



Youth2000 Survey Series

# The health and wellbeing of secondary school students in Christchurch

Findings from the Youth'12 national youth  
health and wellbeing survey

**uniservices**

Adolescent Health Research Group



**Title: The health and wellbeing of secondary school students in Christchurch: Findings from the Youth'12 national youth health and wellbeing survey.**

**ISBN 978-0-473-26439-0**

**To be referenced as:**

Fleming, T., Clark, T.C., Denny, S., Robinson, E., Rossen, F., Bullen, P., Crengle, S., Fortune, S., Peiris-John, R., Teevale, T., Utter, J. & The Adolescent Health Research Group (2013). *The health and wellbeing of secondary school students in Christchurch: Findings from the Youth'12 national youth health and wellbeing survey*. Auckland, New Zealand: The University of Auckland.

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### **Acknowledgements**

A big thank you to:

The students and staff who participated in the survey. Without their patience and help the Youth'12 survey would not have been possible.

Dr Sue Bagshaw (Director) Dr Ria Schroder (Research Manager) from The Collaborative for Research and Training in Youth Health and Development Trust, Christchurch ([www.collaborative.org.nz](http://www.collaborative.org.nz)). They provided invaluable advice.

The Youth'12 project manager, Sarah Masson, and administrator, Toni Jardine.

The research team members who implemented the survey in participating schools. Their names are listed under 'Our Team' at [www.youthresearch.auckland.ac.nz](http://www.youthresearch.auckland.ac.nz)

The Youth'12 survey was funded by the Ministries of Youth Development, Social Development, Health, Education and Justice, the Department of Labour, the Families Commission and the Health Promotion Agency (formerly ALAC).

**This report was funded by the Ministry of Social Development and the Ministry of Health.**

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Adolescent Health  
Research Group (2013)



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# Executive Summary

In 2010 and 2011, Christchurch was struck by large earthquakes. One hundred and eighty-five people were killed, many people were injured and property damage was extensive. Since that time, Christchurch residents have experienced thousands of earthquakes and aftershocks. There have been major disruptions to families' lives, homes, schools and neighbourhoods; to health and social services; and to transport and recreational infrastructures.

The Youth'12 health and wellbeing survey was carried out with 8,500 secondary school students from 91 schools throughout New Zealand during terms 1 to 3 of 2012. Participants included 558 students living in Greater Christchurch (Christchurch City, Waimakariri and Selwyn districts; hereafter 'Christchurch').

This report summarises the results from Youth'12 participants living in Christchurch at the time of the survey.

Overall, most Christchurch participants reported positive family, school and community experiences. Generally, they reported rates of health issues similar to those of students in other parts of New Zealand. However, there was one large exception: many Christchurch students reported significant symptoms of stress (such as nightmares, avoiding situations, being constantly watchful, or feeling numb or detached) because of being affected by earthquakes.

There were also other areas where Christchurch students reported higher needs. Most of these differences were statistically significant at a probability level ( $p$  value) between .01 to .05 (meaning there is a 1% to 5% chance that each reported difference is due to chance, rather than being a true difference). With that caveat in mind, compared to other students, when demographic differences (age, sex, neighbourhood deprivation and ethnicity) were taken into account, Christchurch participants reported:

- More challenges in terms of health: Christchurch students were more likely to report having an on-going health problem. A significant proportion reported having difficulties accessing health care when they needed it. Christchurch students also reported slightly higher rates of regular cigarette use than others.
- More challenges with emotional health: Christchurch students reported slightly lower rates of life satisfaction and higher rates of worrying a lot, compared to students in other parts of New Zealand.
- More challenging school experiences: Christchurch students were less likely to think they will go on to further training after completing school; less likely to feel part of their school; and less likely to report that adults at their school cared about them a lot.
- Less involvement in some positive daily activities: Christchurch students reported lower rates of participation (for an hour or more each day) in vigorous physical activity, or in music, arts, dance or drama.
- On a positive note, Christchurch participants in Youth'12 were more likely to have attended only one school, and, among sexually active students, those who lived in Christchurch reported higher rates of condom use than those in the rest of New Zealand.

These findings suggest that Christchurch students suffer from elevated rates of post-earthquake stress and face increased challenges across a broad range of areas, compared to other New Zealand students from similar backgrounds. However, it is reassuring that despite significant and distressing effects of the earthquakes, the majority of Christchurch youth remain resilient.

