27% of 12- to 17-year-olds exceeded the recommendations for use of electronic media by watching television for three or more hours per day. Approximately 30% of students exceeded these guidelines by using the Internet or playing computer games for three or more hours per day. Twenty-eight percent of students exceeded these guidelines by using chat or social networking sites for three or more hours on an average school day while not at school.

There was no significant change in the proportion of students watching three or more hours of television per night, between 2008 and 2011. However, the rate in 2011 was significantly lower than that in 2005, for both the younger and older group. Among the 12- to 15-year-old students, there was no significant change in the proportion of students using the Internet/playing computer games for three hours or more per day, between 2008 and 2011. However, among the older group, significantly more students, particularly older males, were using the Internet for three hours or more on an average day, than during 2008.

The results indicate that there was no overall change between the survey years of 2005 and 2011, in the proportion of 16- to 17-year-old students engaging in three or more hours of combined sedentary behaviour on an average school day. Among 12- to 15-year-olds, the proportion of students engaging in three or more hours of combined sedentary behaviour on an average school day has decreased since 2008 for females, but has increased in since 2008 for males.

Students were also asked to report the amount of time spent engaging in sedentary activities on an average day of the weekend. Again, a majority of students from both age groups reported that they did homework for less than two hours on an average day of the weekend. Around 41% of students exceeded the recommended guidelines for use of electronic media by watching television/videos/DVDs for three or more hours on an average day of the weekend. Approximately 38% of students reported using the Internet, and 36% of students reported using chat/social networking sites, for three or more hours on an average day of the weekend.

Students who ate more fast food, more snacks and sugar-rich drinks were more likely to exceed these guidelines for use of TV, internet/computer games or chat/social networking sites. Students watching more television or using the Internet beyond the recommended level were more likely to report no days of moderate or vigorous physical activity of at least 60 minutes duration in the last week.

Research suggests that major barriers to physical activity among adolescents include time constraints due to homework and part-time jobs, as well as social factors, including peer pressure, and bullying or teasing 12. The results from the 2011 ASSAD survey would not appear to reflect the findings concerning the influence of homework, as Tasmanian students report spending far less time on homework than they do watching television or using computers for recreational use. Further, the amount of time spent doing homework on an average school day or an average day of the weekend was not related to the number of days students engaged in at least 60 minutes of moderate or vigorous physical activity.

**Reference** Skaczkowski, G., Bariola, E. and Balint, A. (2013). Prevalence of diet, physical activity and sedentary behaviours, among Tasmanian secondary school students in 2011 and trends over time. Centre for Behavioural Research in Cancer: Cancer Council Victoria