Like New Zealand secondary school students overall, the majority of Christchurch students report positive family relationships, positive school and community experiences, good health and limited risk taking. That said, there is no room for complacency; over 50% of New Zealand secondary school students report that they do not get enough time with their mother or their father; around 7% report that they do not have at least one parent who cares about them a lot; many are exposed to dangerous driving or to violence and more than 15% of New Zealand secondary school students have seriously thought of suicide in the last year. There is both cause for optimism and a need for urgent attention to support the wellbeing of young New Zealanders.

There are strengths and limitations in using Youth'12 data to understand the needs of young people in Christchurch. Almost all Christchurch participants attended just six schools, these schools were in both earthquake affected and less affected areas, but this is an important consideration. Further, the Youth'12 survey is of students at school on the day of the survey. Those who are not at school typically face higher rates of health and social difficulties. The strengths of using data from the Youth2000 Survey Series are that the

methods have been extensively piloted and tested, national norms and comparisons are available, and this is the largest dataset regarding the wellbeing of students in New Zealand.

We hope that the data presented in this report can be considered alongside other information to support the wellbeing and positive development of young people in Christchurch.

## Key points

- Christchurch students suffer from elevated rates of post-earthquake stress.
- Christchurch students report higher rates of some health and emotional health difficulties, less positive experiences in some aspects of schooling and less involvement in some positive daily activities, compared to other New Zealand students from similar backgrounds.
- Like New Zealand secondary school students overall, the majority of Christchurch students report generally positive family relationships, positive school and community experiences, good health and limited risk taking. There are also many negative issues or health problems. For example over 50% of students in Christchurch and elsewhere report that they do not get enough time with their mother or father; around 7% report that they do not have at least one parent who cares about them a lot; many are exposed to dangerous driving or to violence and more than 15% have seriously thought of suicide in the last year.
- There is both cause for optimism and a need for action to support the wellbeing of young people in Christchurch.

# Introduction

This report has been produced by the Adolescent Health Research Group (AHRG), which carries out the Youth2000 Survey Series. It provides an overview of important health and wellbeing issues from *Youth'12: The national health and wellbeing survey of New Zealand secondary school students* (Youth'12 survey) for participants who live in Greater Christchurch (Christchurch City and Selwyn and Waimakariri districts). Other Youth'12 reports are available on our website ([www.youthresearch.auckland.ac.nz](http://www.youthresearch.auckland.ac.nz)) including the *Youth'12 Overview* (Clark et al., 2013a) and *Youth'12 Prevalence Tables* report (Clark et al., 2013b), which provide further details on methods and national findings.

## The Adolescent Health Research Group (AHRG)

The Adolescent Health Research Group (AHRG) is a multidisciplinary team of researchers that is supported by youth, cultural, and stakeholder advisors. The purpose of the AHRG is to promote the healthy development and wellbeing of New Zealand youth through scientific research that delivers high quality, useable data. The group was first established in 1997. Over the years the membership of the AHRG has changed, but the vision and commitment remains. The AHRG works closely with many other researchers and groups. We welcome applications from others to use the youth2000 survey series data. A protocol for potential collaborations can be found on our website.

## Previous Youth2000 Surveys

The AHRG has carried out comprehensive national surveys of secondary school students in 2001 (Adolescent Health Research Group, 2003), 2007 (Adolescent Health Research Group, 2008) and now in 2012.

The group has also surveyed students in alternative education in 2000 (Adolescent Health Research Group, 2002) and 2009 (Clark et al., 2010), and surveyed students in teen parent units in 2007 (Johnson & Denny, 2007). In 2007 and 2012, our surveys of secondary school students were supplemented by surveys with school staff members about school characteristics. Together, these surveys make up the youth2000 survey series.

The results of the youth2000 survey series have been presented extensively, and are listed on our website [www.youthresearch.auckland.ac.nz](http://www.youthresearch.auckland.ac.nz)

## How we did the Youth'12 Survey

The Youth2000 Surveys are designed to provide information about the health and wellbeing of New Zealand secondary school students. In 2012, we randomly selected 125 composite and secondary schools in New Zealand which met the inclusion criteria<sup>1</sup> and invited them to participate in the survey. For schools which had a roll of more than 150 Year 9–15 students, we randomly selected 20% of this roll and invited these students to take part in the survey. For participating schools with fewer than 150 Year 9–15 students, 30 students were randomly selected and invited to take part. For more detailed information on the school selection process, please refer to the Youth'12 Prevalence Tables report (Clark et al., 2013b).

Ninety-one (73%) of the 125 invited schools took part in the survey. The majority of participating schools were state funded, co-educational and large schools (at least 350 Year 9–15 students). Thirty-four schools chose not to participate; 25 of these were from main urban areas, 19 were state (not integrated) schools, 19 were co-educational, and 24 were large schools.

In total, 12,503 students were invited to take part in the survey and 8,500 participated (68%). This represents 3% of the 2012 New Zealand secondary school roll. The most common reasons why students did not participate were not being at school on the day of the survey, not wanting to take part, and being unavailable during the time the survey was conducted.

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1. New Zealand registered composite and secondary schools with 50 or more students in Year 9 or higher.

## Ethical issues

The Youth'12 survey built on the procedures used in the previous Youth2000 surveys. Like the previous surveys, Youth'12 was completely voluntary (schools and students did not have to participate and students could choose to not answer questions or to leave at any time) and anonymous (schools which participated are not named and no student identification details were collected). The survey had a 'branching' design, so that students were not asked detailed questions about things that did not apply to them.

The AHRG and a wide range of advisors reviewed the survey content and methods. Ethical approval was obtained from the University of Auckland Human Participants Ethics Committee (ref 2011/206).

School principals gave consent for their own school to take part. A few weeks before the survey, information was sent to each school for distribution to parents and students. Parents were able to have their child excluded from the survey. On the day of the survey, an explanation was given to selected students and each student personally consented to participate.

The survey was available in English and te reo Māori.

## Survey delivery and content

The survey was delivered using handheld internet tablets. The survey questions were displayed on the tablet and were also available by voiceover via headphones. Students answered the questions by touching the appropriate checkbox on the screen.

The Youth'12 survey covered important areas of health and wellbeing for young people in New Zealand, as well as risk and protective factors. The questionnaire contained a total of 608 questions, but students answered fewer than this number of questions due to the branching design of the survey. The complete list of survey questions and full wording for each question is available on our website.

We also measured each student's height and weight. These measurements were taken in private, part way through the survey. At this time, students were asked to provide their usual home address. We used this to ascertain their census meshblock (grouping of approximately 100 households) so that neighbourhood characteristics such as deprivation levels and urban or rural setting could be ascertained. After the meshblock was identified, the student's address was deleted.

## NZ Deprivation Index

In this report, students are grouped into high, medium, or low deprivation neighbourhoods, based on the New Zealand Deprivation Index for the meshblock (small neighbourhood area) in which they live. The New Zealand Deprivation Index is calculated from a range of variables (including household income, employment, access to a telephone and car, single parent families, qualifications, overcrowding and home ownership) from the 2006 census data for each meshblock. It is important to remember that this is an indicator of neighbourhood deprivation, rather than a measure of personal or family hardship; some families will face a level of hardship or deprivation quite different to the average of their meshblock.



# Youth'12 and Christchurch Students

## Defining 'Christchurch'

For the purposes of this report, 'Christchurch' students are those who live in Greater Christchurch. This includes students living in any of the following territorial authorities: Christchurch City, Selwyn District or Waimakariri District. For the sake of readability, Greater Christchurch is referred to as Christchurch.

## Christchurch response rates and sampling

In total, 558 students from Christchurch participated in the survey. The demographic profile of these students is shown on page 11. In brief, the Christchurch students were more evenly split between males and females than the rest of the sample, and were younger, less ethnically diverse and from wealthier (less socioeconomically deprived) neighbourhoods than students elsewhere in New Zealand.

Sixty percent of the Christchurch schools who were invited to participate did so, and 65% of the Christchurch students invited to participate did so. In comparison, nationally 73% of invited schools and 68% of invited students participated.

Christchurch students attended seven different schools, with almost all attending six schools. School and student participation is anonymous so participating schools are not named. The neighbourhoods that students lived in, and the percentages of students reporting that they had been personally affected by an earthquake, suggest that the survey includes a good range of students in areas that had been highly affected and less highly affected by the 2010 and 2011 earthquakes. However, school climate does have a modest effect on student wellbeing (Denny et al., 2011); hence if these six schools were very different to others in Christchurch this would affect the findings.

These points mean that when reading this report, it is important to consider confidence intervals and p values (explained overleaf), rather than considering reported percentages alone.

# Interpreting Findings

The Youth2000 Survey Series is the largest dataset on the health and wellbeing of young people in New Zealand and is of considerable importance for the purposes of planning and programme development for communities, schools and policymakers. It is important to remember, however, that this is a cross-sectional survey and does not include young people who are absent from school on the day, have left school, or are in alternative education settings. Hence, findings are likely to represent a slightly positive view of the health of students in schools.

Sample sizes of students from specific regions may be small for rare behaviours. This means that small differences in numbers of students responding to a question a particular way can lead to large differences in the percentage reported. To reduce the chance of erroneous conclusions based on small numbers, data are presented in this report for important youth health issues and are not reported for experiences affecting fewer than 25 participants.

## Reading tables in this report

In this report we present data the following way:

- n – this refers to the number of students who give this answer (for example the table on page 12 shows that 508 Christchurch students reported that at least one parent, or person who acts as a parent, cares about them a lot)
- Percent (%) – this is the percentage of students in that group who gave that answer to the particular question (for example 92% of Christchurch students who answered the question about parental caring reported that at least one parent, or person who acts as a parent, cares about them a lot)
- 95% confidence intervals (95% CI) – this is the range within which we can be 95% sure that the true percentage for that response falls (for example there is a 95% chance that the true percentage of Christchurch students who consider that at least one parent, or person who acts as a parent, cares about them a lot falls between 87.9% and 96.2%)
- p – this refers to the probability that the percentage reported by the Christchurch students is different from the percentage reported by students in the rest of New Zealand, once demographic differences between the two samples are taken into account (using logistic regression techniques). The demographic differences taken into account are student's sex, age, neighbourhood deprivation and ethnic group. The lower the p value, the more likely there are real differences between the two groups. If p is smaller than .001, there is less than 1 in 1,000 chance that that difference is not real; if p is .05, there is a 5% chance that that difference is not real.

# The Results

## The Participants

In the survey sample, there were 558 students who resided in Greater Christchurch (hereafter 'Christchurch'). Of these, 23 lived in the Selwyn district, 40 in the Waimakariri district and the remainder lived in Christchurch City. Almost all attended six different high schools.

Christchurch survey participants were more evenly split between males and females than the rest of the sample, were younger, less ethnically diverse and from wealthier (less socioeconomically deprived) neighbourhoods than non-Christchurch students.

		Christchurch		Rest of New Zealand	
		n	% 95% CI	n	% 95% CI
<b>Total</b>		558		7942	
<b>Sex</b>	Female	287	51.4 (15.8 – 87)	4336	54.5 (47.5 – 61.4)
	Male	271	48.5 (12.9 – 84.1)	3603	45.4 (38.5 – 52.4)
<b>Age</b>	13 or under	143	25.6 (20.3 – 30.9)	1695	21.3 (19.7 – 22.9)
	14	137	24.5 (21.5 – 27.5)	1759	22.1 (20.8 – 23.4)
	15	125	22.4 (19.3 – 25.4)	1630	20.5 (19.7 – 21.4)
	16	94	16.8 (14.6 – 19)	1484	18.7 (17.5 – 19.9)
	17 or over	59	10.5 (6.9 – 14.1)	1363	17.2 (15.8 – 18.5)
<b>Ethnicity<sup>1</sup></b>	Māori	77	13.8 (8.9 – 18.6)	1624	20.4 (17.2 – 23.6)
	Pacific	18	3.2 (1.7 – 4.7)	1183	15.0 (8.4 – 21.6)
	Asian	49	8.7 (5.8 – 11.7)	1002	12.6 (8.6–16.7)
	European	386	69.1 (63.9 – 74.2)	3638	45.7 (39.1 – 52.3)
	Other	28	5.0 (3.8 – 6.2)	483	6.0 (5.2 – 6.9)
<b>Neighbourhood deprivation<sup>2</sup></b>	Low	252	45.1 (30 – 60.1)	2588	32.8 (25.3 – 40.3)
	Medium	220	39.4 (30.2 – 48.5)	2781	35.5 (31.8–39.2)
	High	86	15.4 (8.1 – 22.7)	2466	31.6 (26.3–36.8)

Notes:

1. Using the New Zealand Census prioritisation method.

2. Using New Zealand 2006 Census meshblock data (Salmond, Crampton, & Atkinson, 2007).

## Home and Families

Caring, supportive and safe families are critically important for young people. Overall, young people who report caring and supportive family relationships are happier, healthier and get on better in life (McLaren, 2002; Resnick, Harris, & Blum, 1993).

### Family relationships

The majority of Youth'12 participants in Christchurch and in the rest of New Zealand report positive family relationships. However, most participants say they do not usually get enough time with their mother or father (or person who acts as their mother or father) and a substantial minority report that they do not have at least one parent who cares about them a lot.

There were no significant differences between Christchurch participants and students in the rest of New Zealand on the family relationship variables reported.

### Family circumstances

A significant minority of New Zealand students report that their parents often or always worry about not having enough money for food and that they have moved home at least twice in the last 12 months. There were no significant differences between Christchurch and other participants in these variables.

	Christchurch		Rest of New Zealand		
	n	% 95% CI	n	% 95% CI	P
<b>Family relationships</b>					
At least one parent (or person who acts as a parent) cares about them a lot	508	92.0 (87.9 – 96.2)	7268	93.1 (92.4 – 93.8)	0.275
Feeling close to at least one parent (or person who acts as a parent)	430	77.3 (68.2 – 86.5)	6157	77.9 (76.6 – 79.2)	0.648
Family ate meals together five or more times in the last 7 days	350	63.2 (59.6 – 66.7)	4867	62.3 (61.0 – 63.6)	0.345
Family members get along well or very well	447	80.1 (77.3 – 82.9)	6419	81.0 (79.8 – 82.2)	0.483
Student has fun with their family often or a lot	371	66.5 (58.7 – 74.3)	5505	69.4 (67.9 – 71.0)	0.471
Usually getting enough time with their mother (or person who acts as mother)	265	48.3 (41.6 – 55.0)	3797	48.9 (47.3 – 50.5)	0.233
Usually getting enough time with their father (or person who acts as father)	194	37.3 (30.3 – 44.3)	2759	37.3 (35.7 – 39.0)	0.148
<b>Family circumstances</b>					
Parents often or always worry about not having enough money for food	52	10.0 (3.5 – 16.6)	868	11.6 (9.9 – 13.3)	0.627
Moved home 2 or more times in the last 12 months	44	7.9 (4.6 – 11.1)	579	7.3 (6.4 – 8.1)	0.240

## School

Schools are critical for the health and wellbeing of young people. Effective learning environments, adults having high expectations of students, adults providing appropriate caring relationships for students, safe school environments and opportunities for meaningful participation in school life are all important predictors of good outcomes for teenagers (Bernat & Resnick, 2006; Resnick, 2000).

Some school experiences change with age; for example, older students are less likely to report being bullied and are more likely to have attended several schools, to feel safe at school and to feel that teachers at school care about them a lot (Clark et al., 2013b). Given that the Christchurch sample included a higher proportion of younger participants than the national sample did, p values, rather than percentages alone, should be considered when comparing the two groups (see 'Reading tables in this report' for an explanation of terms).

Most Youth'12 participants in Christchurch and in the rest of New Zealand reported positive school experiences.

Compared to Youth'12 participants in the rest of New Zealand, Christchurch participants were more likely to have attended only one high school. However, they were less likely to report that they expected to go on to further education or training after finishing school. They were also less likely to report that they felt part of school or that adults at school cared a lot, although this was at the lower level of significance ( $p \leq .05$ ).

	Christchurch		Rest of New Zealand		
	n	% 95% CI	n	% 95% CI	p
Attended only one high school since started Year 9	488	87.6 (86.4 – 88.8)	6454	81.6 (79.4 – 83.8)	0.001‡
Like school (a lot or a bit) or think it's OK	494	88.5 (86.3 – 90.7)	7159	90.3 (89.1 – 91.6)	0.336
Feel part of their school	468	83.9 (81.2 – 86.5)	6933	87.6 (86.3 – 88.8)	0.022†
Adults at school care a lot	128	23.0 (20.8 – 25.2)	2183	27.5 (25.7 – 29.3)	0.018†
Feel safe at school (all or most of the time)	460	82.6 (75.4 – 89.7)	6903	87.2 (85.6 – 88.7)	0.127
People at school expect student to do well	506	91.0 (89.7 – 93.4)	7218	91.3 (90.5 – 92.1)	0.558
Student plans to complete school (i.e., finish Year 13)	477	85.8 (79.9 – 91.6)	6902	87.5 (86.1 – 88.8)	0.734
Expect to go on to further education or training after finishing school	331	59.4 (53.7 – 65.1)	5095	64.6 (62.3 – 66.9)	0.001‡
Bullied at school weekly or more often	51	9.2 (4.8 – 13.6)	475	6.0 (5.3 – 6.7)	0.281

†  $p \leq .05$

‡  $p \leq .001$

## Exercise and Activities

A range of physical activities and interests are important for physical health and for supporting the development of healthy, confident and skilled young people (Breinbauer & Maddaleno 2005).

Christchurch students and those from elsewhere were similar in most aspects of exercise and activity measured. However, compared to students with similar demographics in the rest of New Zealand (at  $p \leq .05$ ), Christchurch students were less likely to participate in vigorous physical activity or in music, arts, drama or dance for an hour or more each day.

	Christchurch		Rest of New Zealand		
	n	% 95% CI	n	% 95% CI	P
More than 20 minutes of vigorous physical activity on 3 or more occasions in the last 7 days	336	61.3 (50.2 – 72.3)	4774	62.0 (59.9 – 64.0)	0.252
60 minutes or more of physical activity daily	41	7.5 (4.2 – 10.8)	745	9.7 (8.8 – 10.6)	0.041†
Participates in a sports team or club outside of school time	338	61.6 (49.8 – 73.5)	4499	58.4 (55.7 – 61.2)	0.732
Play computer games or other electronic games for an hour or more each day	108	20.1 (10.3 – 29.8)	1469	19.5 (17.3 – 21.7)	0.117
Watch TV for an hour or more each day	147	27.3 (19.3 – 35.3)	2130	28.2 (25.9 – 30.5)	0.459
Do music, arts, dance or drama for an hour or more each day	131	24.3 (18.3 – 30.4)	2368	31.4 (29.0 – 33.7)	0.014†

†  $p \leq .05$

## Overall Health and Access to Health Care

Adolescence is generally a stage of life that is associated with good health and the majority of adolescent health problems are preventable (Viner et al., 2012).

Compared to students in the rest of New Zealand (at  $p \leq .05$ ), Christchurch Youth'12 participants were more likely to report having an ongoing health problem or condition. They were also more likely to have seen a health care provider in the last year. At the same time, they were less likely to have been able to access a health care provider when they needed one compared to other students with the same demographic profile. This suggests that students in Christchurch have higher health needs than students elsewhere of the same demographic profile.

	Christchurch		Rest of New Zealand		
	n	% 95% CI	n	% 95% CI	p
Health is good, very good or excellent	512	92.1 (90.7 – 93.4)	7196	91.1 (90.2 – 92.1)	0.729
Ongoing health problem or condition <sup>1</sup>	131	23.6 (20.9 – 26.3)	1553	20.0 (18.5 – 20.8)	0.018†
Ongoing disability <sup>2</sup>	53	9.5 (8.3 – 10.8)	709	9.0 (8.2 – 9.7)	0.965
Received health care in the last 12 months	467	84.0 (80.7 – 87.2)	6150	78.7 (77.1 – 80.3)	0.039†
Have been to a family doctor, medical centre or GP clinic in last 12 months	442	79.3 (74.9 – 83.3)	5795	73.9 (72.2 – 75.5)	0.074
Seen someone for an emotional worry in last 12 months	98	17.8 (16.4 – 19.2)	1444	18.4 (17.0 – 19.9)	0.379
Unable to access health care when needed in the last 12 months	103	18.5 (15.6 – 21.4)	1463	18.6 (17.5 – 19.7)	0.042†

†  $p \leq .05$

Notes:

1. A health problem or condition lasting 6 months or more (e.g. asthma, diabetes, depression).
2. A disability lasting 6 months or more (e.g. impaired hearing, in a wheelchair, learning difficulties).

## Emotional Wellbeing

Emotional wellbeing is an important component of health. Students who feel happy and able to cope with problems generally have a greater capacity to do well at school, to enjoy life and to contribute to their families and communities. Emotional distress and suicidal behaviours are often under-recognised in adolescents and cause considerable harm; and yet these are issues that can be addressed (Merry & Stasiak, 2011).

Compared to students in other parts of New Zealand (at  $p \leq .05$ ), Christchurch students reported lower rates of life satisfaction and higher rates of worrying a lot (at  $p \leq .05$ ).

The percentages of Christchurch students reporting overall difficulties, feeling down, self-harm or having serious thoughts of suicide were higher than the percentages for students elsewhere, however these differences were not statistically significant.

Christchurch students reported much higher rates of being 'personally affected by an earthquake' than did students in other parts of New Zealand (43% compared to 4.3%).<sup>2</sup>

Students who reported that they were personally affected by an earthquake were asked if they had a range of negative consequences within the last month due to that experience. Significant proportions of Christchurch students did report serious symptoms as shown in the second table (follows).

	Christchurch		Rest of New Zealand		
	n	% 95% CI	n	% 95% CI	P
Satisfied with life (it's OK, very happy or satisfied)	496	89.2 (87.4 - 91.0)	7227	92.0 (91.2 - 92.8)	0.007†
Good emotional wellbeing based on WHO-5 Wellbeing Scale	422	76.5 (72.4 - 80.5)	5892	76.2 (74.7 - 77.6)	0.811
Overall, have difficulties in emotions, concentration, behaviour or ability to get on with others	290	52.3 (47.8 - 56.8)	3820	48.9 (47.2 - 50.6)	0.165
Worry a lot (certainly true about me)	130	23.8 (19.8 - 27.8)	1673	21.9 (20.3 - 23.6)	0.017†
Clinically significant depressive symptoms 1	74	13.7 (10.9 - 16.4)	971	12.7 (11.5 - 13.9)	0.423
Feeling down or depressed most of the day for at least 2 weeks in a row during the last 12 months.	183	33.0 (28.3 - 37.6)	2420	31.0 (29.5 - 32.5)	0.170
Deliberate self-harm	142	25.6 (20.3 - 30.9)	1873	23.9 (22.6 - 25.3)	0.233
Serious thoughts of suicide	95	17.3 (11.4 - 23.1)	1217	15.6 (14.4 - 16.9)	0.350

†  $p \leq .05$

Notes:

1. Defined by scoring over 28 on the RADS - Reynolds Adolescent Depression Scale (Short Form) (Clark et al., 2013b)

2. Remember that this survey was undertaken in 2012. The students who reported being personally affected by an earthquake who did not live in Christchurch may have migrated from Christchurch; been affected by an earthquake other than the Christchurch earthquakes; or may have been affected by Christchurch earthquakes even though they were not living there.



	Among Christchurch participants personally affected by an earthquake <sup>1</sup>	
	n	% 95% CI
This experience (of earthquakes) was so frightening or upsetting that in the last month the student has:		
Had nightmares about it or thought about it when did not want to	58	24.3 (15.4 – 33.2)
Tried hard not to think about it or went out of the way to avoid situations that remind you of it	83	34.7 (24.7 – 44.8)
Been constantly on guard, watchful or easily startled	123	51.5 (43.4 – 59.5)
Felt numb or detached from others, activities or surroundings	39	16.3 (11.4 – 21.3)

Notes:

1. 43% of Christchurch participants reported they were personally affected by an earthquake.

## Substance Use

Use of alcohol and other drugs in adolescence can lead to problems and risks during adolescence as well as in later life. Avoiding or reducing substance use in the teenage years may lead to long term health gains (National Research Council & Institute of Medicine, 2009).

Christchurch Youth'12 participants were more likely to regularly smoke cigarettes than students in similar demographic groups in the rest of New Zealand (at  $p \leq .05$ ).

No other statistically significant differences were found between Christchurch and other participants on the reported use of alcohol and other substances.

	Christchurch		Rest of New Zealand		
	n	% 95% CI	n	% 95% CI	P
Current cigarette use <sup>1</sup>	67	12.3 (9.1 – 15.4)	851	11.1 (10.1 – 12.1)	0.077
Weekly or more often cigarette use	26	4.8 (3.3 – 6.3)	345	4.5 (3.7 – 5.2)	0.030†
Drink alcohol at least once a week	55	10.0 (4.1 – 16.0)	626	8.2 (7.2 – 9.3)	0.346
Engaged in binge drinking in the last 4 weeks <sup>2</sup>	125	22.9 (15.1 – 30.8)	1718	22.6 (20.4 – 24.8)	0.624
Current marijuana use <sup>3</sup>	68	12.5 (9.9 – 15.1)	969	12.8 (11.6 – 14.1)	0.519

†  $p \leq .05$

Notes:

1. Students who have ever smoked cigarettes and did not report that they no longer smoke.
2. Binge drinking is defined as having 5 or more alcoholic drinks within 4 hours.
3. Students who have ever smoked marijuana and did not report that they no longer smoked it.

## Sexual Health

Adolescence is the period of life when most people begin to experience strong romantic attractions and sexual feelings (Breinbauer & Maddaleno, 2005).

Among sexually active students, those who lived in Christchurch reported higher rates of condom use than those in the rest of New Zealand (at  $p \leq .05$ ).

	Christchurch		Rest of New Zealand		
	n	% 95% CI	n	% 95% CI	p
Ever had sex <sup>1</sup>	111	20.2 (16.6 – 23.7)	1902	24.7 (22.8 – 26.6)	0.790
Use contraception to protect against pregnancy all of the time <sup>2</sup>	61	68.5 (54.4 – 82.6)	811	57.6 (53.6 – 61.6)	0.544
Use condoms as protection against sexually transmitted disease or infection all of the time (2)	51	56.0 (48.5 – 63.5)	635	44.8 (42.2 – 47.4)	0.01†

†  $p \leq .05$

Notes:

1. Does not include sexual abuse.
2. Among those who have had sex.

## Injuries and Violence

Motor vehicle crashes are the leading cause of death among young people in New Zealand. Violence, including witnessing violence, is associated with a range of poor health outcomes for young people (Clark et al, 2009).

Christchurch participants in the Youth'12 survey reported involvement in risky driving and experiences of violence at rates similar to students in other parts of New Zealand.

	Christchurch		Rest of New Zealand		
	n	% 95% CI	n	% 95% CI	P
Always wears a seatbelt when driving or being driven in a car	426	76.5 (70.1 – 82.4)	5819	73.7 (71.8 – 75.6)	0.912
Driven dangerously by someone in the last 12 months (e.g. speeding, car chases, burnouts)	87	15.7 (12.1 – 19.3)	1396	17.8 (16.7 – 18.8)	0.670
Driven by someone in the last month who had been drinking alcohol	120	21.7 (14.7 – 28.7)	1432	18.2 (17.0 – 19.4)	0.297

	Christchurch		Rest of New Zealand		
	n	% 95% CI	n	% 95% CI	P
Witnessed adults in your home hitting or physically hurting a child (other than yourself) in the last 12 months	58	10.8 (7.6 – 14.0)	1074	14.1 (12.5 – 15.7)	0.759
Witnessed adults in your home hitting or physically hurting each other in the last 12 months	33	6.1 (4.7 – 7.5)	575	7.5 (6.5 – 8.6)	0.617
Hit or physically harmed by someone in the last 12 months (including by an adult in their own home) <sup>1</sup>	201	36.1 (24.5 – 47.7)	2589	32.8 (31.3 – 34.4)	0.431
Experienced sexual abuse or coercion	47	9.1 (6.3 – 11.8)	768	10.8 (9.7 – 11.8)	0.808

Note:

1. This combines being hit or physically harmed by any person and/or by an adult at home.

## Community and Contribution

Positive relationships, safe environments, having things to do and having opportunities to contribute are important for the wellbeing of young people (Blum, 1998; McLaren, 2002).

Christchurch participants in the Youth'12 survey generally reported similar community experiences to young people in other parts of New Zealand. However, Christchurch participants reported lower rates of having nothing to do where they live (at  $p \leq .05$ ).

	Christchurch		Rest of New Zealand		
	n	% 95% CI	n	% 95% CI	P
Have a friend or friends they can talk to about anything	496	90.2 (87.5 – 92.9)	6967	91.5 (90.7 – 92.2)	0.566
Have friends who help and look out for them all or some of the time	525	96.9 (95.7 – 98.0)	7269	96.7 (96.3 – 97.1)	0.664
Like their neighbourhood (always or sometimes)	487	91.4 (88.6 – 94.1)	6481	88.0 (86.8 – 89.0)	0.159
Feel safe in the neighbourhood all the time	285	53.5 (47.5 – 59.4)	4004	54.3 (52.4 – 56.1)	0.247
Have an adult outside their family who they would feel OK talking to about a serious problem	324	59.4 (55.8 – 63.0)	4420	58.8 (57.2 – 60.5)	0.938
Student belongs to a community run group <sup>1</sup>	365	67.1 (60.3 – 73.6)	5100	67.8 (66.3 – 69.3)	0.757
There is nothing to do around where I live	37	6.9 (2.7 – 11.1)	955	12.8 (10.7 – 14.8)	0.014†
Any paid employment in the last 12 months	292	53.7 (46.0 – 61.3)	3649	48.0 (44.1 – 51.7)	0.664

†  $p \leq .05$

Note:

1. A group, club or team which is not run by a student's school.

# Concluding Remarks

Overall, most Christchurch students appear to be healthy. However, there are many Christchurch students who suffer symptoms of stress related to earthquake experiences and there are a number of areas where Christchurch students experience greater problems than students like them in other parts of New Zealand do.

The data set is the largest relating to the health and wellbeing of teenagers in New Zealand and the methods have been extensively reviewed and tested. However a relatively small number of Christchurch schools participated in the survey.

These findings should be considered alongside other information to support the health and wellbeing of young people in Christchurch.

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